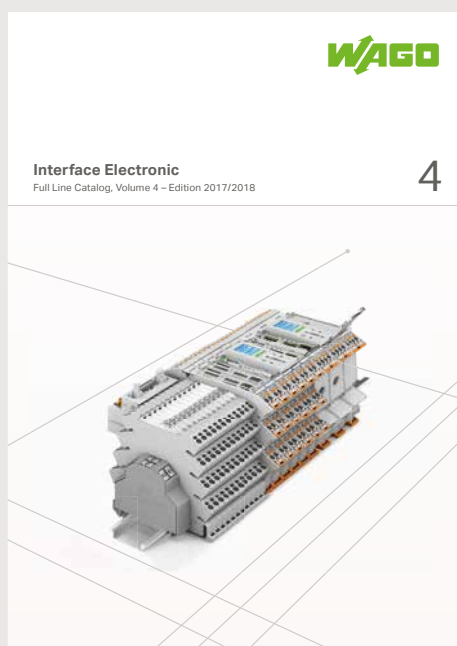
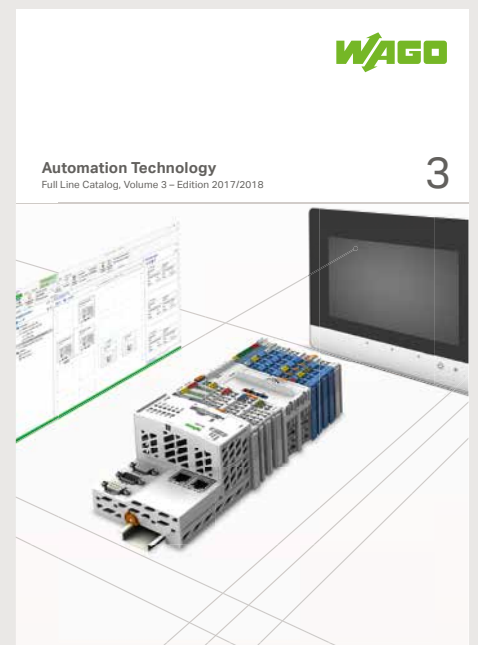


PSF 5.0

Product Short Form



WAGO Full Line Catalogs



Volume 1, Rail-Mount Terminal Block Systems

- Rail-Mount Terminal Blocks
- Rail-Mount Terminal Blocks with Pluggable Connector (X-COM®-SYSTEM)
- Patchboard Systems
- Terminal Strips
- PUSH WIRE® Connectors for Junction Boxes
- Lighting Connectors
- Shield Connecting System



Volume 2, PCB Terminal Blocks and Connectors

- PCB Terminal Blocks
- SMD PCB Terminal Blocks
- *MULTI CONNECTION SYSTEM (MCS)*
- Pluggable PCB Terminal Blocks
- Feedthrough Terminal Blocks
- Specialty Connectors
- Empty Housings



Volume 3, Automation Technology

- Software
- Operating & Monitoring
- Controllers
- Modular I/O-SYSTEM, IP20/IP67
- Industrial Switches
- Radio Technology, *TO-PASS®* Telecontrol Technology
- IP67 Sensor/Actuator Boxes, IP67 Cables and Connectors



Volume 4, Interface Electronic

- Relay and Optocoupler Modules
- *JUMPFLEX®* Signal Conditioners and Isolation Amplifiers
- Current and Energy Measurement Technology
- *EPSITRON®* Power Supply System
- Interface Modules and System Wiring
- Overvoltage Protection
- Empty Housings



Volume 5, *WINSTA®* – The Pluggable Connection System

- Pluggable Connectors
- Snap-In Device Connectors
- Pluggable PCB Connectors
- Distribution Connectors
- Cable Assemblies
- Flat Cable Systems
- Distribution Boxes

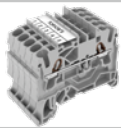












Volume 6, Marking

- Terminal Block Marking
- Cable and Conductor Marking
- Device Marking
- Printer
- Software
- Marker Carriers

PSF 5.0

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More than 50 Years of Innovation



1951

The First
WAGO Spring Clamp
Terminal Block

Since its establishment in 1951, WAGO has pioneered multiple innovative connection systems for both electrical and electronic engineering applications. The idea for a screwless termination system was born in 1951; the first terminal blocks with spring clamp termination technology were presented at the Hanover Fair the same year.



1974

WAGO PUSH WIRE®
Connector for Junction
Boxes

Precisely designed and manufactured, spring clamp terminal blocks not only guarantee a faster and easier connection, but also offer greater safety because the contact quality is largely independent of operator skill.



1977

CAGE CLAMP® Rail-
Mounted Terminal Blocks

Now, WAGO is meeting virtually all of the industry's needs as both the leader in Spring Pressure Connection Technology and a pioneer in automation technology. In 1977, the success story of the CAGE CLAMP® began with "vibration-proof, fast and maintenance-free connections." Safe operation for countless devices, systems and installation depends on the unconditional reliability of our products.

1985

Pluggable Electronic Modules
for Rail-Mounted Terminal Blocks



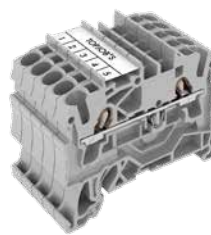
1998

POWER
CAGE CLAMP®



2003

TOPIJOB® S
Rail-Mounted Terminal
Blocks



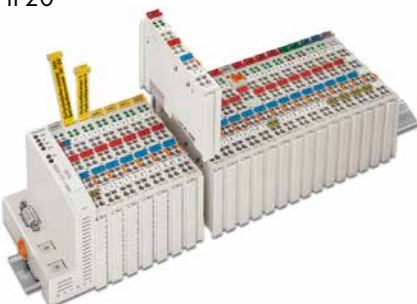
2005

WAGO SPEEDWAY 767,
Modular I/O-SYSTEM, IP67



1995

WAGO-I/O-SYSTEM, 750/753
Series Modular I/O-System,
IP20



2001

WINSTA® -
The Pluggable Connection
System



2004

CLASSIC Splicing
Connectors for All
Conductor Types,
222 Series



2006

WAGO JUMPFLEX® -
Signal Conditioners and
Pluggable Relay Modules



Recognized and Approved Worldwide



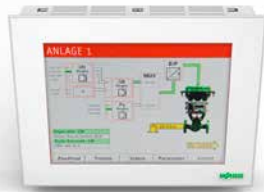
2008

TO-PASS® - Scalable
Telecontrol Technology



2010

PERSPECTO® -
Touch and Control Panels



2014

COMPACT Splicing
Connectors for All
Conductor Types,
221 Series



2015

PFC200 -
Controllers



2009

X-COM®S-SYSTEM



2010

PUSH WIRE®
Connectors for
Junction Boxes,
2273 Series



2014

Shield Clamping
Saddles



2015

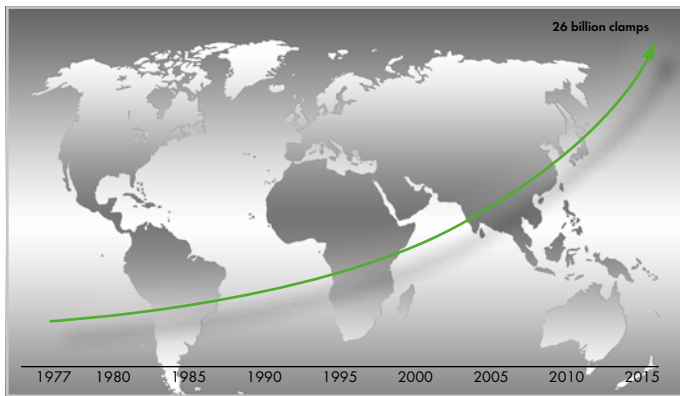
e!COCKPIT Software
Integrated Engineering



From Pioneer to Leader

When the first screwless terminal blocks debuted at the Hanover Fair in 1951, they represented a significant advancement in manufacturing. At the time, manufacturing terminal blocks was not possible because the carbon steel available then did not meet the high quality requirements.

However, WAGO was quite active in the years leading up to the 1977 debut of the first series of CAGE CLAMP®-equipped rail-mounted terminal blocks from 28-6 AWG (0.08-16 mm²).



Number of CAGE CLAMP® springs produced to date

With numerous developments – from the Suprafix banana plug product family up to the first range of rail-mounted terminal blocks for conductors up to 6 AWG (16 mm²) – WAGO has firmly established itself as an innovator.

With this reputation and the desire for “vibration-proof, fast and maintenance-free” connections, CAGE CLAMP® quickly outperformed all previous connection technologies to become a worldwide industrial standard.

Today, CAGE CLAMP® technology has several imitators, yet it remains unmatched. And WAGO continues to set new standards with further developments, such as CAGE CLAMP® Compact (1996) for ultra-compact applications and the WAGO POWER CAGE CLAMP (1998) for a rated cross-section up to 350 kcmil (185 mm²). Figures speak for themselves: More than 26 billion CAGE CLAMP® springs have been sold worldwide, and every day, millions of clamps are added to that number.

In 1951, WAGO was founded in Minden, Germany. Now, the WAGO Group consists of 32 companies with more than 6,700 employees, worldwide operations and global sales of 706 million euros (2015).

The first factory was located in Minden, Germany, which is also our headquarters. As part of WAGO’s global expansion, additional factories have been built: 1977 in Domdidier (Switzerland), 1979 in Milwaukee (USA), 1995 in Sondershausen (Germany) and Delhi (India), 1997 in Tianjin (China) and Wroclaw (Poland).

Products manufactured locally for domestic and foreign markets create the starting point for localized distribution networks that cover WAGO’s complete product portfolio. Such organization enables WAGO subsidiaries and sales offices to develop and deliver custom-designed products that comply with local regulations and meet local demand. More than half of WAGO’s global staff of 6,700 is employed outside of Germany.

WAGO Worldwide



WAGO Minden, Germany – Global Headquarters



WAGO Sondershausen, Germany



WAGO Switzerland



WAGO Poland



WAGO India



WAGO USA

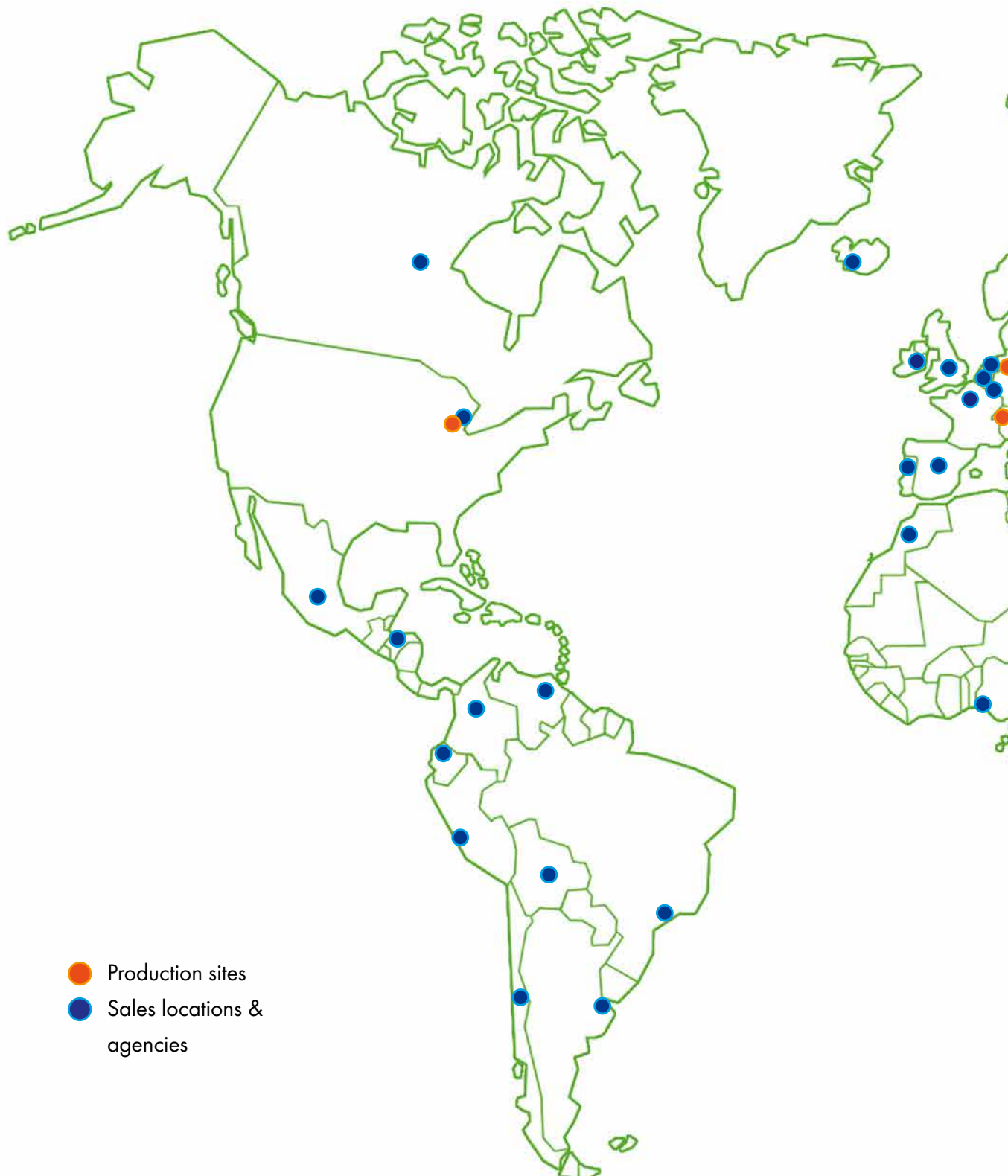


WAGO China

WAGO – At Home in the World

WAGO is a group of companies that operates globally with subsidiaries or agencies on all continents and production facilities in Germany (Minden, Westfalia and Sondershausen, Thuringia); Switzerland (Domdidi-

er, Fribourg); Poland (Wroclaw); China (Tianjin); India (Noida, Delhi); USA (Germantown) and Japan (Koto-Ku, Tokio).



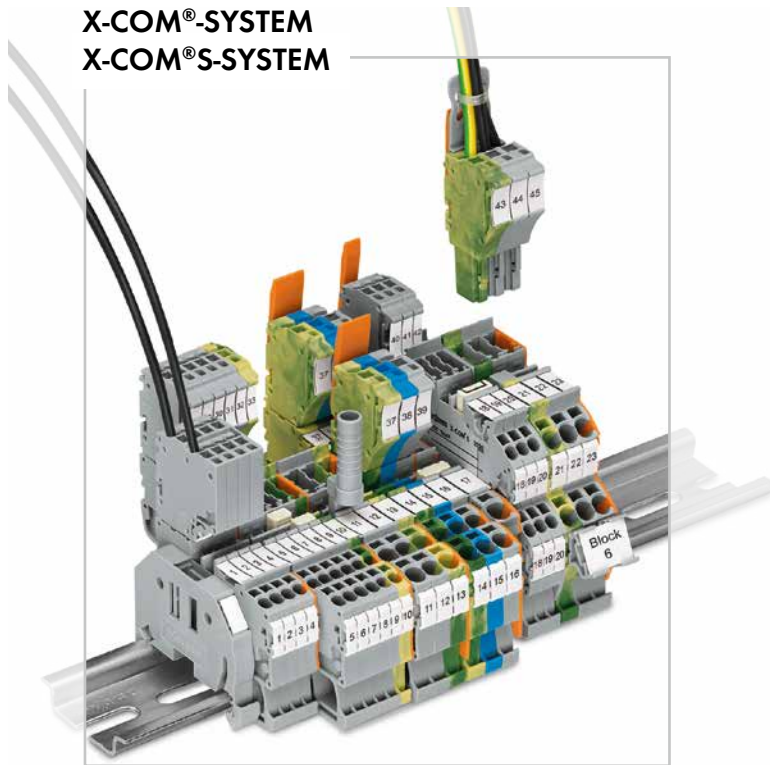
International Success Requires International Presence

Our presence in local markets enables us to provide service tailored to our individual customers, while keeping a finger on the pulse of our valued suppliers.

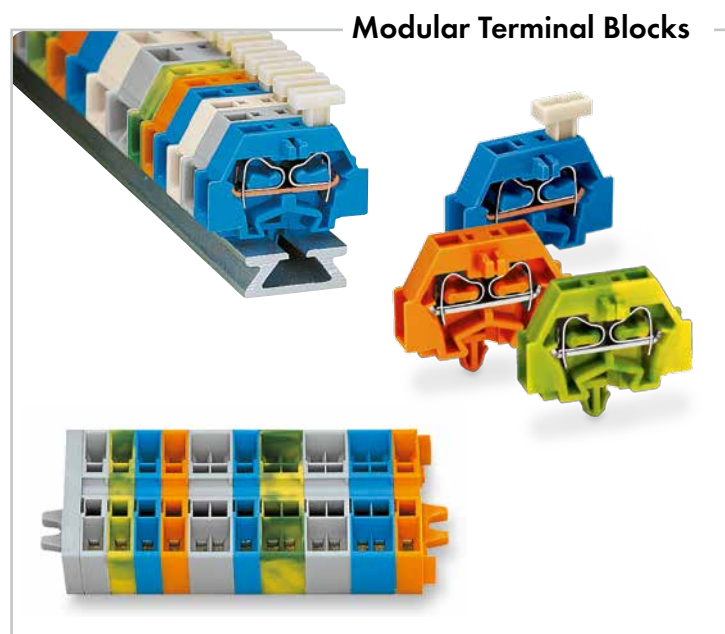
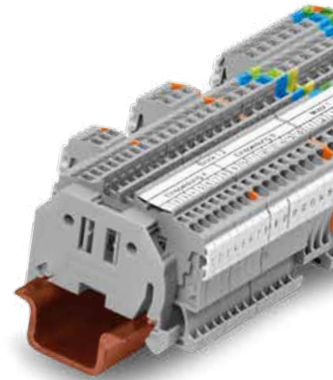
This proximity allows us to develop and deliver products and solutions that comply with local codes and regulations. That is what we consider being close to our customers.



WAGO Product Range: Electrical Interconnections



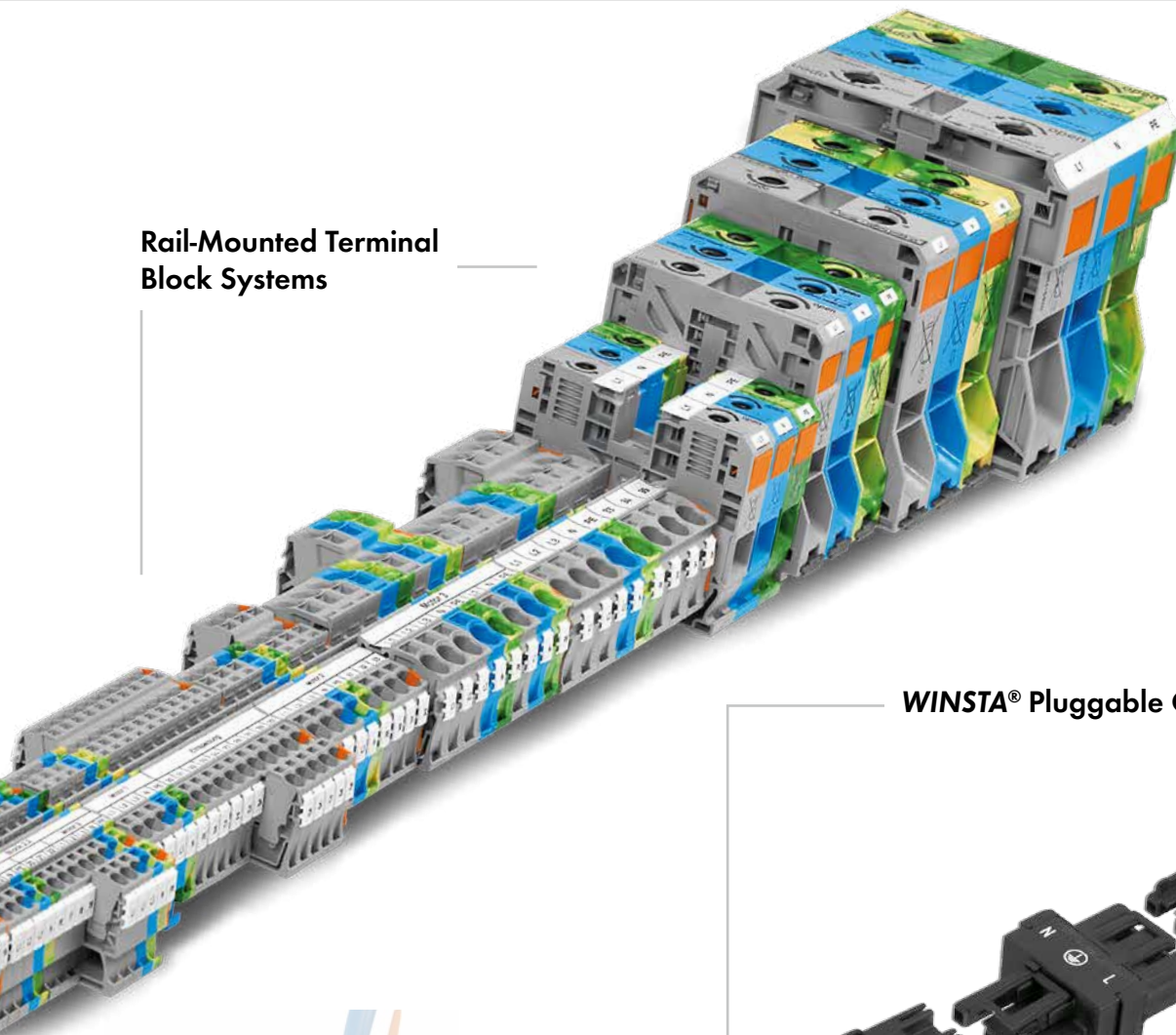
Installation Connectors



PCB Terminal Blocks



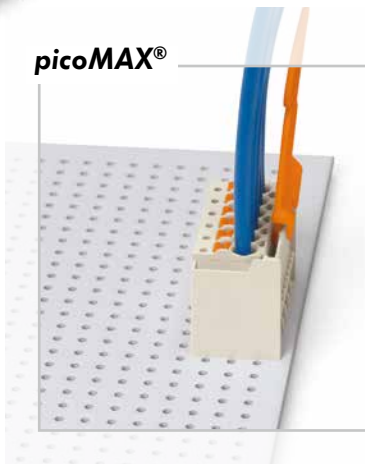
Rail-Mounted Terminal Block Systems



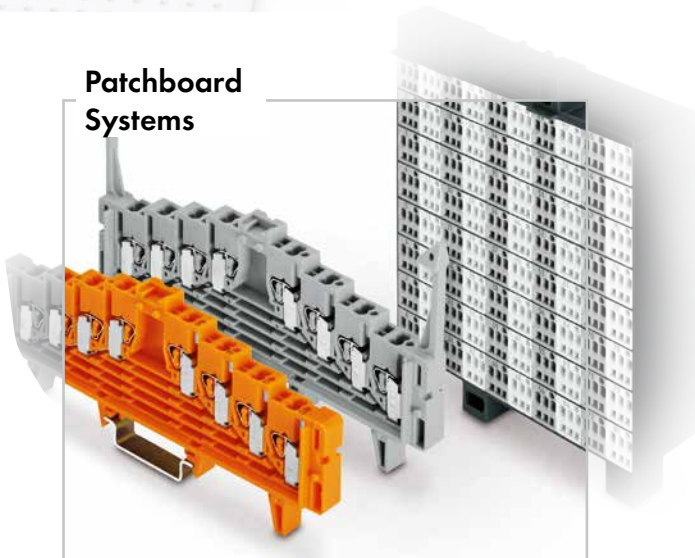
WINSTA® Pluggable Connection System



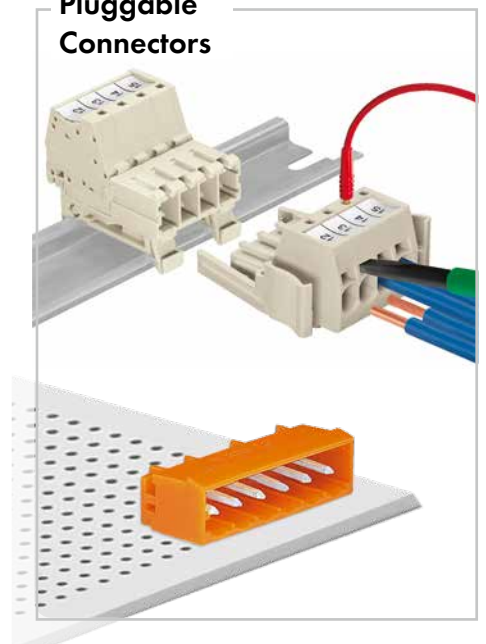
picoMAX®



Patchboard Systems



Pluggable Connectors



WAGO Product Range: Automation

e!DISPLAY



Controllers



EPSITRON® – Advanced Power Supply System



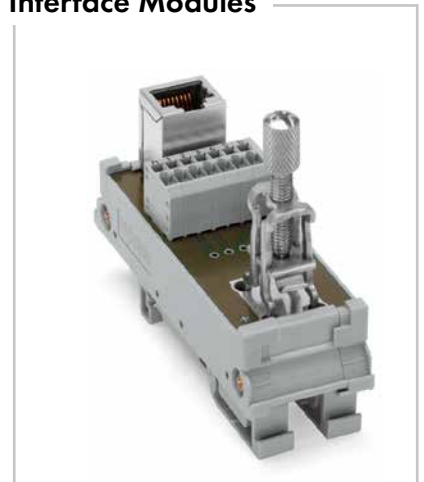
WAGO I/O-Systems



Software and Apps



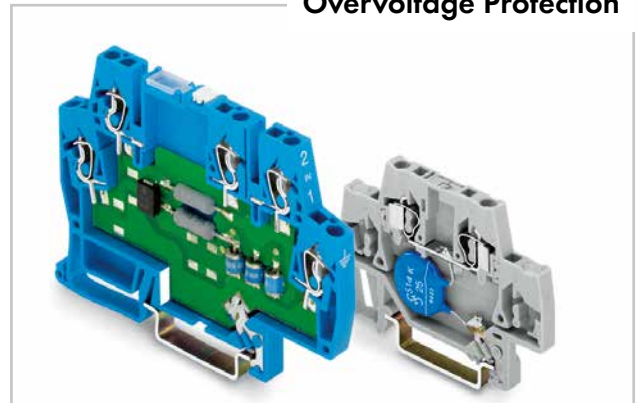
Interface Modules



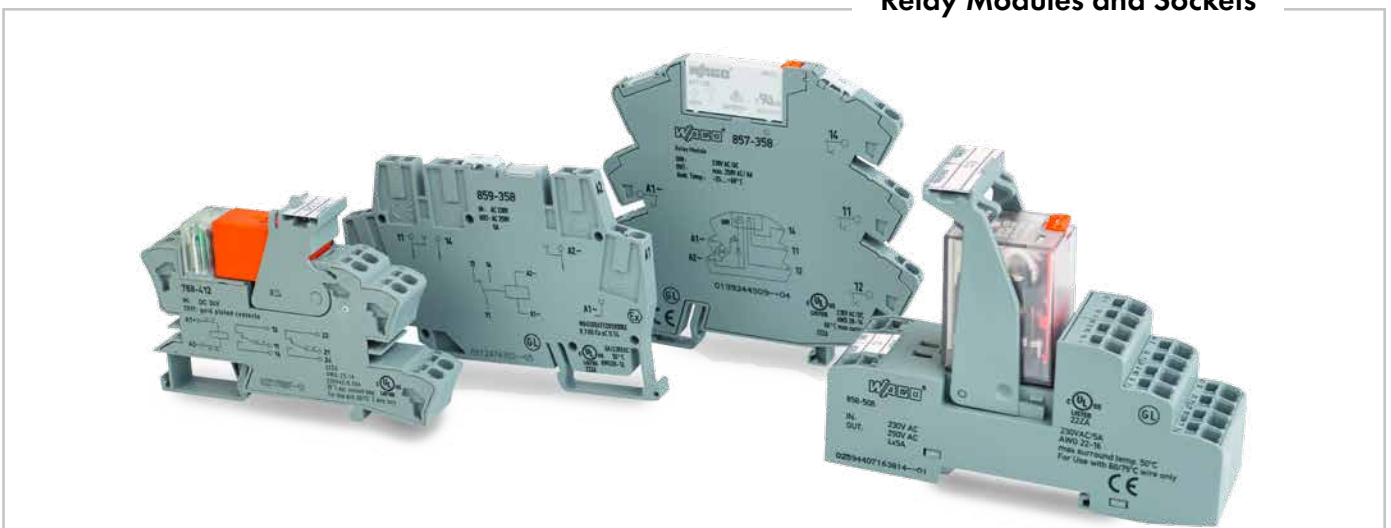
JUMPFLEX® Signal Conditioners



Overvoltage Protection



Relay Modules and Sockets



A Wide Variety of Applications

BUILDING AUTOMATION



Building installation and automation

POWER AND PROCESS TECHNOLOGY



Energy, food, water, chemical, petrochemical and metal industries

INDUSTRY



Plant automation and traffic engineering

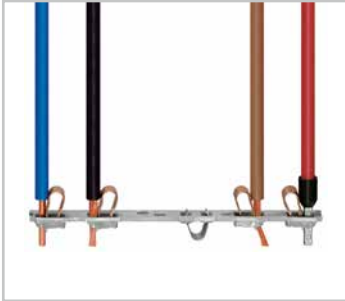
WAGO products support a wide range of industries. Our components and systems are trusted worldwide in industrial, automotive, process engineering, building technology and many other sophisticated applications. In every industry and every country, we focus on the following objectives:

- Implementing innovative solutions
- Creating a compact design
- Saving energy
- Making equipment safer
- Reacting to requirements quickly and flexibly
- Minimizing installation, maintenance costs and downtime
- Ensuring reliable operation under extreme conditions
- Guaranteeing high availability and technical safety
- Accommodating individual customer requirements

Operating WAGO Connection Technologies

Please follow the applicable product-specific termination instructions.

PUSH-IN CAGE CLAMP®



Push-in CAGE CLAMP® terminates the following copper conductors: solid



stranded



fine-stranded, also with tinned single strands



fine-stranded, tip-bonded



fine-stranded, with ferrule (gastight crimped)



fine-stranded, with pin terminal (gastight crimped)

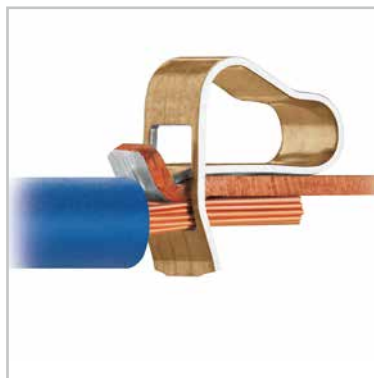
The universal connection with an additional advantage: Push-in connection

Terminate solid and stranded, as well as ferruled conductors, by simply pushing them in - no tools required.

Termination for all conductor types:

- Open clamping unit
- Insert the conductor
- Release clamp

CAGE CLAMP®



CAGE CLAMP® terminates the following copper conductors: solid



stranded



fine-stranded, also with tinned single strands



fine-stranded, tip-bonded



fine-stranded, with ferrule* (gastight crimped)



fine-stranded, with pin terminal (gastight crimped)

The universal connection for solid, stranded and fine-stranded conductors

Termination:

- Open clamping unit
- Insert the conductor
- Release clamp

*With ferruled, fine-stranded conductors, it is necessary to use a terminal block one size larger than the conductor's nominal cross-section.

Operating WAGO Connection Technologies

Please follow the applicable product-specific termination instructions.

POWER CAGE CLAMP



POWER CAGE CLAMP
terminates the following
copper conductors:
solid



stranded



fine-stranded,
also with tinned
single strands



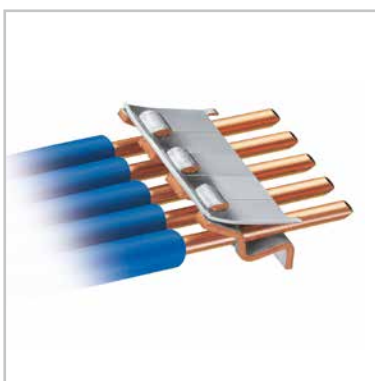
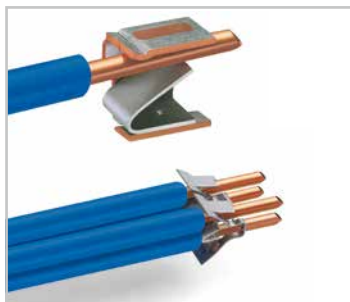
fine-stranded,
with ferrule
(gastight crimped)

The universal connection for conductors larger than 2 AWG (35 mm²)

Termination:

- Open clamp by turning an Allen wrench counter-clockwise
- Press the integrated latch to open clamping unit for hands-free wiring
- Insert the conductor
- A small counter-clockwise rotation closes the clamp, securing conductor

PUSH WIRE®



PUSH WIRE®
terminates the following
copper conductors:
solid



stranded

PUSH WIRE® connection for solid and stranded conductors (depending on the model used)

Termination:

Tool-free, twist-free terminations for solid and rigid stranded conductors – simply push into the unit.

WAGO Connection Technology Benefits

Simple, Easy-to-Use Design

Front-entry wiring:

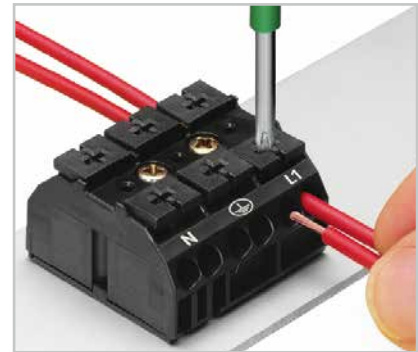
PUSH-IN CAGE CLAMP®

Push-in CAGE CLAMP®
connection



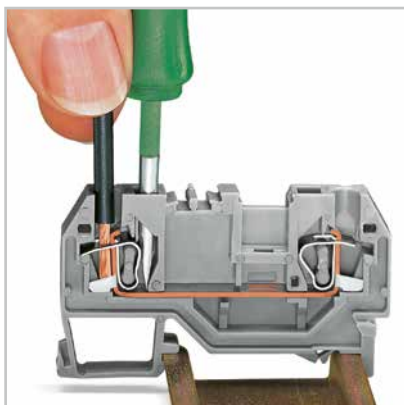
Push-in CAGE CLAMP® terminates both solid and ferruled conductors by simply pushing them in.

Side-entry wiring:

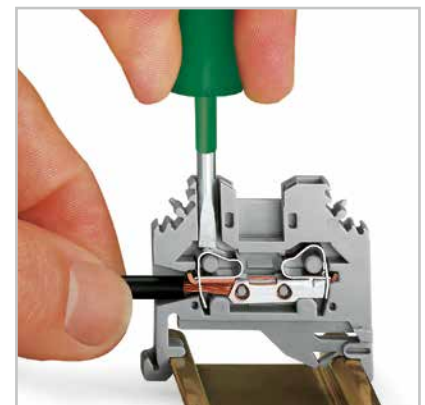


CAGE CLAMP®

CAGE CLAMP®
connection



CAGE CLAMP®
connection



One Conductor per Clamping Unit

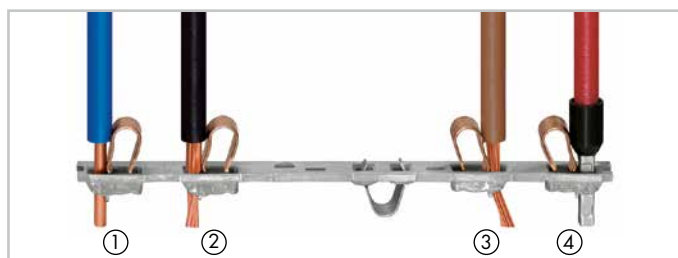
A number of VDE directives mandate or recommend that only one conductor should or must be connected per clamping unit (e.g., DIN VDE 0611, Part 4, 02.91, Section 3.1.9). WAGO complies with this safety requirement, as expressed in the corresponding directives.

Technical and economical benefits for the users:

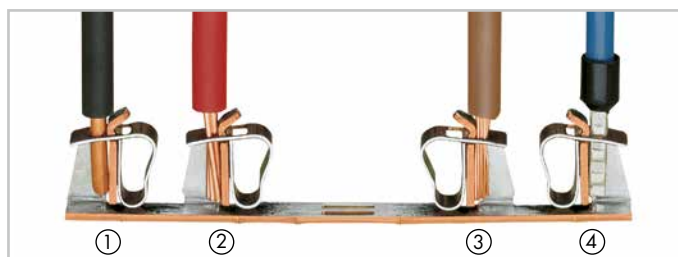
- Each conductor is clamped independently.
- Any conductor size combination per potential can be safely connected.
- Where re-wiring is required, only the conductor to be changed is removed from the clamping point, all other conductors remain safely clamped.
- The arrangement of more than two clamping units on one current bar permits potential multiplication, without jumpers or additional terminal blocks.

CAGE CLAMP® and Push-in CAGE CLAMP® terminate all copper conductors from 28–2 AWG (0.08–35mm²) (350 kcmil/185 mm²), or from 22–4 AWG (0.25–25 mm²). Splice protection is not required, but possible.

The conductor is pressed against the current bar in the **predefined contact area**, without damage. The clamping force adjusts automatically to the conductor size. The clamp dynamically compensates for changes/movement of the conductor to eliminate the risk of a loose connection.

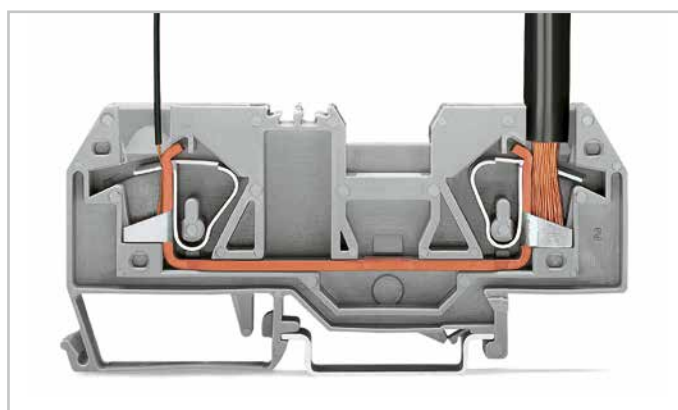


Push-in CAGE CLAMP® terminates one conductor per clamping unit.



CAGE CLAMP® terminates one conductor per clamping unit.

- ① solid
- ② stranded
- ③ fine-stranded
- ④ fine-stranded, with ferrule (gastight crimped)



An unlikely connection demonstrates this capability: 24 AWG (0.2 mm²) conductor (left) and 6 AWG (16 mm²) conductor (right) in a 6 AWG (16 mm²) terminal block.

WAGO Connection Technology Benefits

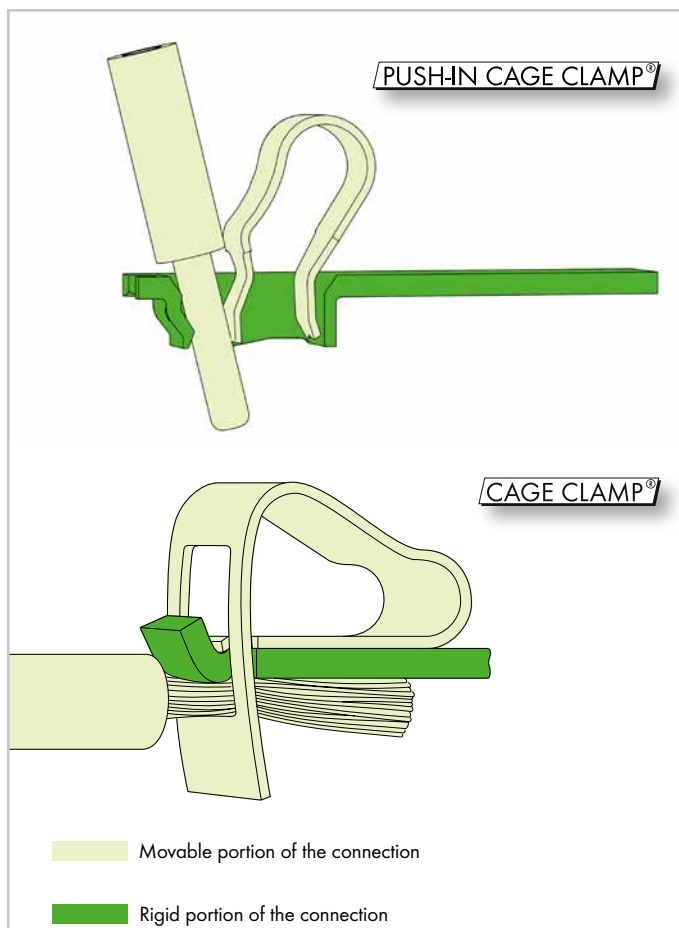
Vibration- and Shock-Proof – Maintenance-Free

The **vibration-proof properties** of CAGE CLAMP® connections have been tested and successfully validated in a vibration test to IEC/EN 60068-2-6. In this test, a frequency band up to 2000 Hz, at different accelerations up to 20g and different amplitudes up to 20 mm, is passed continuously in three axes. Additionally, international authorities have placed extremely demanding requirements on electrical installations. Railway authorities tested for electrical installations in rolling stock (IEC/EN 61373); multiple marine agencies (e.g., GL, LR and DNV) have declared that CAGE CLAMP® meets their lofty approval standards.

In the **Impact Test** (IEC/EN 60068-2-27) for railway applications (IEC/EN 61373), test specimens are exposed to instant shock stresses, instead of permanent vibrations. Stresses up to 100g on the x-, y- and z-axis were easily passed.

Maintenance-free operation **results from excellent long-term consistency of the electrical and mechanical properties of the clamping connection – or more precisely, the clamping unit**. The Voltage Drop Test evaluates clamping unit quality under stresses such as vibrations, temperature changes and corrosive influences, in order to verify that the contact point is gas-tight. The long-term consistency of CAGE CLAMP® technology has been demonstrated both through laboratory testing by international approval agencies and from worldwide applications.

The resulting maintenance-free operation reduces service costs, leading to greater equipment availability and reliability.



Vibration test: WAGO-I/O-SYSTEM

High-Current Carrying Capacity

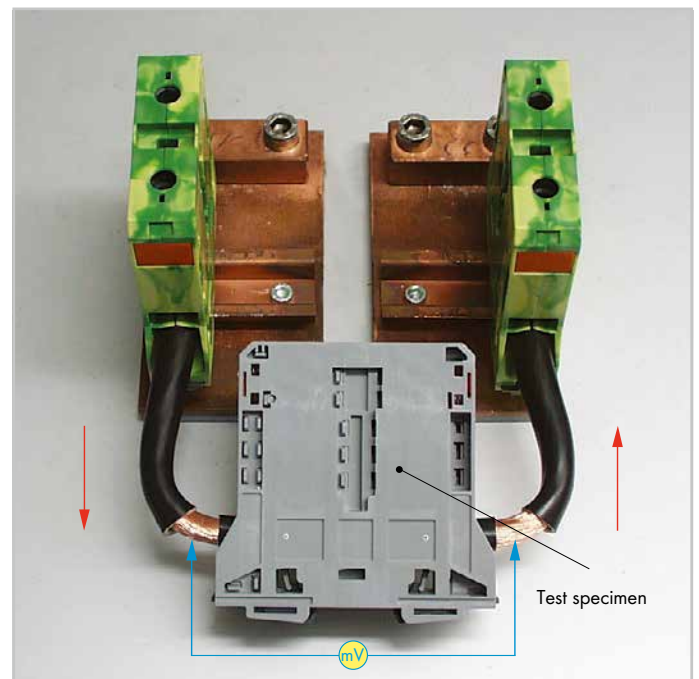


Unrealistic test of a CAGE CLAMP® rail-mounted terminal block, 12 AWG (4 mm²): **Increase of current without time limit**; In such an extreme test – normally, fuse devices would have interrupted the current – **the electrical connection is undamaged.**

In the **Short-Time Withstand Current Test** (e.g., per IEC/EN 60947-7-1), through rail-mounted terminal blocks shall be capable of withstanding for one second the **rated short-time withstand current which corresponds to 120 A/mm² of its rated cross-section**. In the case of a **WAGO 285 Series** 185 mm² (350 kcmil) High-Current Terminal Block, this translates to 22,200 A!

Ground conductor terminal blocks are submitted to the “120 A per mm²” test for 3x one second.

The pass criterion for the test is the voltage drop (limit value and constancy). CAGE CLAMP® and Push-in CAGE CLAMP® connections passed this test without damage or reduced functionality.



Test arrangement: “Short-Time Current Withstand Test”

WAGO Connection Technology Benefits

Gastight Clamping Units – Measurable Contact Quality

Climatic chambers simulate standard atmospheres that could impact the long-term constancy of clamping units. All WAGO products meet requirements for the following climatic tests:

- Temperature Cycling Test per IEC/EN 60947-7-1, IEC/EN 60998-2-2
- Industrial Atmospheres per EN ISO 6988, IEC/EN 60068-2-42, IEC/EN 60068-2-60
- Salt Spray Test per IEC/EN 60068-2-11; Marine Applications GL, LR, DNV
- Quick Change of Temperature per IEC/EN 60068-2-14
- Damp Heat, Cyclic (12 + 12 Hour Cycle) per IEC/EN 60068-2-30; Marine Applications GL, LR, DNV

Long-term consistency for the low contact resistance of both CAGE CLAMP® and Push-in CAGE CLAMP® results from **gas-tight** clamping units. The spring clamp (acid- and saltwater-proof CrNi spring steel) presses the connected conductor against the current bar (electrolyte copper with lead-free, pure tin coating) within a defined contact zone. The conductor is embedded into the soft tin layer with high contact pressure, securing it against corrosive infiltration.



Contact pressure

$$P \left[\frac{\text{N}}{\text{mm}^2} \right] = \frac{\text{Force } F \text{ [N]}}{\text{Area } A \text{ [mm}^2 \text{]}}$$

Numerical example

$$\left[\frac{700 \text{ N}}{4 \text{ mm}^2} \right] = \left[\frac{70 \text{ N}}{0.4 \text{ mm}^2} \right]$$

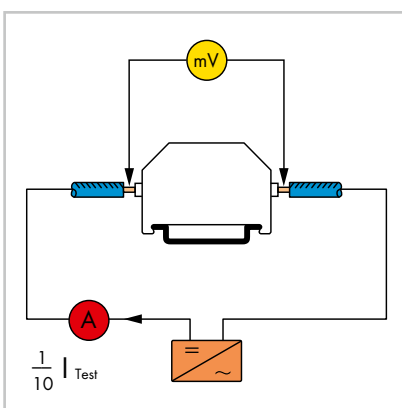
Screw Spring

The contact pressure exerted by CAGE CLAMP® connections is similar to screw connections.



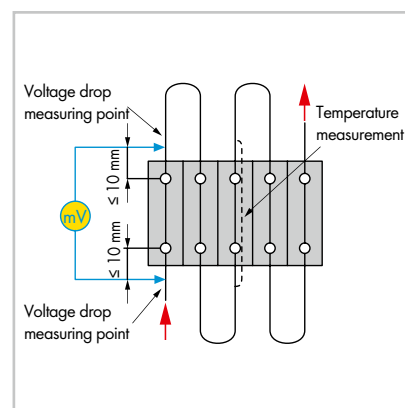
To best evaluate the quality of a clamping point, WAGO uses the following test procedures:

The **Voltage Drop Test** evaluates clamping unit quality under stresses such as vibrations, temperature changes and corrosive influences.



Test arrangement: "Voltage Drop Test"

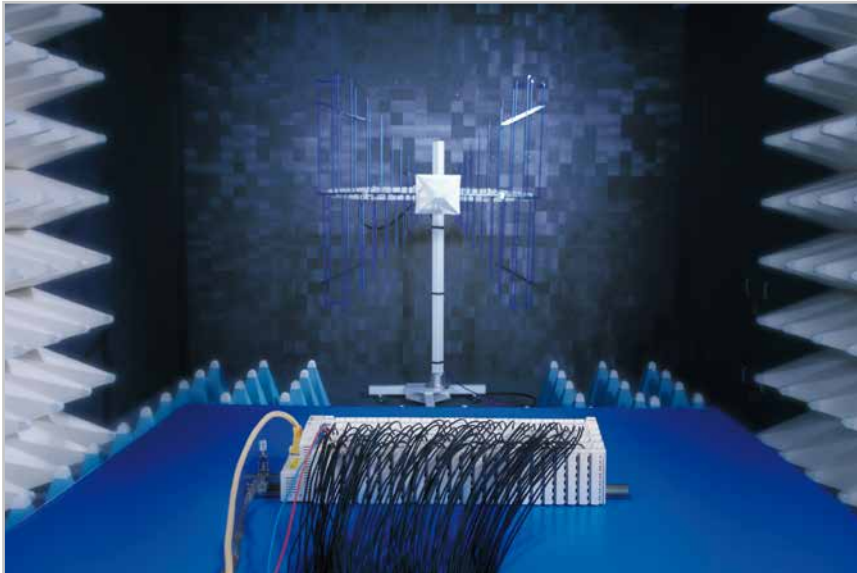
The **Temperature-Rise Test** examines the clamping unit, including the surrounding insulation, at rated current, over-current and short circuit current levels.



Test arrangement: "Temperature-Rise Test"

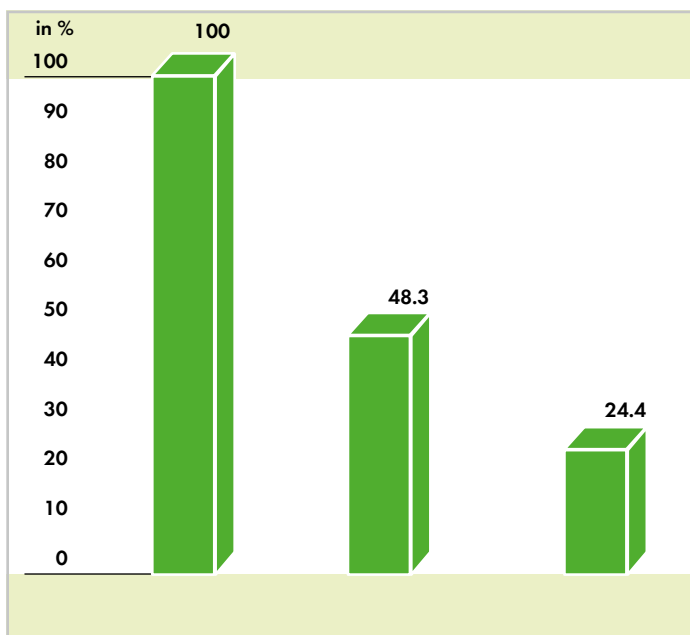
Electromagnetic Compatibility (EMC)

State-of-the-art testing equipment in our laboratory enables us to conduct the most stringent electrical, mechanical and climatic tests. In addition, our electromagnetic compatibility chamber is dedicated to testing our automation components for compliance with electromagnetic safety regulations.



To isolate and eliminate any weak points during development in our electromagnetic compatibility laboratory, we can use bursts of up to 3 kV. All of our automation components have to meet stricter requirements than those defined in CE specifications and the requirements as specified by the international shipping classification organizations.

Time Saved



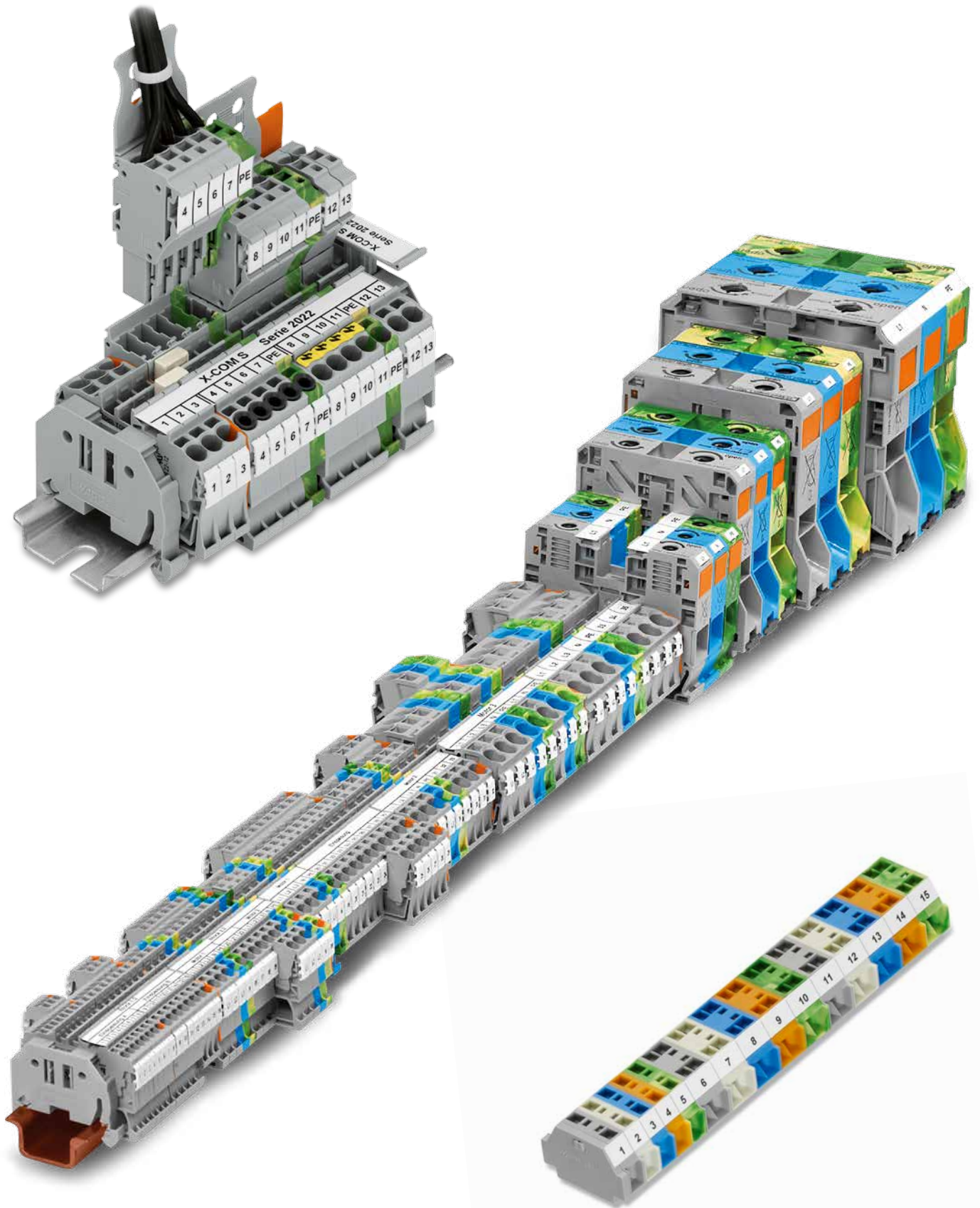
CAGE CLAMP® technology **significantly reduces wiring times**, which helps minimize labor costs.

Additional savings are provided via faster project commissioning **and** the elimination of service costs **due to maintenance-free connections.**

Savings go further by **reducing both material and labor costs** through eliminating the need to prepare ferrules or pin terminals prior to termination. Front-entry terminal blocks are specified for top-tier designs because they minimize both install time and effort.

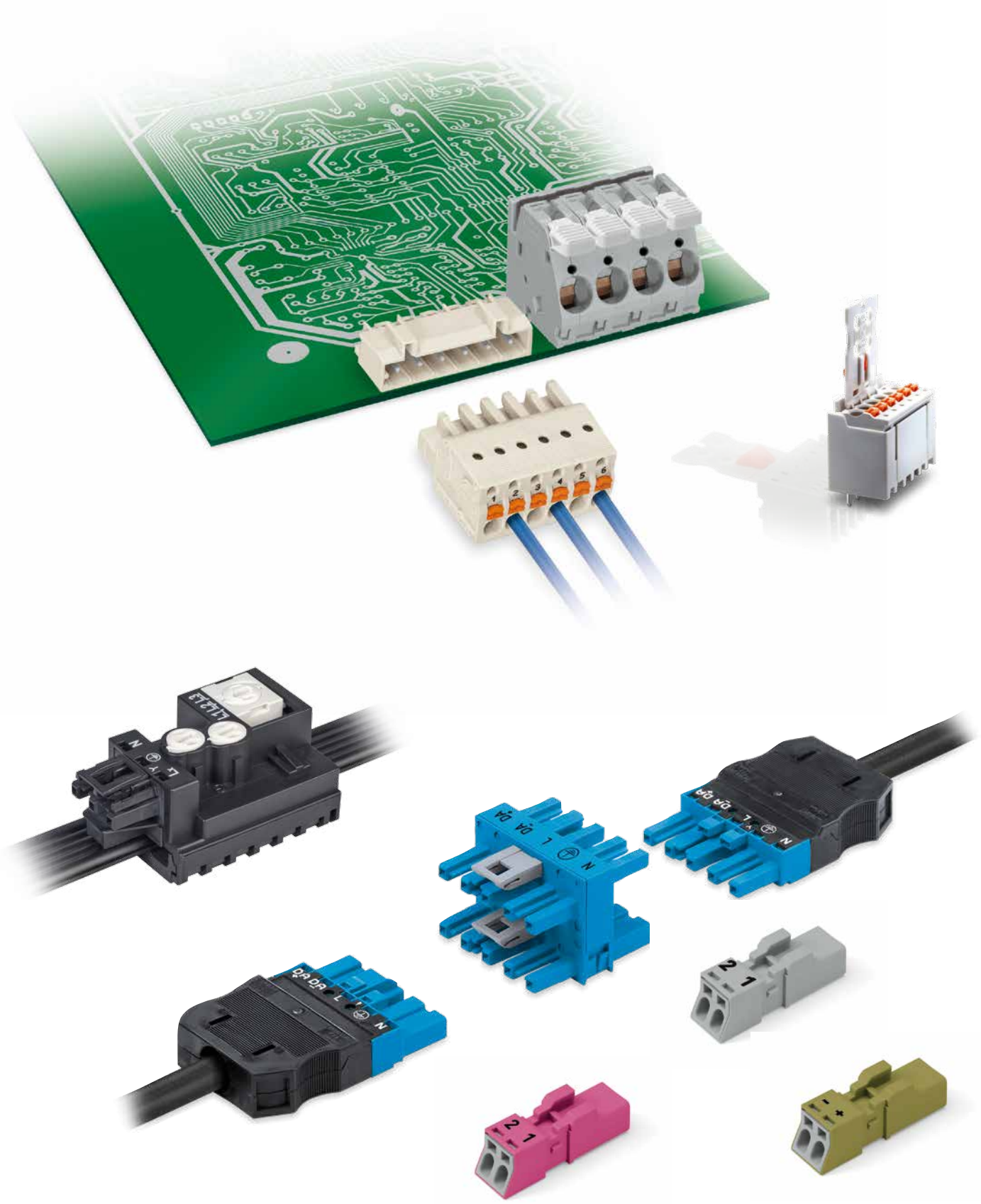
Average manual wiring times in a percentage comparison (per MTM)

Rail-Mounted Terminal Block Systems



PCB Terminal Blocks and Connectors WINSTA® – The Pluggable Connection System

1



TOPJOB® S Rail-Mounted Terminal Blocks – Description and Installation –

Conductor termination/removal

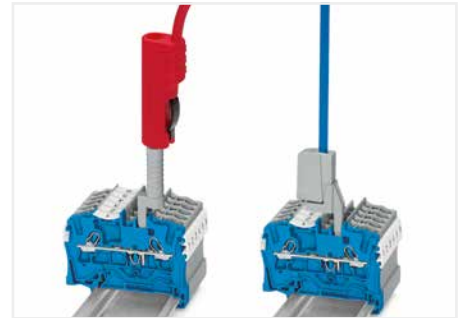


Push-in termination: Solid conductors ranging from at least two sizes below to one size above the rated cross-section can be inserted directly – without tools.



Connecting fine-stranded conductors without ferrules, or small cross-sectional conductors that cannot be pushed in, is performed similarly to the original CAGE CLAMP® – just use a screwdriver.

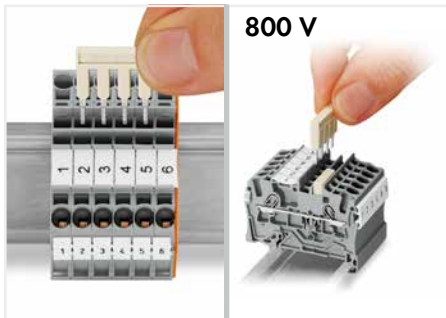
Testing



Testing TOPJOB® S Rail-Mounted Terminal Blocks via Test Plug Adapter or Testing Tap

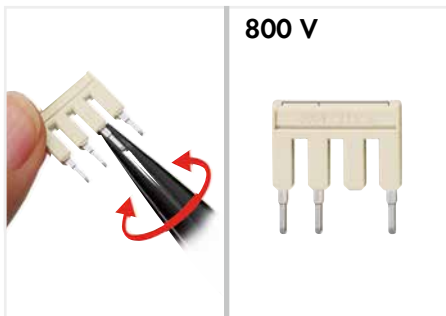
Conductor removal is performed with a screwdriver, just like CAGE CLAMP®.

Commoning

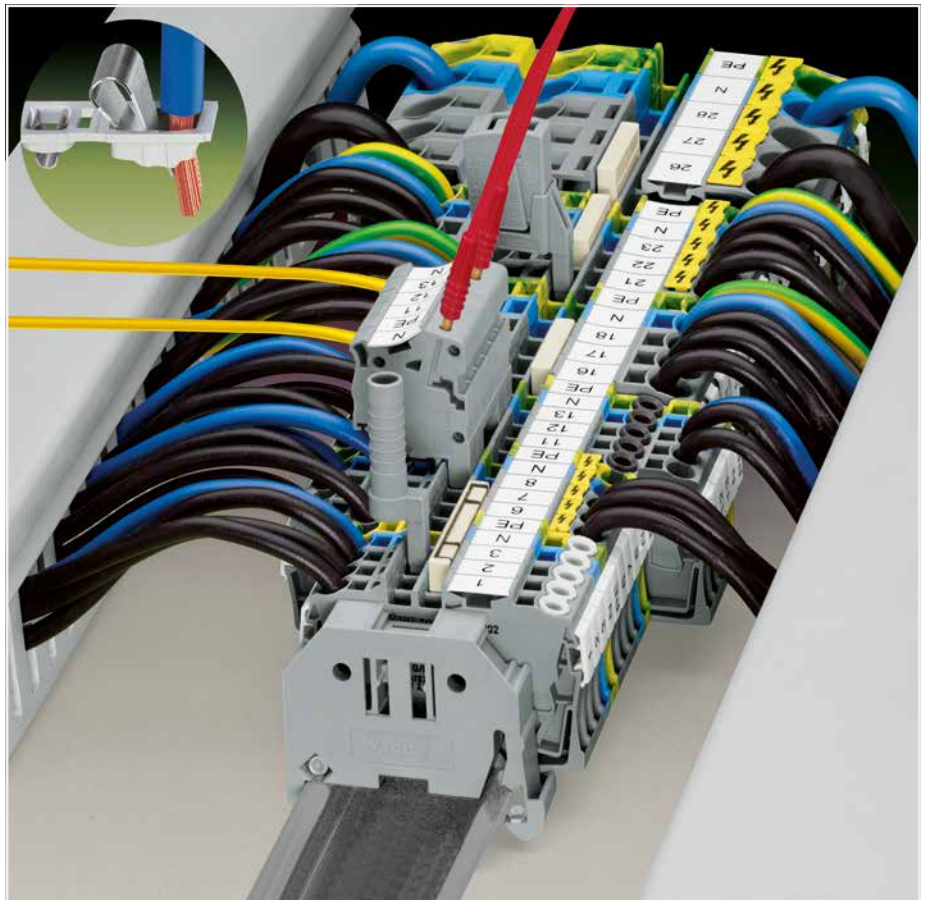


Twin integrated, spring-loaded jumper system allows use of comb-style jumper bars, test plugs and connectors. Jumper bars rated at 800 V (ex works)

Commoning



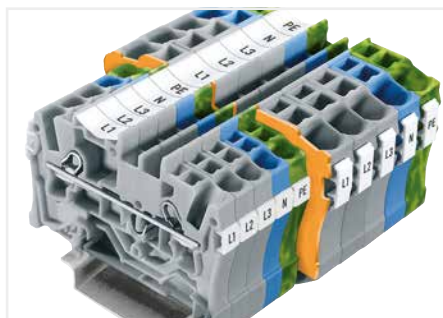
Jumper contacts that are not required can be broken off and removed, the upper-side of the jumper can then be marked accordingly. Applies to 2001, 2002 and 2004 Series.



Marking

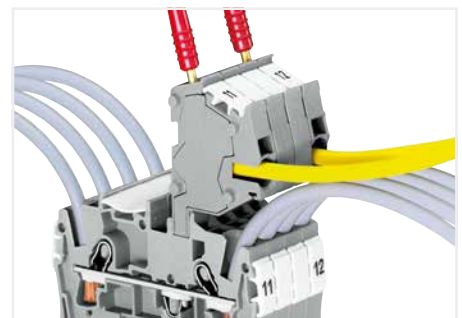


Both WAGO "smartDESIGNER" Software and Thermal Transfer Printer generate the marking.



TOPJOB® S offers three marking positions for WMB or miniature WSB markers, as well as centered full-length marking strips.

Pre-assembled connectors



Pre-assembled connectors with Push-in CAGE CLAMP® connection provide an additional connection option.










For information on Push-in CAGE CLAMP® connection, see page 14.

TOPJOB® S

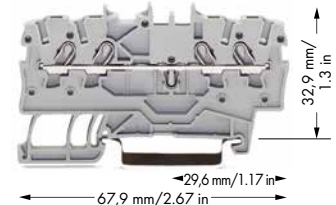
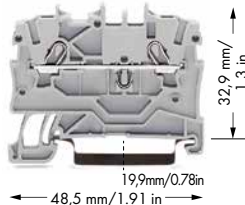
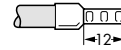
Rail-Mounted Terminal Blocks 1.0 (1.5) mm²























2000 Series

PUSH-IN CAGE CLAMP®










0.14 ... 1.0 (1.5) mm² ① 24 ... 16 AWG 600 V, 10 A  600 V, 10 A  I_N 13.5 A (18 A) Terminal block width: 3.5 mm / 0.138 in.  9 ... 11 mm / 0.39 in. ② Approvals	0.14 ... 1.0 (1.5) mm² ① 24 ... 16 AWG 600 V, 10 A  600 V, 10 A  I_N 13.5 A (18 A) Terminal block width: 3.5 mm / 0.138 in.  9 ... 11 mm / 0.39 in. ② Approvals	0.14 ... 1.0 (1.5) mm² ① 24 ... 16 AWG 600 V, 10 A  600 V, 10 A  I_N 13.5 A (18 A) Terminal block width: 3.5 mm / 0.138 in.  9 ... 11 mm / 0.39 in. ② Approvals
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① Conductor range: 0.14 ... 1.5 mm² "s+fst"
 Push-in termination: 0.5 ... 1.5 mm² "s" and 0.5 ... 1 mm² "insulated ferrule, 12 mm"





















Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
2-conductor through terminal block			3-conductor through terminal block			4-conductor through terminal block		
gray 	2000-1201	100	gray 	2000-1301	100	gray 	2000-1401	100
blue 	2000-1204 ③	100	blue 	2000-1304 ③	100	blue 	2000-1404 ③	100
orange 	2000-1202	100	orange 	2000-1302	100	orange 	2000-1402	100
red 	2000-1203	100	red 	2000-1303	100	red 	2000-1403	100
black 	2000-1205	100	black 	2000-1305	100	black 	2000-1405	100
yellow 	2000-1206	100	yellow 	2000-1306	100	yellow 	2000-1406	100
2-conductor ground terminal block			3-conductor ground terminal block			4-conductor ground terminal block		
green-yellow 	2000-1207	100	green-yellow 	2000-1307	100	green-yellow 	2000-1407	100
						Double potential terminal block		
						gray 	2000-2141	50

Item-Specific Accessories

End and intermediate plate, 0.7 mm thick	End and intermediate plate, 0.7 mm thick	End and intermediate plate, 0.7 mm thick
  2000-1292 100 (4x25)  2000-1291 100 (4x25)	  2000-1392 100 (4x25)  2000-1391 100 (4x25)	  2000-1492 100 (4x25)  2000-1491 100 (4x25)

Accessories, 2000 Series

Appropriate marking systems: **WMB/Marking Strips/WMB Inline**

Push-in type jumper bar, insulated,  I_N 14 A, light gray 2-way 2000-402 200 (8x25) 3-way 2000-403 200 (8x25) 4-way 2000-404 200 (8x25) : 10-way 2000-410 100 (4x25) .../000-005  .../000-006	Push-in type jumper bar, insulated,  I_N 14 A, light gray 1 to 3 2000-433 200 (8x25) 1 to 4 2000-434 200 (8x25) 1 to 5 2000-435 100 (4x25) : 1 to 10 2000-440 100 (4x25)	Star point jumper, insulated,  I_N = I_N terminal block, light gray 1-3-5 2000-405/011-000 100 (4x25)
Protective warning marker, with high-voltage symbol, for 5 terminal blocks   2000-115 100 (4x25)	WMB Multi marking system, plain, 10 strips with 10 markers per card for 3.5 mm terminal block width,   793-3501 5	Delta jumper, insulated,  I_N = I_N terminal block, light gray 1-2 3-4 5-6 2000-406/020-000 100 (4x25)
Operating tool with a partially insulated shaft, type 1, (2.5 x 0.4) mm blade  210-719 1	WMB Inline, plain, 3.5 mm, 2,300 WMB markers per roll  2009-113 1	Marking strips, plain 11 mm wide, 50 m roll   2009-110 1
Insulated ferrules, extra long, for TOPJOB® S terminal blocks, see page 259 	③ Suitable for Ex i applications ④ Suitable for Ex e II applications 550 V, 22 A	Test plug adapter, for 4 mm Ø test plug   2009-174 100 (4x25)
		Testing tap, for max. 2.5 mm²   2009-182 100 (4x25)

② For all approvals and corresponding ratings, visit www.wago.com.

For technical information and abbreviations, see technical section.

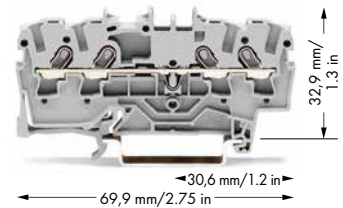
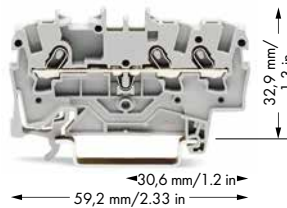
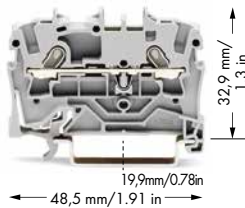
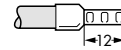
TOPJOB® S

Through/Ground/Shield Conductor and Ex Terminal Blocks 1.5 (2.5) mm²

2001 Series

<p>0.25 ... 1.5 (2.5) mm² ① 22 ... 14 AWG 800 V/8 kV/3 I_N 18 A (24 A)</p> <p>Terminal block width: 4.2 mm / 0.165 in. 9 ... 11 mm / 0.39 in.</p> <p>② Approvals</p>	<p>0.25 ... 1.5 (2.5) mm² ① 22 ... 14 AWG 800 V/8 kV/3 I_N 18 A (24 A)</p> <p>Terminal block width: 4.2 mm / 0.165 in. 9 ... 11 mm / 0.39 in.</p> <p>② Approvals</p>	<p>0.25 ... 1.5 (2.5) mm² ① 22 ... 14 AWG 800 V/8 kV/3 I_N 18 A (24 A)</p> <p>Terminal block width: 4.2 mm / 0.165 in. 9 ... 11 mm / 0.39 in.</p> <p>② Approvals</p>
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① Conductor range: 0.25 ... 2.5 mm² "s+f-st"
Push-in termination: 0.5 ... 2.5 mm² "s" and 0.75 ... 1.5 mm² "insulated ferrule, 12 mm"



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
2-conductor through terminal block			3-conductor through terminal block			4-conductor through terminal block		
gray	2001-1201	100	gray	2001-1301	100	gray	2001-1401	100
blue	2001-1204 ③	100	blue	2001-1304 ③	100	blue	2001-1404 ③	100
orange	2001-1202	100	orange	2001-1302	100	orange	2001-1402	100
red	2001-1203	100	red	2001-1303	100	red	2001-1403	100
black	2001-1205	100	black	2001-1305	100	black	2001-1405	100
yellow	2001-1206	100	yellow	2001-1306	100	yellow	2001-1406	100
2-conductor ground terminal block			3-conductor ground terminal block			4-conductor ground terminal block		
green-yellow	2001-1207	100	green-yellow	2001-1307	100	green-yellow	2001-1407	100
2-cond. shield conductor terminal block			3-cond. shield conductor terminal block			4-cond. shield conductor terminal block		
white	2001-1208	100	white	2001-1308	100	white	2001-1408	100
Other terminal blocks with the same profile:			Other terminal blocks with the same profile:			Other terminal blocks with the same profile:		
Diode	2001-1211/1000-411 ④		Diode	2001-1311/1000-411 ④		Diode	2001-1411/1000-411 ④	
			LED	2001-1321/1000-434 ④		Diode	2001-1411/1000-434 ④	
						Double-potential	2001-1441 ④	

Item-Specific Accessories

Separator for Ex e/Ex i applications, see page 30

<p>End and intermediate plate, 0.8 mm thick</p> <p>2002-1292 100 (4x25)</p> <p>2002-1291 100 (4x25)</p>	<p>End and intermediate plate, 0.8 mm thick</p> <p>2002-1392 100 (4x25)</p> <p>2002-1391 100 (4x25)</p>	<p>End and intermediate plate, 0.8 mm thick</p> <p>2002-1492 100 (4x25)</p> <p>2002-1491 100 (4x25)</p>
<p>Separator, oversized, 0.8 mm thick</p> <p>2002-1294 100 (4x25)</p> <p>2002-1293 100 (4x25)</p>	<p>Separator, oversized, 0.8 mm thick</p> <p>2002-1394 100 (4x25)</p> <p>2002-1393 100 (4x25)</p>	<p>Separator, oversized, 0.8 mm thick</p> <p>2002-1494 100 (4x25)</p> <p>2002-1493 100 (4x25)</p>

Accessories, 2001 Series

Appropriate marking systems: WMB/Marking Strips

<p>Push-in type jumper bar, insulated,</p> <p>I_N 18 A, light gray</p> <p>2-way 2001-402 200 (8x25)</p> <p>3-way 2001-403 200 (8x25)</p> <p>4-way 2001-404 200 (8x25)</p> <p>: :</p> <p>10-way 2001-410 100 (4x25)</p>	<p>Push-in type jumper bar, insulated,</p> <p>I_N 18 A, light gray</p> <p>1 to 3 2001-433 200 (8x25)</p> <p>1 to 4 2001-434 200 (8x25)</p> <p>1 to 5 2001-435 100 (4x25)</p> <p>: :</p> <p>1 to 10 2001-440 100 (4x25)</p>	<p>Push-in type wire jumper, insulated,</p> <p>I_N 16 A, 1.5 mm² conductor size</p> <p>60 mm 2009-412 100 (10x10)</p> <p>110 mm 2009-414 100 (10x10)</p> <p>250 mm 2009-416 100 (10x10)</p>
<p>Insulation stop,</p> <p>5 pcs/strip</p> <p>2001-171 0.25-0.5 mm² 200 (8x25)</p>	<p>Protective warning marker, with high-voltage symbol,</p> <p>for 5 terminal blocks</p> <p>2001-115 100 (4x25)</p>	<p>Star point jumper, insulated,</p> <p>I_N = I_N terminal block, light gray</p> <p>1-3-5 2001-405/011-000 100 (4x25)</p>
<p>WMB Multi marking system, plain,</p> <p>10 strips with 10 markers per card, stretchable from 4 ... 4.2 mm</p> <p>793-4501 5</p>	<p>Operating tool with a partially insulated shaft,</p> <p>type 1, (2.5 x 0.4) mm blade</p> <p>210-719 1</p>	<p>Modular TOPJOB® S connector, can be snapped together,</p> <p>I_N 18 A, for jumper contact slot</p> <p>2001-511 100 (4x25)</p>
<p>Marking strip, plain,</p> <p>11 mm wide, 50 m roll</p> <p>2009-110 1</p>	<p>③ Suitable for Ex i applications ④ Suitable for Ex e II applications 550 V, 17 A</p>	<p>Spacer module, can be snapped together</p> <p>2001-549 100 (4x25)</p>
		<p>Insulated ferrules, extra long,</p> <p>for TOPJOB® S terminal blocks, see page 259</p>

② For all approvals and corresponding ratings, visit www.wago.com.
④ See Full Line Catalog or visit www.wago.com.

For technical information and abbreviations, see technical section.

TOPJOB® S

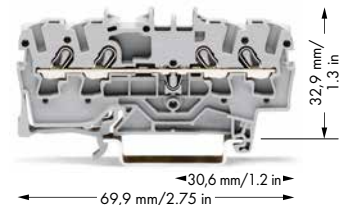
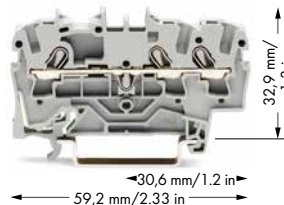
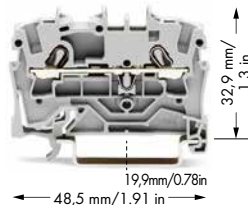
Through/Ground/Shield Conductor and Ex Terminal Blocks 2.5 (4) mm²

2002 Series

PUSH-IN CAGE CLAMP®

0.25 ... 2.5 (4) mm ² ① 800 V/8 kV/3 I _N 24 A (32 A) Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.	22 ... 12 AWG 600 V, 20 A ② 600 V, 20 A ③	0.25 ... 2.5 (4) mm ² ① 800 V/8 kV/3 I _N 24 A (32 A) Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.	22 ... 12 AWG 600 V, 20 A ② 600 V, 20 A ③	0.25 ... 2.5 (4) mm ² ① 800 V/8 kV/3 I _N 24 A (32 A) Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.	22 ... 12 AWG 600 V, 20 A ② 600 V, 20 A ③
② Approvals		② Approvals		② Approvals	

- ① Conductor range: 0.25 ... 4 mm² "s+f-st"
Push-in termination: 0.75 ... 4 mm² "s" and
0.75 ... 2.5 mm² "insulated ferrule, 12 mm"



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
2-conductor through terminal block			3-conductor through terminal block			4-conductor through terminal block		
gray ④	2002-1201	100	gray ④	2002-1301	100	gray ④	2002-1401	100
blue ④	2002-1204 ③	100	blue ④	2002-1304 ③	100	blue ④	2002-1404 ③	100
orange ④	2002-1202	100	orange ④	2002-1302	100	orange ④	2002-1402	100
red ④	2002-1203	100	red ④	2002-1303	100	red ④	2002-1403	100
black ④	2002-1205	100	black ④	2002-1305	100	black ④	2002-1405	100
yellow ④	2002-1206	100	yellow ④	2002-1306	100	yellow ④	2002-1406	100
2-conductor ground terminal block			3-conductor ground terminal block			4-conductor ground terminal block		
green-yellow ④	2002-1207	100	green-yellow ④	2002-1307	100	green-yellow ④	2002-1407	100
2-cond. shield conductor terminal block			3-cond. shield conductor terminal block			4-cond. shield conductor terminal block		
white	2002-1208	100	white	2002-1308	100	white	2002-1408	100
Other terminal blocks with the same profile:			Other terminal blocks with the same profile:			Other terminal blocks with the same profile:		
Diode	2002-1211/1000-411	Page 60	Diode	2002-1311/1000-411	Page 60	Diode	2002-1411/1000-411	Page 60
			LED	2002-1321/1000-434	Page 60	Diode	2002-1411/1000-434	Page 60
						Double-potential	2002-1441 ④	

Item-Specific Accessories

Separator for Ex e/Ex i applications, see page 30

End and intermediate plate, 0.8 mm thick	End and intermediate plate, 0.8 mm thick	End and intermediate plate, 0.8 mm thick
<ul style="list-style-type: none"> 2002-1292 100 (4x25) 2002-1291 100 (4x25) 	<ul style="list-style-type: none"> 2002-1392 100 (4x25) 2002-1391 100 (4x25) 	<ul style="list-style-type: none"> 2002-1492 100 (4x25) 2002-1491 100 (4x25)
Separator, oversized, 0.8 mm thick	Separator, oversized, 0.8 mm thick	Separator, oversized, 0.8 mm thick
<ul style="list-style-type: none"> 2002-1294 100 (4x25) 2002-1293 100 (4x25) 	<ul style="list-style-type: none"> 2002-1394 100 (4x25) 2002-1393 100 (4x25) 	<ul style="list-style-type: none"> 2002-1494 100 (4x25) 2002-1493 100 (4x25)

Accessories, 2002 Series

Appropriate marking systems: WMB/Marking Strips/WMB Inline/Miniature WSB

Adjacent jumper for continuous commoning, insulated, I _N 25 A, light gray 2-way 2002-400 100 (4x25) 1 to 3 2002-423 100 (4x25)	Push-in type jumper bar, insulated, I _N 25 A, light gray 1 to 3 2002-433 200 (8x25) : 1 to 10 2002-440 100 (4x25)	Staggered jumper, insulated, I _N 25 A, light gray 2-way 2002-472 100 (4x25) 3-way 2002-473 100 (4x25) 4-way 2002-474 100 (4x25) : 12-way 2002-482 50 (2x25)
Push-in type jumper bar, insulated, I _N 25 A, light gray 2-way 2002-402 200 (8x25) 3-way 2002-403 200 (8x25) 4-way 2002-404 200 (8x25) : 10-way 2002-410 100 (4x25)	Insulation stop, 5 pcs/strip ○ 2002-171 0.25-0.5 mm ² ● 2002-172 0.75-1 mm ² 200 (8x25)	Star point jumper, insulated, I _N = I _N terminal block, light gray 1-3-5 2002-405/011-000 100 (4x25)
● .../000-005 ● .../000-006	Protective warning marker, with high-voltage symbol, for 5 terminal blocks ● 2002-115 100 (4x25)	Delta jumper, insulated, I _N = I _N terminal block, light gray 1-2 3-4 5-6 2004-406/020-000 100 (4x25)
Push-in type wire jumper, insulated, I _N 16 A, 1.5 mm ² conductor size 60 mm 2009-412 100 (10x10) 110 mm 2009-414 100 (10x10) 250 mm 2009-416 100 (10x10)	Operating tool with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade 210-720 1	Modular TOPJOB® S L-test plug, can be snapped together, I_N 18 A, for conductor entry ● 2002-611 100 (4x25)
WMB Multi marking system, plain, 10 strips with 10 markers per card, stretchable from 5 ... 5.2 mm ○ 793-5501 5	③ Suitable for Ex i applications ④ Suitable for Ex e II applications 550 V, 22 A	Spacer module, can be snapped together ● 2002-649 100 (4x25)



Please find the entire product range in our Full Line Catalog. For additional information, visit www.wago.com.

④ See Full Line Catalog or visit www.wago.com.

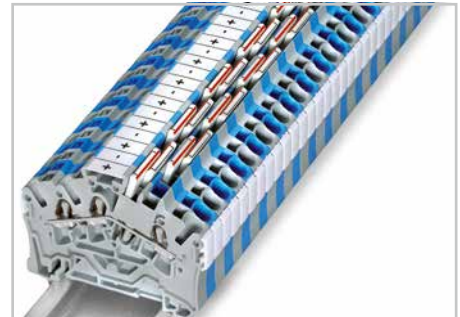
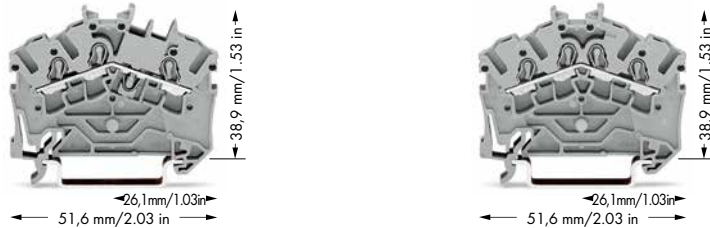
TOPJOB® S

Through/Ground/Shield Conductor and Ex Terminal Blocks 2.5 (4) mm²

2002 Series

<p>0.25 ... 2.5 (4) mm² ①</p> <p>800 V/8 kV/3 I_N 24 A (32 A)</p> <p>Terminal block width: 5.2 mm / 0.205 in.</p> <p> 10 ... 12 mm / 0.43 in.</p> <p>② Approvals</p>	<p>22 ... 12 AWG 600 V, 20 A ③ 600 V, 20 A ④</p>	<p>0.25 ... 2.5 (4) mm² ①</p> <p>800 V/8 kV/3 I_N 24 A (32 A)</p> <p>Terminal block width: 5.2 mm / 0.205 in.</p> <p> 10 ... 12 mm / 0.43 in.</p> <p>② Approvals</p>	<p>22 ... 12 AWG 600 V, 20 A ③ 600 V, 20 A ④</p>
--	--	--	--

① Conductor range: 0.25 ... 4 mm² "st+st"
Push-in termination: 0.75 ... 4 mm² "s"
and 0.75 ... 2.5 mm² "insulated ferrule, 12 mm"





Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
3-conductor through terminal block			4-conductor through terminal block		
gray ④	2002-6301	100	gray ④	2002-6401	100
blue ④	2002-6304 ③	100	blue ④	2002-6404 ③	100
orange ④	2002-6302	100	orange ④	2002-6402	100
Additional colors will be available soon.			Additional colors will be available soon.		
3-conductor ground terminal block			4-conductor ground terminal block		
green-yellow ④	2002-6307	100	green-yellow ④	2002-6407	100
3-cond. shield conductor terminal block			Notice: These terminal blocks cannot be com-		
white	2002-6308	100	moned.		

3- and 4-conductor terminal blocks

WAGO's TOPJOB® S Rail-Mounted Terminal Blocks have a 35-degree conductor entry angle permitting a very small bend radius and an extremely short wiring distance to the cable duct. Space- and cost-saving solutions for switchgear and control cabinet applications that use the LSC wiring system from Lütze. The design allows cable duct to be placed very close to the terminal blocks, keeping its height relatively low.

An end plate must be applied when changing from a 3-conductor terminal block to a 4-conductor terminal block and vice versa.

Item-Specific Accessories

<p>End and intermediate plate, 0.8 mm thick</p> <p> ④</p> <p>● 2002-6392 100 (4x25)</p> <p>○ 2002-6391 100 (4x25)</p>	<p>End and intermediate plate, 0.8 mm thick</p> <p> ④</p> <p>● 2002-6392 100 (4x25)</p> <p>○ 2002-6391 100 (4x25)</p>
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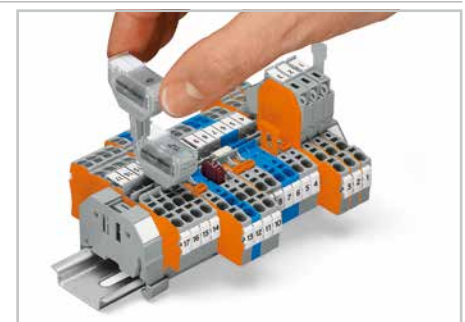
Accessories, 2002 Series

Appropriate marking systems:
WMB/Marking Strips/WMB Inline/Miniature WSB

<p>Adjacent jumper for continuous commoning, insulated, I_N 25 A, light gray</p> <p>2-way 2002-400 100 (4x25)</p> <p>1 to 3 2002-423 100 (4x25)</p>	<p>Insulation stop, 5 pcs/strip</p> <p>○ 2002-171 0.25-0.5 mm²</p> <p>● 2002-172 0.75-1 mm²</p> <p>200 (8x25)</p>
<p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p>2-way 2002-402 200 (8x25)</p> <p>: :</p> <p>10-way 2002-410 100 (4x25)</p> <p>● .../000-005 ● .../000-006</p>	<p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</p> <p>● 2002-115 100 (4x25)</p>
<p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p>1 ... 3 2002-433 200 (8x25)</p> <p>: :</p> <p>1 ... 10 2002-440 100 (4x25)</p>	<p>Test plug adapter, for 4 mm Ø test plug</p> <p>○ 2009-174 100 (4x25)</p> <p>Testing tap, for max. 2.5 mm²</p> <p>○ 2009-182 100 (4x25)</p>
<p>Staggered jumper, insulated, I_N 25 A, light gray</p> <p>2-way 2002-472 100 (4x25)</p> <p>3-way 2002-473 100 (4x25)</p> <p>4-way 2002-474 100 (4x25)</p> <p>5-way 2002-475 50 (2x25)</p> <p>: :</p> <p>12-way 2002-482 50 (2x25)</p>	<p>Banana plugs, only for safety extra-low voltage (42 V)</p> <p>● 215-212 50</p> <p>● 215-311 50</p> <p>For additional colors, see page 262.</p>
<p>Modular TOPJOB® S connector, can be snapped together, I_N 24 A, for jumper contact slot</p> <p>○ 2002-511 100 (4x25)</p>	<p>Insulated ferrules, extra long, for TOPJOB® S terminal blocks (see page 259)</p>
<p>Spacer module, can be snapped together</p> <p>○ 2002-549 100 (4x25)</p>	<p>Operating tool,</p> <p>3.5 mm and 2.5 mm blades</p> <p>● 2009-309 1</p>
<p>Operating tool with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade</p> <p>● 210-720 1</p>	<p>③ Suitable for Ex i applications</p> <p>④ Suitable for Ex e II applications 550 V, 22 A</p>

Through Terminal Block Accessories, 2001 ... 2006 Series

<p>Diode module,</p> <p>I_N 1 A, 10.4 mm wide, gray</p> <p>● 2002-880/1000-411 50</p>
<p>LED module, with red LED,</p> <p>I_N ≤ 3 mA, 10.4 mm wide, gray</p> <p>12 ... 30 V ● 2002-880/1000-541 50</p>
<p>LED module, with red LED,</p> <p>I_N ≤ 3 mA, 10.4 mm wide, gray</p> <p>30 ... 65 V ● 2002-880/1000-542 50</p>
<p>LED module, with red LED,</p> <p>I_N ≤ 3 mA, 10.4 mm wide, gray</p> <p>230 V ● 2002-880/1000-836 50</p>



Plugging a diode module into a through terminal block.

For empty component plug housings, see page 236.

② For all approvals and corresponding ratings, visit www.wago.com.










For technical information and abbreviations, see "Technical Section."

TOPJOB® S

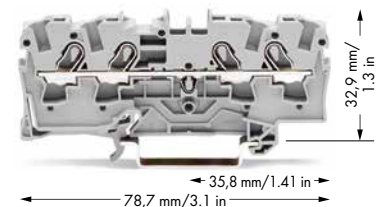
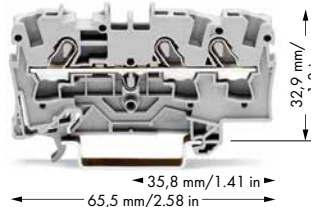
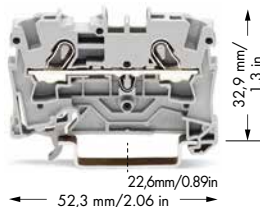
Through/Ground/Shield Conductor and Ex Terminal Blocks 4 (6) mm²

























2004 Series

PUSH-IN CAGE CLAMP®

0.5 ... 4 (6) mm² ① 800 V/8 kV/3 I_N 32 A (41 A) Terminal block width: 6.2 mm / 0.244 in.  11 ... 13 mm / 0.47 in. ② Approvals	20 ... 10 AWG 600 V, 30 A  600 V, 30 A 	0.5 ... 4 (6) mm² ① 800 V/8 kV/3 I_N 32 A (41 A) Terminal block width: 6.2 mm / 0.244 in.  11 ... 13 mm / 0.47 in. ② Approvals	20 ... 10 AWG 600 V, 30 A  600 V, 30 A 	0.5 ... 4 (6) mm² ① 800 V/8 kV/3 I_N 32 A (41 A) Terminal block width: 6.2 mm / 0.244 in.  11 ... 13 mm / 0.47 in. ② Approvals	20 ... 10 AWG 600 V, 30 A  600 V, 30 A 
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① Conductor range: 0.5 ... 6 mm² "s+f-st"
 Push-in termination: 1 ... 6 mm² "s" and
 0.75 ... 4 mm² "insulated ferrule, 12 mm"



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
2-conductor through terminal block			3-conductor through terminal block			4-conductor through terminal block		
gray 	2004-1201	100	gray 	2004-1301	100	gray 	2004-1401	100
blue 	2004-1204 ③	100	blue 	2004-1304 ③	100	blue 	2004-1404 ③	100
orange 	2004-1202	100	orange 	2004-1302	100	orange 	2004-1402	100
red 	2004-1203	100	red 	2004-1303	100	red 	2004-1403	100
black 	2004-1205	100	black 	2004-1305	100	black 	2004-1405	100
yellow 	2004-1206	100	yellow 	2004-1306	100	yellow 	2004-1406	100
2-conductor ground terminal block			3-conductor ground terminal block			4-conductor ground terminal block		
green-yellow 	2004-1207	100	green-yellow 	2004-1307	100	green-yellow 	2004-1407	100
2-cond. shield conductor terminal block			3-cond. shield conductor terminal block			4-cond. shield conductor terminal block		
white 	2004-1208	100	white 	2004-1308	100	white 	2004-1408	100




















Item-Specific Accessories

Separator for Ex e/Ex i applications, see page 30

End and intermediate plate, 1 mm thick  <ul style="list-style-type: none"> orange  2004-1292 100 (4x25) gray  2004-1291 100 (4x25) 	End and intermediate plate, 1 mm thick  <ul style="list-style-type: none"> orange  2004-1392 100 (4x25) gray  2004-1391 100 (4x25) 	End and intermediate plate, 1 mm thick  <ul style="list-style-type: none"> orange  2004-1492 100 (4x25) gray  2004-1491 100 (4x25)
Separator, oversized, 0.8 mm thick  <ul style="list-style-type: none"> orange  2004-1294 100 (4x25) gray  2004-1293 100 (4x25) 	Separator, oversized, 0.8 mm thick  <ul style="list-style-type: none"> orange  2004-1394 100 (4x25) gray  2004-1393 100 (4x25) 	Separator, oversized, 0.8 mm thick  <ul style="list-style-type: none"> orange  2004-1494 100 (4x25) gray  2004-1493 100 (4x25)

Accessories, 2004 Series

Appropriate marking systems: WMB/Marking Strips/WMB Inline/Miniature WSB







Push-in type jumper bar, insulated, I_N 32 A, light gray  <ul style="list-style-type: none"> 2-way 2004-402 200 (8x25) 3-way 2004-403 200 (8x25) 4-way 2004-404 100 (4x25) : : 10-way 2004-410 100 (4x25) 	Push-in type jumper bar, insulated, I_N 32 A, light gray  <ul style="list-style-type: none"> 1 to 3 2004-433 200 (8x25) 1 to 4 2004-434 200 (8x25) 1 to 5 2004-435 100 (4x25) : : 1 to 10 2004-440 100 (4x25) 	Delta jumper, insulated, $I_N = I_N$ terminal block, light gray  <ul style="list-style-type: none"> 1-2 3-4 5-6 2004-406/020-000 100 (4x25)
Insulation stop, 5 pcs/strip  <ul style="list-style-type: none"> white  2004-171 0.25-0.5 mm² gray  2004-172 0.75-1 mm² 	Protective warning marker, with high-voltage symbol, for 5 terminal blocks  <ul style="list-style-type: none"> yellow  2004-115 100 (4x25) 	Star point jumper, insulated, $I_N = I_N$ terminal block, light gray  <ul style="list-style-type: none"> 1-3-5 2004-405/011-000 100 (4x25)
WMB Multi marking system, plain, 10 strips with 10 markers per card, stretchable from 5 ... 5.2 mm  <ul style="list-style-type: none"> white  793-5501 5 	Operating tool with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade  <ul style="list-style-type: none"> 210-720 1 	Modular TOPJOB® S connector, can be snapped together, I_N 32 A, for jumper contact slot  <ul style="list-style-type: none"> gray  2004-511 100 (4x25)
Marking strip, plain, 11 mm wide, 50 m roll  <ul style="list-style-type: none"> white  2009-110 1 	③ Suitable for Ex i applications ④ Suitable for Ex e II applications 550 V, 30 A	Spacer module, can be snapped together  <ul style="list-style-type: none"> gray  2004-549 100 (4x25)
Insulated ferrules, extra long,  for TOPJOB® S terminal blocks, see page 259		

Please find the entire product range in our Full Line Catalog. For additional information, visit www.wago.com.

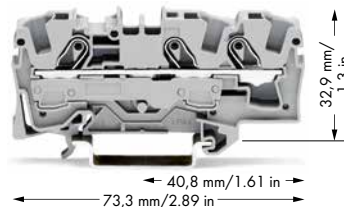
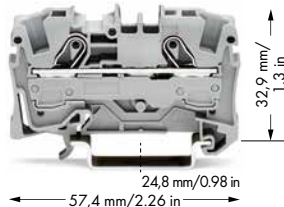
TOPJOB® S

















Through/Ground/Shield Conductor and Ex Terminal Blocks 6 (10) mm²

2006 Series

<p>0.5 ... 6 (10) mm² ①</p> <p>20 ... 8 AWG</p> <p>800 V/8 kV/3</p> <p>I_N 41 A (57 A)</p> <p>Terminal block width: 7.5 mm / 0.295 in.</p> <p> 13 ... 15 mm / 0.55 in.</p> <p>② Approvals</p>	<p>20 ... 8 AWG</p> <p>600 V, 50 A </p> <p>600 V, 50 A </p>	<p>0.5 ... 6 (10) mm² ①</p> <p>20 ... 8 AWG</p> <p>800 V/8 kV/3</p> <p>I_N 41 A (57 A)</p> <p>Terminal block width: 7.5 mm / 0.295 in.</p> <p> 13 ... 15 mm / 0.55 in.</p> <p>② Approvals</p>	<p>20 ... 8 AWG</p> <p>600 V, 50 A </p> <p>600 V, 50 A </p>	<p>Separator for Ex e/Ex i applications</p>
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① Conductor range: 0.5 ... 10 mm² "s+fs"
 Push-in termination: 1.5 ... 10 mm² "s" and
 1.5 ... 6 mm² "insulated ferrule, 12 mm"

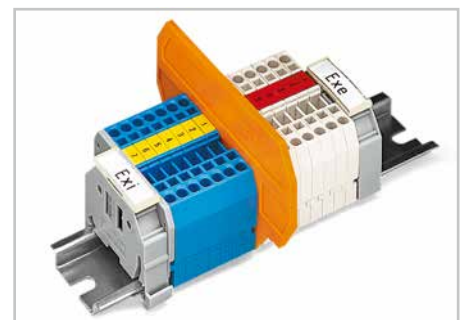


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
2-conductor through terminal block			3-conductor through terminal block			Separator for Ex e/Ex i applications,		
gray 	2006-1201	50	gray 	2006-1301	25	3 mm thick, orange		
blue 	2006-1204 ③	50	blue 	2006-1304 ③	25	90 mm wide	209-190	50 (2x25)
orange 	2006-1202	50	orange 	2006-1302	25	120 mm wide	209-191	50 (2x25)
2-conductor ground terminal block			3-conductor ground terminal block			125,5 mm wide	209-192	50 (2x25)
green-yellow 	2006-1207	50	green-yellow 	2006-1307	25			
2-cond. shield conductor terminal block								
white	2006-1208	50						
Item-Specific Accessories								
End and intermediate plate, 1 mm thick			End and intermediate plate, 1 mm thick					
	 2006-1292	100 (4x25)		 2006-1392	100 (4x25)			
	 2006-1291	100 (4x25)		 2006-1391	100 (4x25)			

Accessories, 2006 Series

Appropriate marking systems: **WMB/Marking Strips/WMB Inline/Miniature WSB**

<p>Push-in type jumper bar, insulated,</p> <p>I_N 41 A, light gray</p> <p>2-way 2006-402 50 (2x25)</p> <p>3-way 2006-403 50 (2x25)</p> <p>4-way 2006-404 50 (2x25)</p> <p>5-way 2006-405 50 (2x25)</p>	<p>Push-in type jumper bar, insulated,</p> <p>I_N 41 A, light gray</p> <p>1 to 3 2006-433 50 (2x25)</p> <p>1 to 4 2006-434 50 (2x25)</p> <p>1 to 5 2006-435 50 (2x25)</p>
<p>Star point jumper, insulated,</p> <p>I_N = I_N terminal block, light gray</p> <p>1-3-5 2006-405/011-000</p> <p>50 (2x25)</p>	<p>Step-down jumper, insulated,</p> <p>I_N 32 A, light gray</p> <p>2006-499 50 (2x25)</p>
<p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</p> <p> 2006-115 100 (4x25)</p>	<p>Operating tool,</p> <p>3.5 mm and 5.5 mm blades</p> <p>2009-310 1</p>
<p>Test plug adapter, for 4 mm Ø test plug</p> <p> 2009-174 100 (4x25)</p> <p>Testing tap, for max. 2.5 mm²</p> <p> 2009-182 100 (4x25)</p>	<p>Operating tool with a partially insulated shaft,</p> <p>type 3, (5.5 x 0.8) mm blade</p> <p>210-721 1</p>
<p>Modular TOPJOB® S connector, can be snapped together, I_N 32 A, for jumper contact slot</p> <p> 2006-511 100 (4x25)</p>	<p>Banana plugs, only for safety extra-low voltage (42 V)</p> <p> 215-212 50</p> <p> 215-311 50</p> <p>For additional colors, see page 262.</p>
<p>Spacer module, can be snapped together</p> <p> 2006-549 100 (4x25)</p>	<p>Marking strip, plain,</p> <p>11 mm wide, 50 m roll</p> <p> 2009-110 1</p>
<p>Insulated ferrules, extra long, for TOPJOB® S terminal blocks, see page 259</p> <p></p>	<p>③ Suitable for Ex i applications</p> <p> Suitable for Ex e II applications</p> <p>550 V, 38 A (2-conductor terminal blocks)</p> <p>550 V, 36 A (3-conductor terminal blocks)</p>



Separator for Ex e/Ex i applications
 According to EN 50020, a minimum distance of 50 mm must be kept between live parts of Ex e and Ex i circuits. The use of Ex e/Ex i separators is a space-saving solution when Ex e and Ex i terminal blocks are mounted on a common carrier rail.

Suitable for Series: 279 to 282, 2001, 2002 and 2004.

209-190 for 2-conductor terminal blocks
 209-191 for 2-, 3-, 4-conductor terminal blocks
 209-192 for double-deck terminal blocks

② For all approvals and corresponding ratings, visit www.wago.com.

For technical information and abbreviations, see "Technical Section."

TOPJOB® S

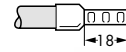
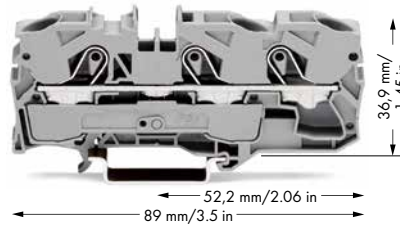
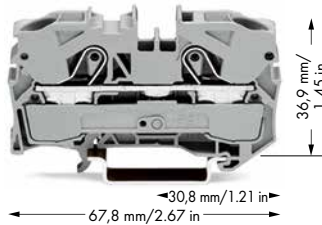
Through/Ground/Shield Conductor and Ex Terminal Blocks 10 (16) mm²

2010 Series

PUSH-IN CAGE CLAMP®

0.5 ... 10 (16) mm ² ① 800 V/8 kV/3 I _N 57 A (76 A) Terminal block width: 10 mm / 0.394 in. 17 ... 19 mm / 0.71 in.	20 ... 6 AWG 600 V, 65 A ② 600 V, 65 A ③	0.5 ... 10 (16) mm ² ① 800 V/8 kV/3 I _N 57 A (76 A) Terminal block width: 10 mm / 0.394 in. 17 ... 19 mm / 0.71 in.	20 ... 6 AWG 600 V, 65 A ② 600 V, 65 A ③	Step-down jumpers
② Approvals		② Approvals		

- ① Conductor range: 0.5 ... 16 mm² "s+fst"
Push-in termination: 2.5 ... 16 mm² "s" and
2.5 ... 10 mm² "insulated ferrule, 18 mm"

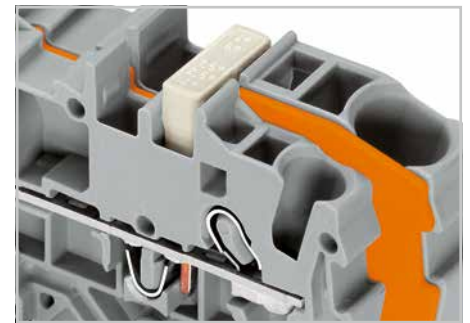


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Item No.	Pack. Unit
2-conductor through terminal block			3-conductor through terminal block			Step-down jumper, insulated,	
gray ④	2010-1201	25	gray ④	2010-1301	25	I _N 32 A, light gray,	
blue ④	2010-1204 ③	25	blue ④	2010-1304 ③	25	commons 6/4 mm ² down to 4/2.5/1.5 mm ²	
orange ④	2010-1202	25	orange ④	2010-1302	25	2006-499	50 (2x25)
2-conductor ground terminal block			3-conductor ground terminal block			Step-down jumper, insulated,	
green-yellow ④	2010-1207	25	green-yellow ④	2010-1307	25	I _N 57 A, light gray,	
2-cond. shield conductor terminal block						commons 16/10 mm ² down to 10/6/4/2.5 mm ²	
white	2010-1208	25				2016-499	50 (2x25)
Item-Specific Accessories							
End and intermediate plate, 1 mm thick				End and intermediate plate, 1 mm thick			
	2010-1292	100 (4x25)		2010-1392	100 (4x25)		
	2010-1291	100 (4x25)		2010-1391	100 (4x25)		

Accessories, 2010 Series

Appropriate marking systems: WMB/Marking Strips/WMB Inline/Miniature WSB

Push-in type jumper bar, insulated, I _N 57 A, light gray		2-way 2010-402 50 (2x25)	Push-in type jumper bar, insulated, I _N 57 A, light gray		1 to 3 2010-433 50 (2x25)
		3-way 2010-403 50 (2x25)			1 to 4 2010-434 50 (2x25)
		4-way 2010-404 50 (2x25)			1 to 5 2010-435 50 (2x25)
		5-way 2010-405 50 (2x25)	Star point jumper, insulated, I _N = I _N terminal block, light gray		1-3-5 2010-405/011-000
Step-down jumper, insulated, I _N 32 A, light gray		2016-499 50 (2x25)			50 (2x25)
Protective warning marker, with high-voltage symbol, for 5 terminal blocks		2010-115 50 (2x25)	Finger guard, touch-proof cover protects unused conductor entries		2010-100 100 (4x25)
Test plug adapter, for 4 mm Ø test plug		2009-174 100 (4x25)	Operating tool with a partially insulated shaft, type 3, (5.5 x 0.8) mm blade		210-721 1
Testing tap, for max. 2.5 mm²		2009-182 100 (4x25)	Banana plugs, only for safety extra-low voltage (42 V)		215-212 50
Modular TOPJOB® S connector, can be snapped together, I _N 32 A, for jumper contact slot		2010-511 100 (4x25)			215-311 50
Spacer module, can be snapped together		2010-549 100 (4x25)	WMB Multi marking system, plain, 10 strips with 10 markers per card, stretchable from 5 ... 5.2 mm		793-5501 5
Insulated ferrules, extra long, for TOPJOB® S terminal blocks, see page 259			③ Suitable for Ex i applications ④ Suitable for Ex e II applications 550 V, 51 A (2-conductor terminal blocks) 550 V, 50 A (3-conductor terminal blocks)		



An end plate must be applied to the open side of the larger terminal block.

Additional terminal blocks having a smaller cross-section may be commoned using push-in type jumper bars.

Note:

The total current flowing shall not exceed the rating of the step-down jumper.

Cross-Section Reduction	Push-In Type Jumper Bar	Step-Down Jumper
16 to 10 mm ²	2010	
16 to 6 mm ²	2006	
16 to 4 mm ²		2016-499
16 to 2.5 mm ²		2016-499
10 to 6 mm ²	2006	
10 to 4 mm ²	2004	
10 to 2.5 mm ²		2016-499
6 to 4 mm ²	2004	
6 to 2.5 mm ²	2002	
6 to 1.5 mm ²		2006-499



Please find the entire product range in our Full Line Catalog. For additional information, visit www.wago.com.

TOPJOB® S

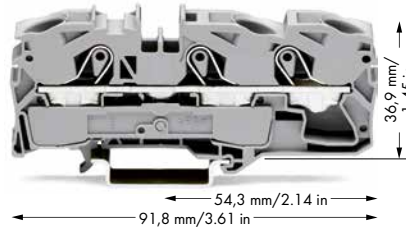
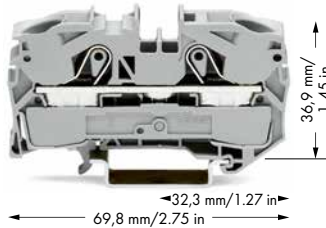
PUSH-IN CAGE CLAMP®





Through/Ground Conductor/Shield and Ex Terminal Blocks 16 (25 "f-st") mm²

2016 Series

0.5 ... 16 (25 "f-st") mm ² ① 800 V/8 kV/3 I _N 76 A (90 A) Terminal block width: 12 mm / 0.472 in.  18 ... 20 mm / 0.75 in. ② Approvals	20 ... 4 AWG 600 V, 85 A ③ 600 V, 85 A ④	0.5 ... 16 (25 "f-st") mm ² ① 800 V/8 kV/3 I _N 76 A (90 A) Terminal block width: 12 mm / 0.472 in.  18 ... 20 mm / 0.75 in. ② Approvals	20 ... 4 AWG 600 V, 85 A ③ 600 V, 85 A ④	Step-down jumpers
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


① Conductor range: 0.5 ... 16 mm² "st+f-st" and 25 mm² "f-st"
 Push-in termination: 2.5 ... 16 mm² "s" and 2.5 ... 16 mm² "insulated ferrule, 18 mm"

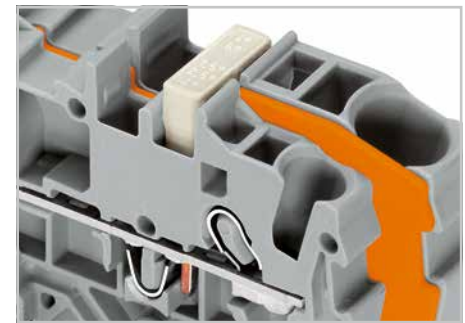


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Item No.	Pack. Unit
2-conductor through terminal block			3-conductor through terminal block			Step-down jumper, insulated,	
gray ⑤	2016-1201	20	gray ⑤	2016-1301	20	I _N 32 A, light gray,	
blue ⑤	2016-1204 ③	20	blue ⑤	2016-1304 ③	20	commons 6/4 mm ² down to 4/2.5/1.5 mm ²	
orange ⑤	2016-1202	20	orange ⑤	2016-1302	20	2006-499	50 (2x25)
2-conductor ground terminal block			3-conductor ground terminal block			Step-down jumper, insulated,	
green-yellow ⑤	2016-1207	20	green-yellow ⑤	2016-1307	20	I _N 57 A, light gray,	
2-cond. shield conductor terminal block						commons 16/10 mm ² down to 10/6/4/2.5 mm ²	
white	2016-1208	20				2016-499	50 (2x25)
Item-Specific Accessories							
End and intermediate plate, 1 mm thick				End and intermediate plate, 1 mm thick			
	● 2016-1292	100 (4x25)		● 2016-1392	100 (4x25)		
	● 2016-1291	100 (4x25)		● 2016-1391	100 (4x25)		

Accessories, 2016 Series

Appropriate marking systems: **WMB/Marking Strips/WMB Inline/Miniature WSB**

Push-in type jumper bar, insulated, I _N 76 A, light gray 2-way 2016-402 50 (2x25) 3-way 2016-403 50 (2x25) 4-way 2016-404 50 (2x25) 5-way 2016-405 50 (2x25)	Push-in type jumper bar, insulated, I _N 76 A, light gray 1 to 3 2016-433 50 (2x25) 1 to 4 2016-434 50 (2x25) 1 to 5 2016-435 50 (2x25)
Star point jumper, insulated, I _N = I _N terminal block, light gray 1-3-5 2016-405/011-000 50 (2x25)	Finger guard, touch-proof cover protects unused conductor entries  ● 2016-100 100 (4x25)
Protective warning marker, with high-voltage symbol, for 5 terminal blocks  ● 2016-115 50 (2x25)	Operating tool, 3.5 mm and 5.5 mm blades  ● 2009-310 1
Test plug adapter, for 4 mm Ø test plug  ● 2009-174 100 (4x25) Testing tap, for max. 2.5 mm²  ● 2009-182 100 (4x25)	Operating tool with a partially insulated shaft, type 3, (5.5 x 0.8) mm blade  ● 210-721 1
Modular TOPJOB® S connector, can be snapped together, I_N 32 A, for jumper contact slot  ● 2016-511 100 (4x25)	Banana plugs, only for safety extra-low voltage (42 V)  ● 215-212 50  ● 215-311 50 For additional colors, see page 262.
Spacer module, can be snapped together  ● 2016-549 100 (4x25)	Marking strip, plain, 11 mm wide, 50 m roll  ○ 2009-110 1
Insulated ferrules, extra long, for TOPJOB® S terminal blocks, see page 259 	③ Suitable for Ex i applications ⑤ Suitable for Ex e II applications 550 V, 70 A (2-conductor terminal blocks) 550 V, 67 A (3-conductor terminal blocks)



An end plate must be applied to the open side of the larger terminal block.

Additional terminal blocks having a smaller cross-section may be commoned using push-in type jumper bars.

Note:
The total current flowing shall not exceed the rating of the step-down jumper.

Cross-Section Reduction	Push-In Type Jumper Bar	Step-Down Jumper
16 to 10 mm ²	2010	
16 to 6 mm ²	2006	
16 to 4 mm ²		2016-499
16 to 2.5 mm ²		2016-499
10 to 6 mm ²	2006	
10 to 4 mm ²	2004	
10 to 2.5 mm ²		2016-499
6 to 4 mm ²	2004	
6 to 2.5 mm ²	2002	
6 to 1.5 mm ²		2006-499

② For all approvals and corresponding ratings, visit www.wago.com.

For technical information and abbreviations, see "Technical Section."

High-Current Terminal Blocks, 285 Series – Description and Installation –

POWER CAGE CLAMP

Conductor termination



Rotate the T-wrench or screwdriver counter-clockwise to the stop ①. Next, push in the orange locking tab. The clamp is locked open for hands-free wiring.



Insert stripped conductor into the clamping unit until it hits the backstop. Hold this position.



A short counter-clockwise rotation ② releases the tab. When unlocked, the T-wrench rotates clockwise, securely clamping the conductor.

Conductor preparation



1. Bend conductor, if required
2. Cut conductor to length (Conductor end must be straight!)
3. Strip conductor (Observe strip length printed on terminal block!)

Safety notes



Risk of injury!
Keep fingers out of the conductor entry hole!



Warning covers visually indicate high-voltage applications (e.g., NOTICE: Power is still on even after switching off the main switch!)

Finger guard



Touch-proof cover protects unused conductor entries and jumper slots (separate jumper entry protector from touch-proof cover).

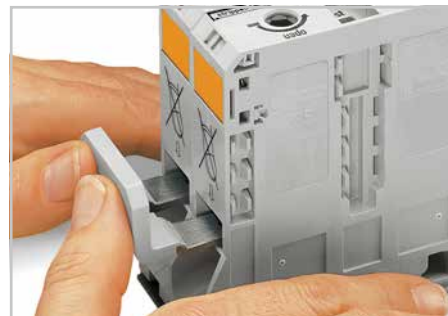
Commoning (35 mm²)



Commoning adjacent terminal blocks using a centrally positioned push-in jumper.

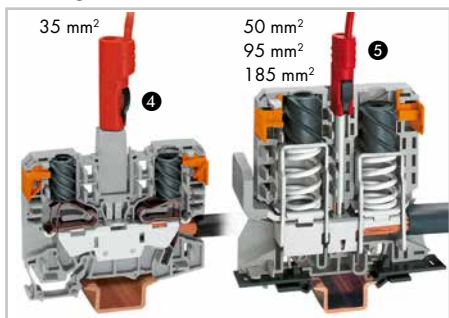
Use an operating tool to remove the conductor!

Commoning (50 mm²/95 mm²/185 mm²)



Commoning with adjacent jumper: tool-free insertion of jumper above the conductor entry. The nominal cross-section remains unchanged.

Testing



- ④ via test adapter for 4 mm Ø plugs
- ⑤ via touch-proof 4 mm Ø plugs

Power tap (35 mm²)



The power tap is inserted into the jumper contact slot. It can be fitted with a strain relief plate and provides a test option for 2 mm Ø test plugs.

Power tap (50 mm²/95 mm²/185 mm²)



Reliably and easily tap directly into the power supply. Insert the unwired tap before opening the clamping unit.










For information on POWER CAGE CLAMP connection, see page 15.

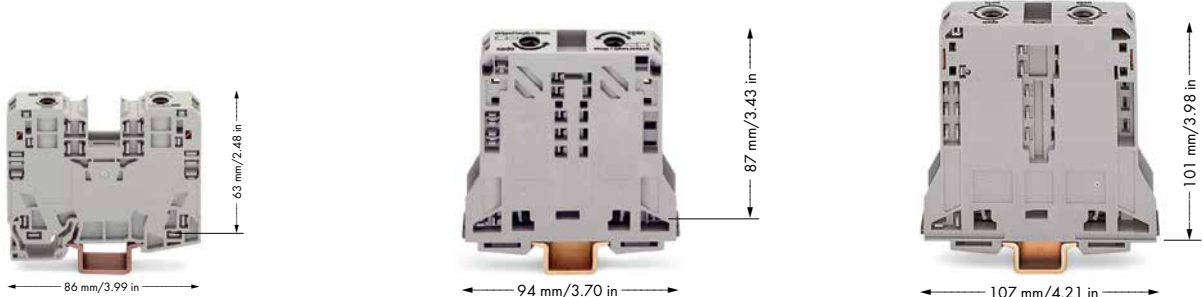
For aluminum conductors, see notes in Full Line Catalog.




High-Current, Through/Ground Conductor and Ex Terminal Blocks

35 mm², 50 mm² and 95 mm²

285 Series
































<p>6 ... 35 mm² 1000 V/8 kV/3 I_N 125 A</p> <p>Terminal block width: 16 mm / 0.63 in.</p>  25 mm / 0.98 in. <p>② Approvals</p>	<p>8 ... 2 AWG 600 V, 115 A  600 V, 115 A </p>	<p>10 ... 50 (70 "f-st") mm² 1000 V/8 kV/3 I_N 150 A</p> <p>Terminal block width: 20 mm / 0.787 in.</p>  30 mm / 1.18 in. <p>② Approvals</p>	<p>8 ... 1 AWG 600 V, 150 A  600 V, 150 A </p>	<p>25 ... 95 mm² 1000 V/8 kV/3 I_N 232 A</p> <p>Terminal block width: 25 mm / 0.98 in.</p>  35 mm / 1.38 in. <p>② Approvals</p>	<p>4 ... 4/0 AWG 600 V, 200 A  600 V, 210 A </p>
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
2-conductor through terminal block			2-conductor through terminal block			2-conductor through terminal block		
gray	285-135	15	gray	285-150	5	gray	285-195	5
blue	285-134	15	blue	285-154	5	blue	285-194	5
light gray 	285-935	15	dark gray/yellow	285-151	5	light gray 	285-995	5
dark gray/yellow	285-131	15				dark gray/yellow	285-191	5
2-cond. ground conductor terminal block, only for DIN 35 x 15 rails; 2.3 mm thick, copper			2-cond. ground conductor terminal block, only for DIN 35 x 15 rails; 2.3 mm thick, copper			2-cond. ground conductor terminal block, only for DIN 35 x 15 rails; 2.3 mm thick, copper		
green-yellow	285-137	15	green-yellow	285-157	5	green-yellow	285-197	5
						green-yellow 	285-197/999-950	5

Accessories, 285 Series

Appropriate marking system: **WMB/WMB Inline**

<p>Adjacent jumper, insulated, I_N 85 A, gray  285-435 50 (2x25)</p>	<p>Adjacent jumper, insulated,  I_N 150 A for 1 jumper I_N 130 A for 2 to 4 jumpers  285-450 25</p>	<p>Adjacent jumper, insulated,  I_N 232 A for 1 jumper I_N 130 A for 2 to 4 jumpers  285-495 25</p>
<p>Power tap, I_N 32 A, 0.2 ... 6 mm², 8 mm/0.315 in. wide  285-427 5</p>	<p>Power tap, I_N 41 A, 0.2 ... 6 mm²,  16 mm/0.63 in. wide  285-447 5</p>	<p>Power tap, I_N 57 A, 0.2 ... 10/16 mm²,  20 mm/0.787 in. wide  285-407 5</p>
<p>Operating tool with a partially insulated shaft, type 3, (5.5 x 0.8) mm blade  210-721 1</p>	<p>Allen wrench with a partially insulated shaft 8 mm  285-172 1</p>	<p>Allen wrench with a partially insulated shaft 8 mm  285-172 1</p>
<p>Protective warning marker, with high-voltage symbol, black  285-420 50 (2x25)</p>	<p>Protective warning marker, with high-voltage symbol, black  285-440 50 (2x25)</p>	<p>Protective warning marker, with high-voltage symbol, black  285-170 50 (2x25)</p>
<p>Finger guard, touch-proof cover protects unused conductor entries  285-421 100 (4x25)</p>	<p>Finger guard, touch-proof cover protects unused conductor entries and jumper slots  285-441 100 (4x25)</p>	<p>Finger guard, touch-proof cover protects unused conductor entries and jumper slots  285-169 25</p>
<p>Step-down jumper, insulated, 800 V, I_N 32 A, gray  285-499 50 (2x25)</p>	<p>Test plug, 4 mm Ø, protected against accidental contact (e.g., available through Multi-Contact Deutschland GmbH Postfach 1606, 79551 Weil am Rhein, Hegenheimerstraße 19 79576 Weil am Rhein) </p>	<p>Test plug, 4 mm Ø, protected against accidental contact (e.g., available through Multi-Contact Deutschland GmbH Postfach 1606, 79551 Weil am Rhein, Hegenheimerstraße 19 79576 Weil am Rhein) </p>
<p>Steel carrier rail, per EN 60715, 35 x 15 mm, 1.5 mm thick, 2 m long, unslotted  210-114 10</p>	<p>Copper carrier rail, per EN 60715, 35 x 15 mm, 2.3 mm thick, 2 m long, unslotted  210-198 10</p>	<p>Copper carrier rail, per EN 60715, 35 x 15 mm, 2.3 mm thick, 2 m long, unslotted  210-198 10</p>
<p>Marking strip, plain, 11 mm wide, 50 m roll  2009-110 1</p>	<p>Block-to-block connector, for 50 mm² high-current terminal blocks  285-448 25 WMB</p>	<p>Block-to-block connector, for 95 mm² high-current terminal blocks  285-168 25</p>
<p>Test plug adapter, 11.6 mm wide, for 4 mm Ø test plug  283-404 25</p>	<p>Multi marking system, plain, 10 strips with 10 markers per card, stretchable from 5 ... 5.2 mm  793-5501 5</p>	<p> Suitable for Ex e II applications 25 ... 95 mm² 4 ... 4/0 AWG 750 V, 195 A 35 ... 70 mm² 2 ... 2/0 AWG for ground conductor terminal blocks</p>

② For all approvals and corresponding ratings, visit www.wago.com.

For technical information and abbreviations, see "Technical Section."

High-Current Through and Ground Conductor Terminal Blocks, 185 mm²

285 Series

50 ... 185 mm² | 1/0 AWG ... 350 kcmil
AC/DC 1000 V/DC 1500 V/12 kV/3 ①
I_N 353 A
Terminal block width: 32 mm / 1.26 in.
45 ... 47 mm / 1.77 ... 1.85 in.
② Approvals

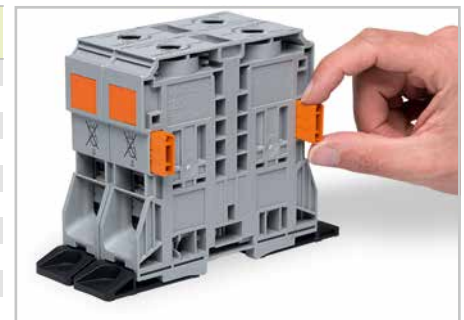
50 ... 185 mm² | 1/0 AWG ... 350 kcmil
AC/DC 1000 V/DC 1500 V/12 kV/3 ①
I_N 353 A
Terminal block width: 32 mm / 1.26 in.
45 ... 47 mm / 1.77 ... 1.85 in.
② Approvals



① AC/DC up to 1000 V = Rated voltage
DC up to 1500 V
12 kV = Rated impulse voltage
3 = Pollution degree

(see Full Line Catalog)

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
2-conductor through terminal block only for DIN 35 x 15 rails			2-conductor through terminal block with screw flanges		
gray	285-1185	5	gray	285-1161	4
blue	285-1184	5	blue	285-1164	4
2-conductor ground terminal block, only for DIN 35 x 15 rails; 2.3 mm thick, copper			2-conductor through terminal block with screw flanges		
green-yellow	285-1187	5	dark gray/yellow	285-1167	4
















High-current through terminal blocks for M8 screws and fixing elements

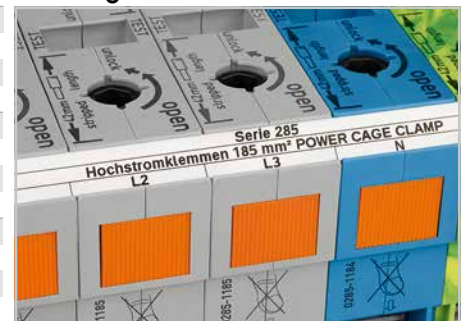
Accessories, 285 Series

Appropriate marker systems:

WMB/Marking Strips/WMB Inline

Adjacent jumper, insulated, ③ I _N 309 A for 1 jumper		○ 285-1171	25	Block-to-block connector, for 185 mm ² high-current terminal blocks		○ 285-1179	25
Power tap, I_N 57 A, 0.2 ... 10/16 mm², ③ 20 mm/0.787 in. wide		○ 285-1175	5	WMB Inline, plain, stretchable from 5 ... 5.2 mm, 1,500 WMB markers (5 mm) per roll		○ 2009-115	1
Allen wrench with a partially insulated shaft 8 mm		285-172	1	Marking strip, plain, 11 mm wide, 50 m roll		○ 2009-110	1
Protective warning marker, with high-voltage symbol, black		● 285-1177	50 (2x25)	WMB Multi marking system, plain, 10 strips with 10 markers per card, for 5 ... 17.5 mm terminal block width		○ 793-501	5
Finger guard, touch-proof cover protects unused conductor entries and jumper slots		● 285-1178	25	WMB Multi marking system, plain, 10 strips with 10 markers per card, stretchable from 5 ... 5.2 mm		○ 793-5501	5
Copper carrier rail, as per EN 60715, 35 x 15 mm, 2.3 mm thick, 2 m long unslotted		210-198	10				
Three-phase set, with 185 mm ² high-current terminal blocks		285-1169	1				
Screwless end stop, for DIN-35 rail, 14 mm wide		○ 249-197	10				

Marking



In addition to WMB markers, marking strips can be directly applied to 185 mm² (350 kcmil) high-current terminal blocks.

834 Series



Commoning from 35 mm²/AWG 2 POWER CAGE CLAMP terminal blocks to 10/16 mm² (AWG 8/10) TOPJOB® S terminal blocks (2010 and 2016 Series)

③ Adjacent jumpers and power taps can only be removed or inserted when the clamp is in closed position.

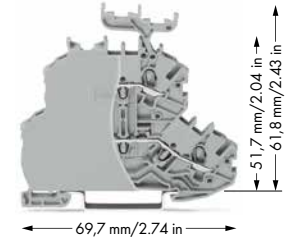
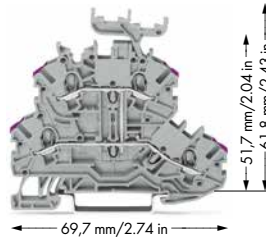
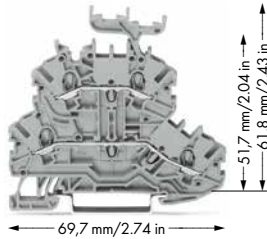
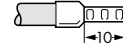
TOPJOB® S

Double-Deck Terminal Blocks 1 (1.5) mm²

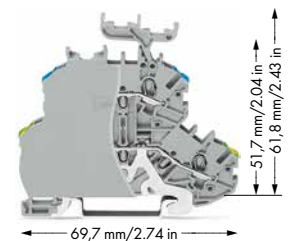
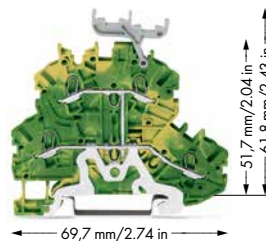
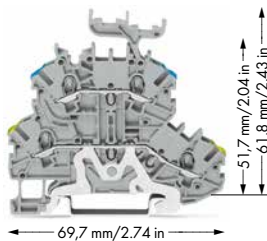
2000 Series

<p>0.14 ... 1 (1.5) mm² ① 24 ... 16 AWG 500 V/6 kV/3 I_N 13.5 A (16 A)</p> <p>Terminal block width: 3.5 mm / 0.138 in. 9 ... 11 mm / 0.39 in.</p> <p>② Approvals</p>	<p>0.14 ... 1 (1.5) mm² ① 24 ... 16 AWG 500 V/6 kV/3 I_N 13.5 A (16 A)</p> <p>Terminal block width: 3.5 mm / 0.138 in. 9 ... 11 mm / 0.39 in.</p> <p>② Approvals</p>	<p>0.14 ... 1 (1.5) mm² ① 24 ... 16 AWG 800 V/8 kV/3 I_N 13.5 A (16 A)</p> <p>Terminal block width: 4.2 mm / 0.165 in. 9 ... 11 mm / 0.39 in.</p> <p>② Approvals</p>
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① Conductor range: 0.14 ... 1.5 mm² "s+f-st"
Push-in termination: 0.5 ... 1.5 mm² "s" and 0.5 ... 0.75 mm² "insulated ferrule, 10 mm"



Color	Item No.	Item No.	Pack. Unit	Color	Item No.	Item No.	Pack. Unit	Color	Item No.	Item No.	Pack. Unit
Through/through terminal block, gray housing				4-conductor through terminal block, internally commoned, gray housing, violet-colored conductor entry				Through/through terminal block, with end plate, gray housing			
Marker carrier with		without		Marker carrier with		without		Marker carrier with		without	
● L/L	2000-2231	2000-2201	50	● L	2000-2238	2000-2208	50	● L/L	2000-2231/099-000	2000-2201/099-000	50
● N/L	2000-2232	2000-2202	50					● N/L	2000-2232/099-000	2000-2202/099-000	50
● L/N	2000-2233	2000-2203	50					● L/N	2000-2233/099-000	2000-2203/099-000	50
Blue housing				4-conductor through terminal block, internally commoned, blue housing, violet-colored conductor entry				Blue housing			
● N/N	2000-2234 ③	2000-2204 ③	50	● N	2000-2239 ③	2000-2209 ③	50	● N/N	2000-2234/099-000 ③	2000-2204/099-000 ③	50



Color	Item No.	Item No.	Pack. Unit	Color	Item No.	Item No.	Pack. Unit	Color	Item No.	Item No.	Pack. Unit
Ground conductor/through terminal block, colored conductor entry				4-conductor ground terminal block, internally commoned, green-yellow housing				Ground conductor/through terminal block, with end plate, colored conductor entry			
Marker carrier with		without		Marker carrier with		without		Marker carrier with		without	
● PE/N	2000-2247	2000-2217	50	● PE	2000-2237	2000-2207	50	● PE/N	2000-2247/099-000	2000-2217/099-000	50
● PE/L	2000-2257	2000-2227	50					● PE/L	2000-2257/099-000	2000-2227/099-000	50
Shield conductor/through terminal block, colored conductor entry								Shield conductor/through terminal block, with end plate, colored conductor entry			
Marker carrier with		without		Marker carrier with		without		Marker carrier with		without	
● Shield/N	2000-2248	2000-2218	50					● Shield/N	2000-2248/099-000	2000-2218/099-000	50
● Shield/L	2000-2258	2000-2228	50					● Shield/L	2000-2258/099-000	2000-2228/099-000	50

Item-Specific Accessories

<p>End and intermediate plate, 0.7 mm thick</p> <p>● 2000-2292 100 (4x25)</p> <p>○ 2000-2291 100 (4x25)</p>	<p>End and intermediate plate, 0.7 mm thick</p> <p>● 2000-2292 100 (4x25)</p> <p>○ 2000-2291 100 (4x25)</p>	<p>The end plate is an integral part of the terminal block.</p>
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Accessories, 2000 Series

Appropriate marking systems: **WMB/Marking Strips/WMB Inline**

<p>Push-in type jumper bar, insulated, I_N 14 A, light gray</p> <p>2-way 2000-402 200 (8x25)</p> <p>3-way 2000-403 200 (8x25)</p> <p>4-way 2000-404 200 (8x25)</p> <p>10-way 2000-410 100 (4x25)</p> <p>● .../000-005 ● .../000-006</p>	<p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p>1 to 3 2000-433 200 (8x25)</p> <p>1 to 10 2000-440 100 (4x25)</p> <p>Double-deck vertical jumper, insulated, I_N 13.5 A</p> <p>○ 2000-492</p> <p>● 2000-493/000-012 100 (4x25)</p>	<p>Star point jumper, insulated, I_N = I_N terminal block, light gray</p> <p>1-3-5 2000-405/011-000 100 (4x25)</p> <p>Double-deck marker carrier, pivoting</p> <p>○ 2000-121 50 (2x25)</p>
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Please find the entire product range in our Full Line Catalog. For additional information, visit www.wago.com.

TOPJOB® S

Double-Deck Terminal Blocks 2.5 (4) mm²

2002 Series

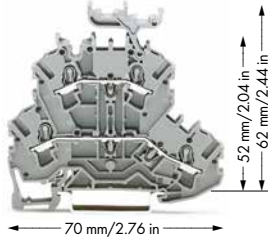
PUSH-IN CAGE CLAMP®

0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG
 500 V/6 kV/3 I_N 24 A (28 A)
 300 V, 20 A ②
 600 V, 20 A ③

Terminal block width: 5.2 mm / 0.205 in.
 10 ... 12 mm / 0.43 in.

② Approvals

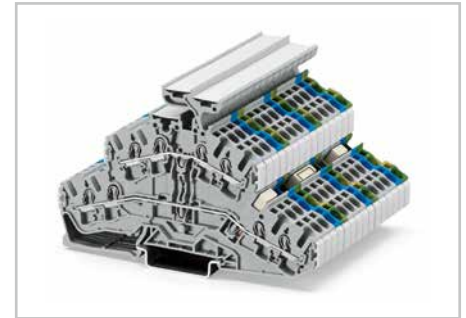
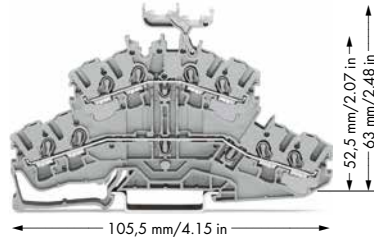
① Conductor range: 0.25 ... 4 mm² "st+st"
 Push-in termination: 0.75 ... 4 mm² "s" and
 0.75 ... 2.5 mm² "insulated ferrule, 12 mm"



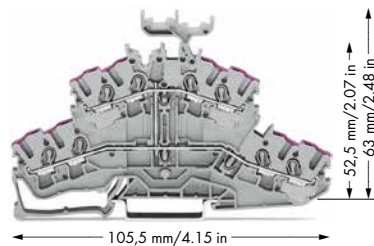
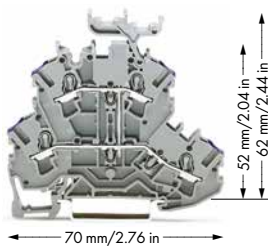
0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG
 800 V/8 kV/3 I_N 24 A (28 A)

Terminal block width: 5.2 mm / 0.205 in.
 10 ... 12 mm / 0.43 in.

② Approvals



Color	Item No.	Item No.	Pack. Unit	Color	Item No.	Item No.	Pack. Unit
2-conductor double-deck terminal block, for DIN-35 rail Through/through terminal block,				4-conductor double-deck terminal block, for DIN-35 rail Through/through terminal block,			
Marker carrier with		without		Marker carrier with		without	
○ L/L ②	2002-2231	2002-2201	50	○ L/L ②	2002-2431	2002-2401	50
○ N/L ②	2002-2232	2002-2202	50	○ N/L ②	2002-2432	2002-2402	50
○ L/N ②	2002-2233	2002-2203	50	○ L/N ②	2002-2433	2002-2403	50
Blue housing				Blue housing			
● N/N	2002-2234 ③	2002-2204 ③	50	● N/N	2002-2434 ③	2002-2404 ③	50
Ground conductor/through terminal block,				Ground conductor/through terminal block,			
○ PE/N ②	2002-2247	2002-2217	50	○ PE/N ②	2002-2447	2002-2417	50
○ PE/L ②	2002-2257	2002-2227	50	○ PE/L ②	2002-2457	2002-2427	50



Color	Item No.	Item No.	Pack. Unit	Color	Item No.	Item No.	Pack. Unit
4-conductor double-deck terminal block, for DIN-35 rail Through terminal block, internally commoned, violet-colored conductor entry				8-conductor double-deck terminal block, for DIN-35 rail Through terminal block, internally commoned, violet-colored conductor entry			
Marker carrier with		without		Marker carrier with		without	
○ L ②	2002-2238	2002-2208	50	○ L ②	2002-2438	2002-2408	50
4-conductor through terminal block, internally commoned, violet-colored conductor entry				Through terminal block, internally commoned, violet-colored conductor entry			
● N	2002-2239 ③	2002-2209 ③	50	● N	2002-2439 ③	2002-2409 ③	50
4-conductor double-deck terminal block, for DIN-35 rail Ground terminal block, internally commoned,				4-conductor double-deck terminal block, for DIN-35 rail Ground terminal block, internally commoned,			
● PE ②	2002-2237	2002-2207	50	● PE ②	2002-2437	2002-2407	50

Item-Specific Accessories

Appropriate marking systems: **WMB/Marking Strips**

End and intermediate plate, 0.8 mm thick

●	2002-2292	100 (4x25)
○	2002-2291	100 (4x25)

End and intermediate plate, 0.8 mm thick

●	2002-2492	100 (4x25)
○	2002-2491	100 (4x25)

Accessories, 2002 Series

Adjacent jumper for continuous commoning, insulated, I_N 25 A, light gray

2-way	2002-400	100 (4x25)
1 to 3	2002-423	100 (4x25)

Push-in type jumper bar, insulated, I_N 25 A, light gray

2-way	2002-402	200 (8x25)
3-way	2002-403	200 (8x25)
4-way	2002-404	200 (8x25)
:	:	:
10-way	2002-410	100 (4x25)

● .../000-005 ● .../000-006

Push-in type jumper bar, insulated, I_N 25 A, light gray

1 to 3	2002-433	200 (8x25)
1 to 4	2002-434	200 (8x25)
:	:	:
1 to 10	2002-440	100 (4x25)

Staggered jumper, insulated, I_N 25 A, light gray

2-way	2002-472	100 (4x25)
3-way	2002-473	100 (4x25)
:	:	:
12-way	2002-482	50 (2x25)

Double-deck vertical jumper, insulated, I_N 24 A

○	2002-492	
●	2002-492/000-012	100 (4x25)

Modular TOPJOB® S connector,
 can be snapped together, for jumper contact slot, I_N 24 A

○	2002-511	100 (4x25)
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Spacer module, can be snapped together

○	2002-549	100 (4x25)
---	----------	------------

Protective warning marker, with high-voltage symbol, for 5 terminal blocks

●	2002-115	100 (4x25)
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Double-deck marker carrier, pivoting

○	2002-121	50 (2x25)
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Operating tool with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade

210-720	1
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③ Suitable for Ex i applications
 ② Suitable for Ex e II applications
 440 V, 20 A



② For all approvals and corresponding ratings, visit www.wago.com.

For technical information and abbreviations, see technical section.

TOPJOB® S

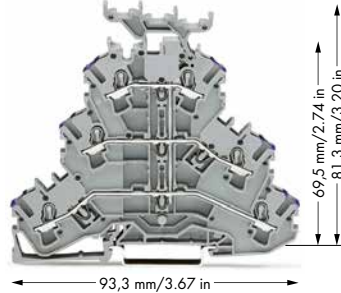
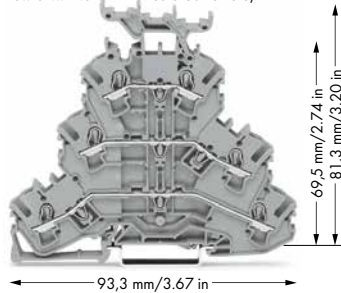
Triple-Deck Terminal Blocks 2.5 (4) mm²

2002 Series

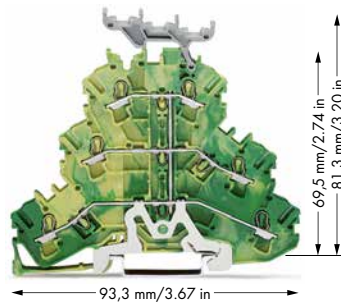
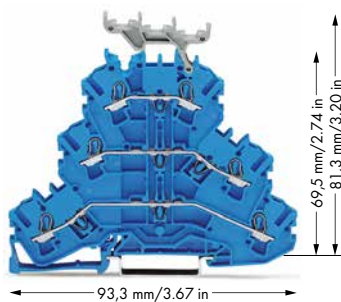
0.25 ... 2.5 (4) mm ² ① 500 V/6 kV/3 I _N 24 A (28 A) Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in.	22 ... 12 AWG 300 V, 20 A ② 600 V, 20 A ③	0.25 ... 2.5 (4) mm ² ① 500 V/6 kV/3 I _N 24 A (28 A) Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in.	22 ... 12 AWG
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② Approvals

① Conductor range: 0.25 ... 4 mm² "s+fst"
 Push-in termination: 0.75 ... 4 mm² "s" and
 0.75 ... 2.5 mm² "insulated ferrule, 12 mm"













Color	Item No.	Item No.	Pack. Unit	Color	Item No.	Item No.	Pack. Unit
Through/through/through terminal block				6-conductor through terminal block, internally commoned, violet-colored conductor entry			
Marker carrier with without				Marker carrier with without			
● L/L/L	2002-3231	2002-3201	50	● L	2002-3238	2002-3208	50
● L/L/N	2002-3233	2002-3203	50				
Ground conductor/through/through terminal block				Shield/through/through terminal block			
Marker carrier with without				Marker carrier with without			
● PE/N/L	2002-3247	2002-3217	50	● Shield/N/L	2002-3248	2002-3218	50
● PE/L/L	2002-3257	2002-3227	50	● Shield/L/L	2002-3258	2002-3228	50



Color	Item No.	Item No.	Pack. Unit	Color	Item No.	Item No.	Pack. Unit
Through/through/through terminal block				6-conductor ground terminal block, internally commoned,			
Marker carrier with without				Marker carrier with without			
● N/N/N	2002-3234 ③	2002-3204 ③	50	● PE	2002-3237	2002-3207	50
6-conductor through terminal block							
Marker carrier with without							
● N	2002-3239 ③	2002-3209 ③	50				

Accessories, 2002 Series

End and intermediate plate, 0.8 mm thick			
	●	2002-3292	100 (4x25)
	○	2002-3291	100 (4x25)
Triple-deck marker carrier, pivoting			
	○	2002-131	50 (2x25)
Adjacent jumper for continuous commoning, insulated, I _N 25 A, light gray			
		2-way	2002-400 100 (4x25)
		1 to 3	2002-423 100 (4x25)
Push-in type jumper bar, insulated, I _N 25 A, light gray			
		2-way	2002-402 200 (8x25)
		3-way	2002-403 200 (8x25)
		4-way	2002-404 200 (8x25)
		:	:
		10-way	2002-410 100 (4x25)
● .../000-005	●	.../000-006	
Push-in type jumper bar, insulated, I _N 25 A, light gray			
		1 to 3	2002-433 200 (8x25)
		1 to 4	2002-434 200 (8x25)
		:	:
		1 to 10	2002-440 100 (4x25)
Staggered jumper, insulated, I _N 25 A, light gray			
		2-way	2002-472 100 (4x25)
		3-way	2002-473 100 (4x25)
		4-way	2002-474 100 (4x25)
		5-way	2002-475 50 (2x25)
		:	:
		12-way	2002-482 50 (2x25)
Double-deck vertical jumper, insulated, I_N 24 A			
	○	2002-492	
	●	2002-492/000-012	100 (4x25)
Triple-deck vertical jumper, insulated, I_N 25 A			
	○	2002-493	
	●	2002-493/000-012	100 (4x25)
Operating tool with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade			
		210-720	1

TOPJOB® S

Quadruple-Deck Terminal Blocks 2.5 (4) mm²

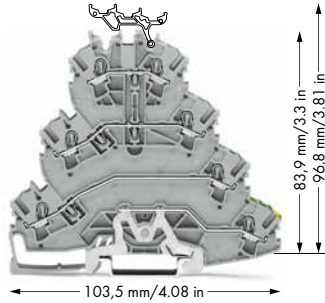
2002 Series

PUSH-IN CAGE CLAMP®

1

0.25 ... 2.5 (4) mm ² ①	22 ... 12 AWG
800 V/8 kV/3	
I _N 20 A (25 A)	
Terminal block width: 5.2 mm / 0.205 in.	
10 ... 12 mm / 0.43 in.	
② Approvals	

① Conductor range: 0.25 ... 4 mm² "s+fst"
 Push-in termination: 0.75 ... 4 mm² "s" and 0.75 ... 2.5 mm² "insulated ferrule, 12 mm"



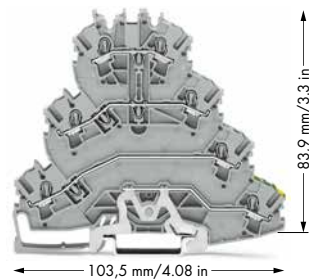
Creating spacer housings for rail-mounted terminal blocks for electric motor wiring via conductor entry and operating slot covers.

Color	Item No.	Pack. Unit
Quadruple-deck terminal block		
or		
Terminal block for electric motor wiring, with marker carrier, gray		
● L1 - L2	2002-4141	25
● L1 - L2 - L3	2002-4131	25
● L1 - L2 - L3 - PE	2002-4157	25

Accessories, 2002 Series	
End and intermediate plate, 0.8 mm thick	
●	2002-4192 100 (4x25)
○	2002-4191 100 (4x25)
Insulation stop, 5 pcs/strip	
○	2002-171 0.25-0.5 mm ²
●	2002-172 0.75-1 mm ²
200 (8x25)	
Star point jumper, insulated,	
I _N = I _N terminal block, light gray	
1 - 3 - 5	2002-405/011-000
100 (4x25)	
Delta jumper, insulated,	
I _N = I _N terminal block, light gray	
1-2 3-4 5-6	2002-406/020-000
100 (4x25)	



Compact design: Three phases and one ground conductor in a single terminal block.



Color	Item No.	Pack. Unit
Quadruple-deck terminal block		
or		
Terminal block for electric motor wiring, without marker carrier, gray		
● L1 - L2	2002-4111	25
● L1 - L2 - L3	2002-4101	25
● L1 - L2 - L3 - PE	2002-4127	25

Push-in type wire jumper, insulated,	
I _N 18 A,	
1.5 mm ² conductor size	
L=60 mm	2009-412 100 (10x10)
L=110 mm	2009-414 100 (10x10)
L=250 mm	2009-416 100 (10x10)
Lockout cap,	
for conductor entry and operating slot	
●	2002-192 25
○	2002-191 25
●	2002-194 25
Protective warning marker, with high-voltage symbol, for 5 terminal blocks	
●	2002-115 100 (4x25)
WMB Inline, plain, stretchable from 5 ... 5.2 mm, 1,500 WMB markers (5 mm) per roll	
○	2009-115 1
Marking strip, plain,	
11 mm wide,	
50 m roll	
○	2009-110 1
Modular TOPJOB® S L-test plug, can be snapped together,	
I _N 18 A, for conductor entry	
●	2002-611 100 (4x25)
Spacer module, can be snapped together	
●	2002-649 100 (4x25)



Marking clamping units with WMB Multi marking system (see Full Line Catalog). Group marking via marking strips.

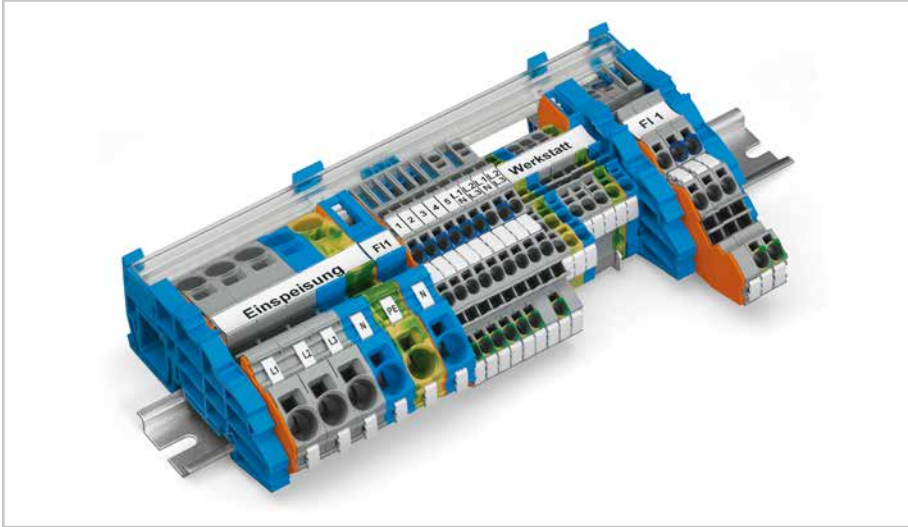


Testing with 2 mm Ø test plug.

② For all approvals and corresponding ratings, visit www.wago.com.

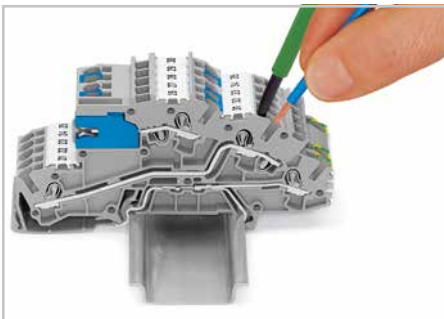
For technical information and abbreviations, see technical section.

TOPJOB® S Multilevel Installation Terminal Blocks, N-Disconnect Slide Link and Busbar Carrier – Description and Installation –

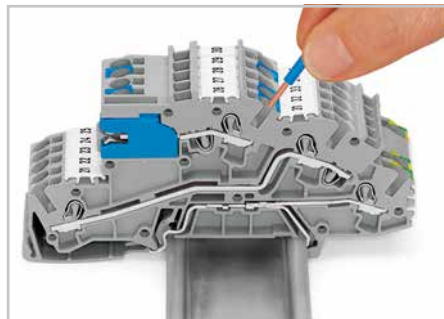


TOPJOB® S – Terminal Blocks for Every Application

- Push-in termination of solid conductors in small distribution boards saves time and money.
- Operating errors can be prevented as all TOPJOB® S terminal blocks for building installations are equipped with push-in connection technology.
- Terminal blocks for building installations expand circuit design possibilities.
- The use of standard accessories reduces order processing and inventory costs.
- Accessories, shared with all terminal blocks, enhance safety by reducing the amount of components and installation techniques required.
- The busbar position is the same, making the TOPJOB® S Terminal Blocks compatible with standard TOPJOB® Installation Terminal Blocks.
- The optional busbar transparent cover (Item No. 777-303) protects the busbar against accidental contact and makes it easy to see which terminal blocks are connected to the busbar.



Terminating fine-stranded conductors using an operating tool.



Terminating solid conductors by simply pushing them in.



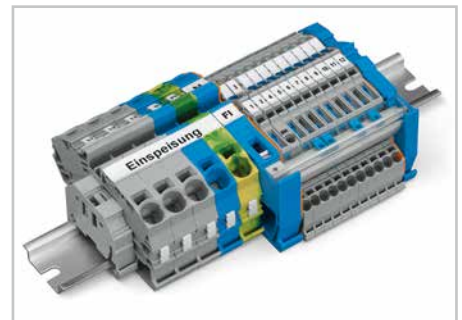
Conductor entries on multilevel installation terminal blocks are color-coded, providing a clear arrangement of the terminals.



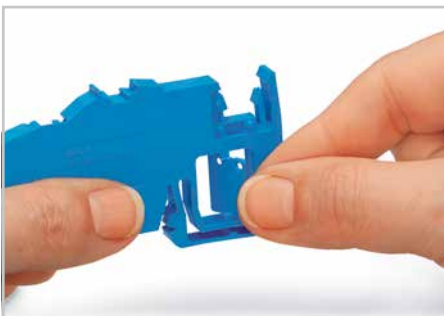
Testing with 2 mm Ø test plug (max. test voltage: 42 V).



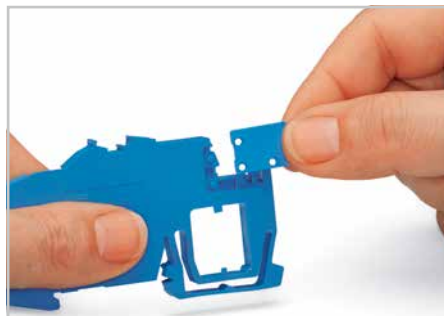
Tool-operated N-disconnect slide link



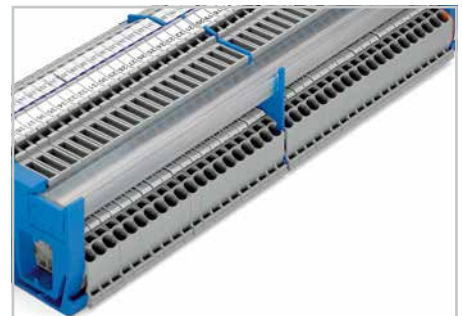
Each connection point features an individual marker slot for WMB markers. Additionally, the upper marker slot is suitable for marker strips that can be marked manually using a felt-tip pen or automatically via thermal transfer printer.



Removing the separator plate from the busbar carrier.



Inserting the separator plate to protect the N-busbar against accidental contact.



The compact busbar carrier, which is placed every 200 mm, provides additional busbar support for longer assemblies.

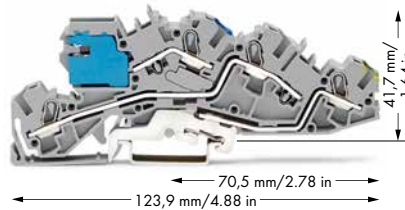
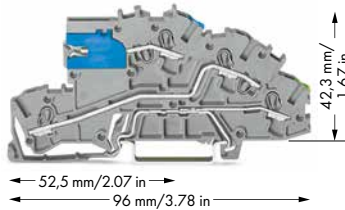
For information on Push-in CAGE CLAMP® connection, see page 14.

TOPJOB® S**Multilevel Installation Terminal Blocks****with N-Disconnect Slide Links 2.5 (4) / 4 (6) mm², 2003 / 2005 Series****PUSH-IN CAGE CLAMP®**

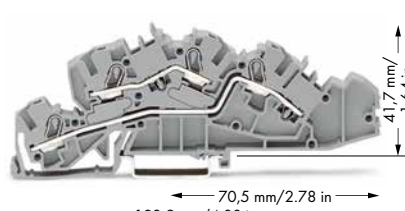
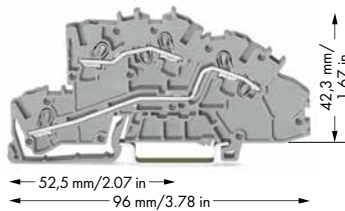
0.25 ... 2.5 (4) mm ² ① 250 V/4 kV/3; 32 A (32 A) ③ ④ 400 V/6 kV/3; 32 A (32 A) ③ ⑤ Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in. ⑥ Approvals	22 ... 12 AWG	0.5 ... 4 (6) mm ² ② 250 V/4 kV/3; 36 A (36 A) ③ ④ 400 V/6 kV/3; 36 A (36 A) ③ ⑤ Terminal block width: 6.2 mm / 0.244 in. 11 ... 13 mm / 0.47 in. ⑥ Approvals	20 ... 10 AWG
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- ① Conductor range: 0.25 ... 4 mm² "s+f-st"
Push-in termination: 0.75 ... 4 mm² "s"
"insulated ferrules, 12 mm"
- ② Conductor range: 0.5 ... 6 mm² "s+f-st"
Push-in termination: 1 ... 6 mm² "s"
and 0.75 ... 4 mm²
"insulated ferrules, 12 mm"
- ③ 250 V/
400 V = Rated voltage
4 kV/
6 kV = Rated impulse voltage
3 = Pollution degree

- ④ 250 V/4 kV potential - ground
⑤ 400 V/6 kV potential - potential



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Accessories, 2003 and 2005 Series
Multilevel installation terminal block, with N-disconnect slide link			Multilevel installation terminal block, with N-disconnect slide link			Straight busbar, Cu with tin plating, 10 x 3 mm, 1000 mm long I _N 140 A 210-133 1
○ NT/L/PE	2003-7641	50	○ NT/L/PE	2005-7641	50	
○ NT/L	2003-7640	50				Cover for N-busbar, transparent, 1000 mm long 777-303 1
○ LT/L	2003-7659	50				N-supply terminal block, I _N 76 A, 16 mm ² , 12 mm wide 2016-7714 20
○ N/L/PE	2003-7646	50				
○ L/L/PE	2003-7645	50				Ground supply terminal block, 16 mm ² , 12 mm wide 2016-7607 20



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Accessories, 2003 and 2005 Series
Multilevel installation terminal block			Multilevel installation terminal block			Connector, with blue cover, for N-busbar, 2.5 ... 16 mm ² 210-281 100 (2x50)
○ L/L	2003-7642	50	○ N/L/PE	2005-7646	50	
○ N/L	2003-7649	50	○ L/L/PE	2005-7645	50	Connector, for N-busbar, 2.5 ... 35 mm ² unplated 209-105 50
○ L	2003-7650	50	○ L/L	2005-7642	50	
○ N	2003-7651	50	○ N/L	2005-7649	50	Test plug adapter, for 4 mm Ø test plug 209-174 100 (4x25)

Item-Specific Accessories

Appropriate marking systems:

WMB/Marking Strips/WMB Inline

End and intermediate plate, 0.8 mm thick 2003-7692 100 (4x25)	End and intermediate plate, 1 mm thick 2005-7692 100 (4x25)
Adjacent jumper for continuous commoning, insulated, I _N 25 A, light gray 2-way 2002-400 100 (4x25) 1 to 3 2002-423 100 (4x25)	
Push-in type jumper bar, insulated, I _N 25 A, light gray see page 27 (2002 Series)	Push-in type jumper bar, insulated, I _N 32 A, light gray see page 29 (2004 Series)
Lock-out, snap-on type, prevents reclosing of slide link 2003-7300 100 (4x25)	Lock-out, snap-on type, prevents reclosing of slide link 2005-7300 100 (4x25)
Staggered jumper, insulated, I _N 25 A, light gray 2-way 2002-472 100 (4x25) 3-way 2002-473 100 (4x25) : : 12-way 2002-482 50 (2x25)	

Test plug, with 500 mm cable 2 mm Ø 210-136 50 2.3 mm Ø 210-137 50
--

Operating tool, 3.5 mm and 2.5 mm blades 2009-309 1

Busbar carrier, not suitable as end stop, can be snapped onto DIN-35 rail, 1.5 mm thick 2009-304 100 (4x25)

Busbar carrier, with end stop function and detachable separator plate, can be snapped onto DIN-35 rail, 7.5 mm thick 2009-305 25
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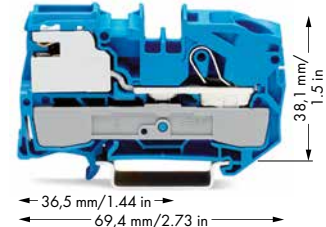
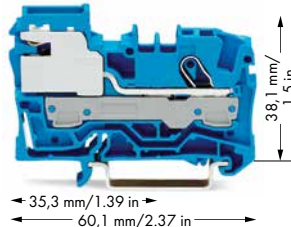
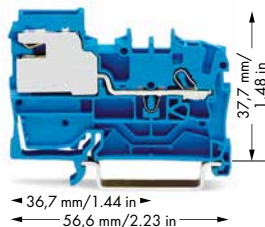
⑥ For all approvals and corresponding ratings, visit www.wago.com.

TOPJOB® S

N-Conductor and Power Distribution Disconnect Terminal Blocks

2002 / 2006 / 2016 Series

<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG 250 V/4 kV/3 I_N 32 A Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in. ④ Approvals</p>	<p>0.5 ... 6 (10) mm² ② 20 ... 8 AWG 250 V/4 kV/3 I_N 51 A Terminal block width: 7.5 mm / 0.295 in. 13 ... 15 mm / 0.55 in. ④ Approvals</p>	<p>0.5 ... 16 (25 "f-st") mm² ③ 20 ... 4 AWG 250 V/4 kV/3 I_N 76 A Terminal block width: 12 mm / 0.472 in. 18 ... 20 mm / 0.75 in. ④ Approvals</p>
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
● blue	2002-7114	50	● blue	2006-7114	50	● blue	2016-7114	25
○ gray			○ gray			○ gray		
1-conductor N-disconnect terminal block			1-conductor N-disconnect terminal block			1-conductor N-disconnect terminal block		
1-conductor power distribution disconnect terminal block			1-conductor power distribution disconnect terminal block			1-conductor power distribution disconnect terminal block		
For compatible through/ground conductor terminal blocks and jumpers, see page 27.			For compatible through/ground conductor terminal blocks and jumpers, see page 30.			For compatible through/ground conductor terminal blocks and jumpers, see page 32.		

Item-Specific Accessories		Item-Specific Accessories		Item-Specific Accessories	
End and intermediate plate, 0.8 mm thick	● 2002-7192 100(4x25)	End and intermediate plate, 1 mm thick	● 2006-7192 100 (4x25)	End and intermediate plate, 1 mm thick	● 2016-7192 100 (4x25)
Lock-out, snap-on type, prevents reclosing of slide link	● 2003-7300 100(4x25)	Lock-out, snap-on type, prevents reclosing of slide link	● 2006-7300 100 (4x25)	Lock-out, snap-on type, prevents reclosing of slide link	● 2006-7300 100 (4x25)

Accessories, 2002, 2006 and 2016 Series

Appropriate marking systems: WMB/Marking Strips/WMB Inline

	<p>Busbar carrier, not suitable as an end stop, can be snapped onto DIN-35 rail, 1.5 mm thick ● 2009-304 100 (4x25)</p>	<p>Connector, for N-busbar, 2.5 ... 35 mm² unplated ● 209-105 50</p>
	<p>Busbar carrier, with end stop function and detachable separator plate, can be snapped onto DIN-35 rail, 7.5 mm thick ● 2009-305 25</p>	<p>Connector, with blue cover, for N-busbar, 2.5 ... 16 mm² ● 210-281 100 (2x50)</p>
<p>Straight busbar, Cu with tin plating, 10 x 3 mm, 1000 mm long I_N 140 A ● 210-133 1</p>	<p>Test plug, with 500 mm cable ● 2 mm Ø 210-136 50 ● 2.3 mm Ø 210-137 50</p>	
<p>Cover for N-busbar, transparent, 1000 mm long ● 777-303 1</p>	<p>WMB Multi marking system, plain, 10 strips with 10 markers per card, stretchable from 5 ... 5.2 mm ○ 793-5501 5</p>	
<p>Item-Specific Accessories</p> <p>End and intermediate plate, 0.8 mm thick ● 2002-7292 100 (4x25)</p>	<p>Operating tool, 3.5 mm and 5.5 mm blades ● 2009-310 1</p>	

④ For all approvals and corresponding ratings, visit www.wago.com.

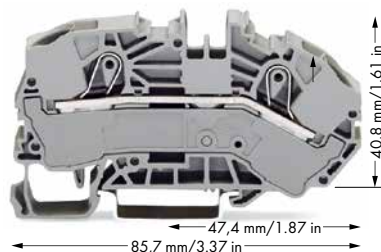
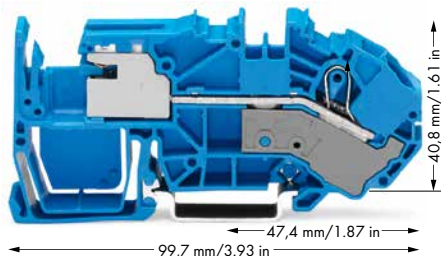
TOPJOB® S

Supply Terminal Blocks for Distribution Cabinets,
N-Conductor and Power Distribution Disconnect Terminal Blocks, 2016 Series

0.5 ... 16 (25 "f-st") mm² ③ | 20 ... 4 AWG
250 V/4 kV/3
I_N 76 A
Terminal block width: 12 mm / 0.472 in.
18 ... 20 mm / 0.75 in.
④ Approvals

0.5 ... 16 (25 "f-st") mm² ③ | 20 ... 4 AWG
800 V/8 kV/3
I_N 76 A
Terminal block width: 12 mm / 0.472 in.
18 ... 20 mm / 0.75 in.
④ Approvals

- ① Conductor range: 0.25 ... 4 mm² "s+f-st"
Push-in termination: 0.75 ... 4 mm² "s"
and 0.75 ... 2.5 mm²
"insulated ferrules, 12 mm"
- ② Conductor range: 0.5 ... 10 mm² "s+f-st"
Push-in termination: 1.5 ... 10 mm² "s"
and 1.5 ... 6 mm²
"insulated ferrules, 12 mm"
- ③ Conductor range: 0.5 ... 16 mm² "s+f-st"
and 25 mm² "f-st"
Push-in termination: 2.5 ... 16 mm² "s"
and 2.5 ... 16 mm²
"insulated ferrules, 18 mm"



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
1-conductor N-disconnect terminal block			2-conductor supply terminal blocks for distribution cabinets		
● blue	2016-7714	20	● gray	2016-7601	20
			● blue	2016-7604	20
1-conductor power distribution disconnect terminal block			2-conductor ground conductor terminal block, 15 mm-high DIN-35 rails shall be used for a current load higher than 76 A.		
● gray	2016-7711	20	● green-yellow	2016-7607	20

Item-Specific Accessories

End and intermediate plate, 1 mm thick

● 2016-7792 100 (4x25)



Item-Specific Accessories

End and intermediate plate, 1 mm thick

● 2016-7692 100 (4x25)



Lock-out, snap-on type,

prevents reclosing of slide link

● 2006-7300 100 (4x25)



Accessories, 2016 Series Appropriate marking systems: WMB/Marking Strips/WMB Inline

Push-in type jumper bar, insulated,

I_N 76 A, light gray

2-way 2016-402 50 (2x25)

3-way 2016-403 50 (2x25)

4-way 2016-404 50 (2x25)

5-way 2016-405 50 (2x25)



Straight busbar, Cu with tin plating,

10 x 3 mm,

1000 mm long

I_N 140 A 210-133 1

Cover for N-busbar,

transparent,

1000 mm long

777-303 1



Banana plugs, only for safety extra-low voltage (42 V)

● 215-212 50

● 215-311 50

For additional colors, see page 262.



WMB Multi marking system, plain,

10 strips with 10 markers per card,

stretchable from 5 ... 5.2 mm

● 793-5501 5



Push-in type jumper bar, insulated,

I_N 76 A, light gray

1 to 3 2016-433 50 (2x25)

1 to 4 2016-434 50 (2x25)

1 to 5 2016-435 50 (2x25)



Testing tap,

for max. 2.5 mm²

● 2009-182 100 (4x25)



Test plug, with 500 mm cable

● 2 mm Ø 210-136 50

● 2.3 mm Ø 210-137 50



Marking strip, plain,

11 mm wide,

50 m roll

● 2009-110 1



Protective warning marker,

with high-voltage symbol, black,

for 5 terminal blocks

● 2016-115 50 (2x25)



Test plug adapter,

for 4 mm Ø test plug

● 2009-174 100 (4x25)



Finger guard,

touchproof cover protects unused

conductor entries

● 2016-100 100 (4x25)



Operating tool,

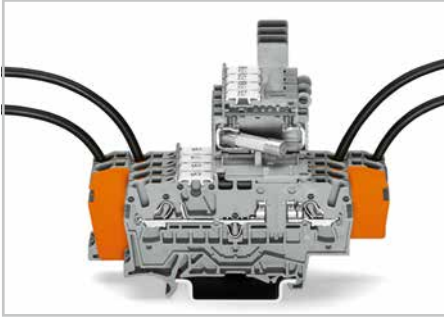
3.5 mm and 5.5 mm blades

● 2009-310 1

TOPJOB® S Function Terminal Blocks

– Description and Installation –

Fuse terminal blocks



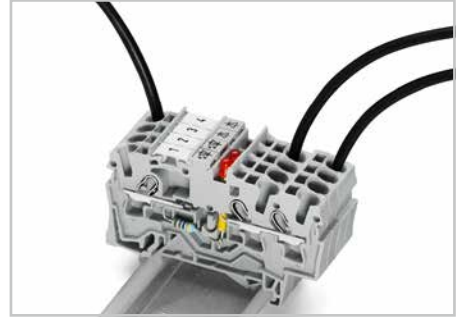
Fuse plug with blown fuse indication on a 2-conductor carrier terminal block

Disconnect/test terminal blocks



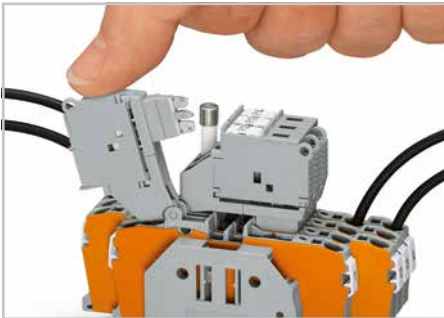
2-conductor disconnect/test terminal block with movable knife disconnect and mechanical interlock – open position

Diode and LED terminal blocks



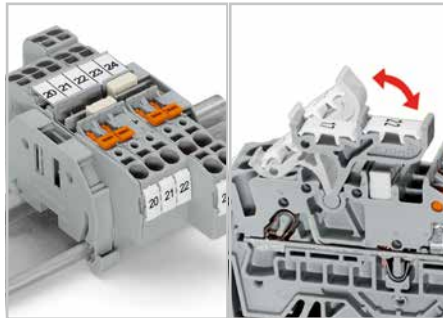
Designing custom circuits:
- via diode terminal blocks (e.g., collective fault signals)
- via LED terminal blocks (e.g., monitoring units)

Fuse replacement 1



Before replacing the fuse, pivot the fuse holder into the locked open position.

Commoning and marking



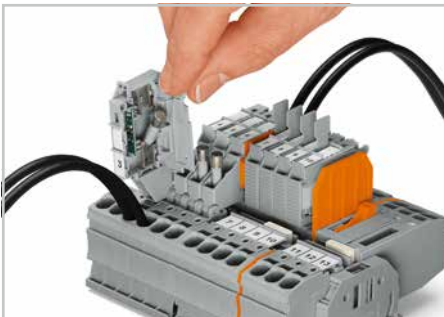
Dual jumper slots, in the same position as the 2002 Series terminal blocks. Commoning options in front of or behind the knife disconnect, depending on the power supply direction; additional marking option via pivoting marker carriers.

Commoning



Custom circuit design via push-in type jumper bars. Example shows "lamp test circuit."

Fuse replacement 2



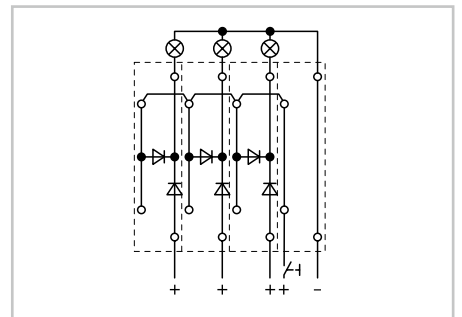
One end of the fuse is automatically ejected from the holder when opening the cover.

Disconnect/test terminal blocks



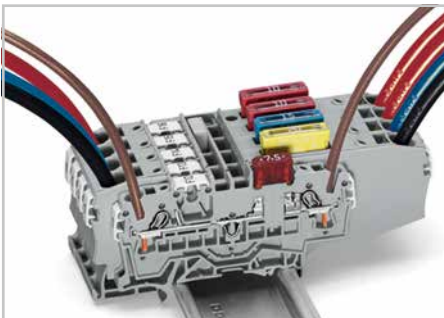
Base terminal block with disconnect plug in parked position

Application



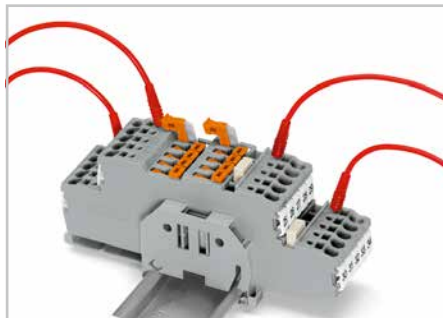
Lamp test circuit

Mini-automotive blade-style fuses



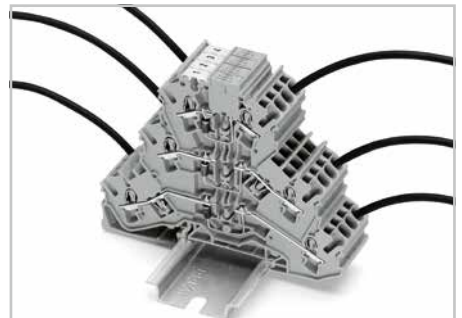
Fuse terminal block for mini-automotive blade-style fuses

Double-deck disconnect terminal blocks



Two disconnect terminal blocks with different potential are accommodated on two levels in a double-deck disconnect terminal block.

Triple-deck diode terminal blocks



Space-saving arrangement

For information on Push-in CAGE CLAMP® connection, see page 14.

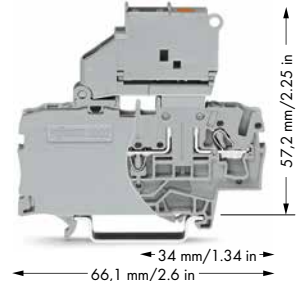
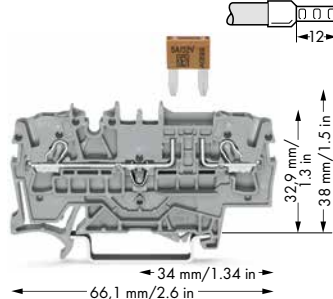
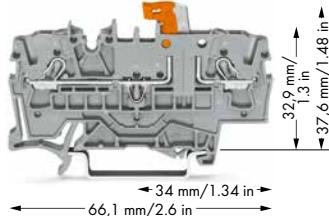
TOPJOB® S

2-Conductor Disconnect/Test and Fuse Terminal Blocks, 2002 Series

PUSH-IN CAGE CLAMP®

<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG 400 V/6 kV/3 I_N 16 A</p> <p>Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.</p> <p>③ Approvals</p>	<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG 400 V, 15 A ② 300 V, 10 A ③</p> <p>Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.</p> <p>③ Approvals</p>	<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG 250 V/6 kV/3 I_N 6.3 A ②</p> <p>Terminal block width: 6.2 mm / 0.244 in. 10 ... 12 mm / 0.43 in.</p> <p>③ Approvals</p>
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① Conductor range: 0.25 ... 4 mm² "s+fst"
Push-in termination: 0.75 ... 4 mm² "s" and
0.75 ... 2.5 mm² "insulated ferrule, 12 mm"



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
2-conductor disconnect/test terminal block			2-conductor fuse terminal block, for blade-style fuses per DIN 72581-3f, ISO 8820-3			2-conductor fuse terminal block with end plate, with blown fuse indication, for miniature metric fuses, gray		
gray	2002-1671	50	gray	2002-1681	50	12 ... 30 V ≈	2002-1611/1000-541	50
blue	2002-1674	50				30 ... 65 V ≈	2002-1611/1000-542	50
orange	2002-1672	50				120 V ≈	2002-1611/1000-867	50
2-conductor disconnect/test terminal block with mechanical interlock			- Individual arrangement: 10 A - Block arrangement: 5 A Protection against direct contact must be observed for 42 V and higher voltages.			230 V ≈ 2002-1611/1000-836 50		
gray	2002-1671/401-000	50	2-conductor fuse terminal block for mini-automotive blade-style fuses, with test point and additional jumper slot, without blown fuse indication			2-conductor fuse terminal block with end plate, without blown fuse indication, gray		
blue	2002-1674/401-000	50	gray	2002-1981	50		2002-1611	50
orange	2002-1672/401-000	50						
2-conductor through terminal block, same profile								
gray	2002-1601	50						
blue	2002-1604	50						
orange	2002-1602	50						

Item-Specific Accessories

<p>End and intermediate plate, 1 mm thick</p> <p>Orange: 2002-1692 100 (4x25)</p> <p>Gray: 2002-1691 100 (4x25)</p>	<p>End and intermediate plate, 1 mm thick</p> <p>Orange: 2002-1692 100 (4x25)</p> <p>Gray: 2002-1691 100 (4x25)</p>	<p>End plate for fuse terminal blocks, 2 mm thick</p> <p>Orange: 2002-992 100 (4x25)</p> <p>Gray: 2002-991 100 (4x25)</p>
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Accessories, 2002 Series

Appropriate marking systems: WMB/Marking Strips/WMB Inline/Miniature WSB

<p>Adjacent jumper for continuous commoning, insulated, I_N 25 A, light gray</p> <p>2-way 2002-400 100 (4x25)</p> <p>1 to 3 2002-423 100 (4x25)</p>	<p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p>1 to 3 2002-433 200 (8x25)</p> <p>1 to 4 2002-434 200 (8x25)</p> <p>1 to 5 2002-435 100 (4x25)</p> <p>: : 1 to 10 2002-440 100 (4x25)</p>
<p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p> <p>2-way 2002-402 200 (8x25)</p> <p>: : 10-way 2002-410 100 (4x25)</p> <p>Red: .../000-005 Blue: .../000-006</p>	<p>Modular TOPJOB® S connector, can be snapped together, I_N 24 A, for jumper contact slot</p> <p>Gray: 2002-511 100 (4x25)</p>
<p>Staggered jumper, insulated, I_N 25 A, light gray</p> <p>2-way 2002-472 100 (4x25)</p> <p>3-way 2002-473 100 (4x25)</p> <p>: : 12-way 2002-482 50 (2x25)</p>	<p>Spacer module, can be snapped together</p> <p>Gray: 2002-549 100 (4x25)</p>
<p>Insulation stop, 5 pcs/strip</p> <p>White: 2002-171 0.25-0.5 mm² 200 (8x25)</p> <p>Black: 2002-172 0.75-1 mm² 200 (8x25)</p>	<p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</p> <p>Yellow: 2002-115 100 (4x25)</p>
<p>Test plug adapter, for 4 mm Ø test plug</p> <p>2009-174 100 (4x25)</p> <p>Testing tap, for max. 2.5 mm²</p> <p>2009-182 100 (4x25)</p>	<p>Operating tool with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade</p> <p>210-720 1</p>
<p>Test plug, with 500 mm cable</p> <p>Red: 2 mm Ø 210-136 50</p> <p>Yellow: 2.3 mm Ø 210-137 50</p>	

Fuse terminal blocks with a width of 6.2 mm can be assembled adjacently. If there is **no** adjacent fuse or disconnect terminal block at the end of the assembly, an end plate must be used.

When selecting miniature metric fuses, make sure that the maximum power loss listed below is not exceeded. The power loss is determined according to IEC or EN 60947-7-3/VDE 0611-6 at 23 °C. The temperature rise of the terminal blocks must be checked according to their application and mounting. Higher ambient temperatures place additional strain on fuse cartridges. Therefore, in such applications, the rated current must be reduced if necessary. More details are available from the manufacturers.

Miniature metric fuses (5 x 20 mm)

Series Item No.	Overload and short circuit protection		Short circuit protection only	
	Individual arrangement	Group arrangement	Individual arrangement	Group arrangement
Fuse terminal blocks				
2002-1611	1.6 W	1.6 W	2.5 W	2.5 W
2002-1811	1.6 W	1.6 W	2.5 W	2.5 W
2002-1811/.....	1.6 W	1.6 W	2.5 W	2.5 W
2002-1611/.....	1.6 W	1.6 W	2.5 W	2.5 W

② Nominal voltage and current are given by the fuse or blown fuse indicator.
③ For all approvals and corresponding ratings, visit www.wago.com.

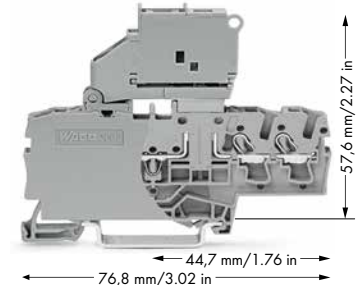
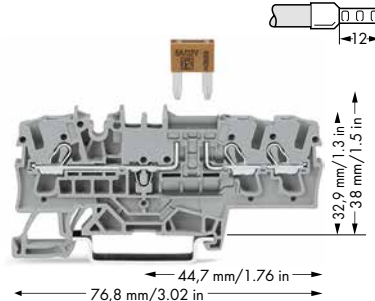
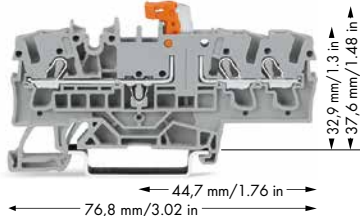
For technical information and abbreviations, see technical section.

TOPJOB® S

3-Conductor Disconnect/Test and Fuse Terminal Blocks, 2002 Series

<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG 400 V/6 kV/3 I_N 16 A</p> <p>Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.</p> <p>③ Approvals</p>	<p>22 ... 12 AWG 300 V, 15 A ② 300 V, 10 A ③</p>	<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG 400 V/6 kV/3 I_N 10 A ②</p> <p>Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.</p> <p>③ Approvals</p>	<p>22 ... 12 AWG 300 V, 10 A ② 300 V, 10 A ③</p>	<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG 250 V/6 kV/3 I_N 6.3 A ②</p> <p>Terminal block width: 6.2 mm / 0.244 in. 10 ... 12 mm / 0.43 in.</p> <p>③ Approvals</p>	<p>22 ... 12 AWG</p>
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① Conductor range: 0.25 ... 4 mm² "s+f-st"
Push-in termination: 0.75 ... 4 mm² "s" and
0.75 ... 2.5 mm² "insulated ferrule, 12 mm"



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
3-conductor disconnect/test terminal block			3-conductor fuse terminal block, for blade-style fuses per DIN 72581-3f, ISO 8820-3			3-conductor fuse terminal block with end plate, with blown fuse indication by LED, gray		
gray	2002-1771	50	gray	2002-1781	50	12 ... 30 V ≈	2002-1711/1000-541	50
blue	2002-1774	50				30 ... 65 V ≈	2002-1711/1000-542	50
orange	2002-1772	50				120 V ≈	2002-1711/1000-867	50
3-conductor disconnect/test terminal block with mechanical interlock			- Individual arrangement: 10 A - Block arrangement: 5 A Protection against direct contact must be observed for 42 V and higher voltages.			230 V ≈ 2002-1711/1000-836 50		
gray	2002-1771/401-000	50				3-conductor fuse terminal block with end plate, without blown fuse indication		
blue	2002-1774/401-000	50				gray 2002-1711 50		
orange	2002-1772/401-000	50						
3-conductor through terminal block, same profile								
gray	2002-1701	50						
blue	2002-1704	50						
orange	2002-1702	50						

Item-Specific Accessories

<p>End and intermediate plate, 1 mm thick</p> <p>orange 2002-1792 100 (4x25) gray 2002-1791 100 (4x25)</p>	<p>End and intermediate plate, 1 mm thick</p> <p>orange 2002-1792 100 (4x25) gray 2002-1791 100 (4x25)</p>	<p>End plate for fuse terminal blocks, 2 mm thick</p> <p>orange 2002-992 100 (4x25) gray 2002-991 100 (4x25)</p>
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Accessories, 2002 Series

Appropriate marking systems: **WMB/Marking Strips/WMB Inline/Miniature WSB**

<p>Adjacent jumper for continuous commoning, insulated, I_N 25 A, light gray 2-way 2002-400 100 (4x25) 1 to 3 2002-423 100 (4x25)</p>	<p>Push-in type jumper bar, insulated, I_N 25 A, light gray 1 to 3 2002-433 200 (8x25) 1 to 4 2002-434 200 (8x25) 1 to 5 2002-435 100 (4x25) : : 1 to 10 2002-440 100 (4x25)</p>	<p>Push-in type jumper bar, insulated, I_N 25 A, light gray 2-way 2004-402 200 (8x25) : : 10-way 2004-410 100 (4x25)</p>
<p>Push-in type jumper bar, insulated, I_N 25 A, light gray 2-way 2002-402 200 (8x25) : : 10-way 2002-410 100 (4x25) .../000-005 .../000-006</p>	<p>Modular TOPJOB® S L-test plug, can be snapped together, I_N 18 A, for conductor entry 2002-611 100 (4x25)</p>	<p>Push-in type jumper bar, insulated, I_N 25 A, light gray 1 ... 3 2004-433 200 (8x25) : : 1 ... 10 2004-440 100 (4x25)</p>
<p>Staggered jumper, light gray, insulated, I_N 25 A 2-way 2002-472 100 (4x25) 3-way 2002-473 100 (4x25) : : 12-way 2002-482 50 (2x25)</p>	<p>Spacer module, can be snapped together 2002-649 100 (4x25)</p>	<p>Note: Due to the 6.2 mm width of fuse disconnect terminal blocks with pivoting fuse holder, 2004 Series Push-In Type Jumper Bars must be used.</p>
<p>Insulation stop, 5 pcs/strip 2002-171 0.25-0.5 mm² 2002-172 0.75-1 mm² 200 (8x25)</p>	<p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks 2002-115 100 (4x25)</p>	<p>Test plug, with 500 mm cable 2 mm Ø 210-136 50 2.3 mm Ø 210-137 50</p>
<p>Test plug adapter, for 4 mm Ø test plug 2009-174 100 (4x25) Testing tap, for max. 2.5 mm² 2009-182 100 (4x25)</p>	<p>WMB Multi marking system, plain, 10 strips with 10 markers per card, stretchable from 5 ... 5.2 mm 793-5501 5</p>	<p>Insulated ferrules, extra long, for TOPJOB® S terminal blocks, see page 259</p>
<p>Double-deck marker carrier, pivoting 2002-121 50 (2x25)</p>		<p>Operating tool with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade 210-720 1</p>

② Nominal voltage and current are given by the fuse or blown fuse indicator.
③ For all approvals and corresponding ratings, visit www.wago.com.

For technical information and abbreviations, see technical section.

TOPJOB® S

4-Conductor Disconnect/Test and Fuse Terminal Blocks, 2002 Series

PUSH-IN CAGE CLAMP®

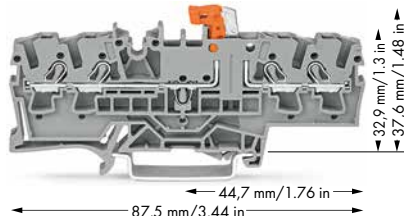
0.25 ... 2.5 (4) mm² ①
400 V/6 kV/3
I_N 16 A

22 ... 12 AWG
300 V, 15 A ②
300 V, 15 A ③

Terminal block width: 5.2 mm / 0.205 in.
10 ... 12 mm / 0.43 in.

③ Approvals

① Conductor range: 0.25 ... 4 mm² "s+fst"
Push-in termination: 0.75 ... 4 mm² "s" and
0.75 ... 2.5 mm² "insulated ferrule, 12 mm"

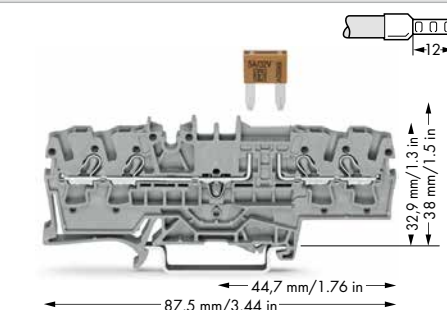


0.25 ... 2.5 (4) mm² ①
400 V/6 kV/3
I_N 10 A ②

22 ... 12 AWG
300 V, 10 A ②
300 V, 10 A ③

Terminal block width: 5.2 mm / 0.205 in.
10 ... 12 mm / 0.43 in.

③ Approvals

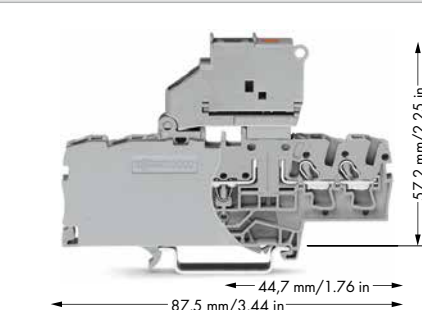


0.25 ... 2.5 (4) mm² ①
250 V/6 kV/3
I_N 6.3 A ②

22 ... 12 AWG
250 V, 6 A ②
250 V, 6 A ③

Terminal block width: 6.2 mm / 0.244 in.
10 ... 12 mm / 0.43 in.

③ Approvals



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
4-conductor disconnect/test terminal block			4-conductor fuse terminal block, for blade-style fuses per DIN 72581-3f, ISO 8820-3			4-conductor fuse terminal block with end plate, with blown fuse indication by LED, gray		
gray	2002-1871	50	gray	2002-1881	50	12 ... 30 V ≈	2002-1811/1000-541	50
blue	2002-1874	50				30 ... 65 V ≈	2002-1811/1000-542	50
orange	2002-1872	50				120 V ≈	2002-1811/1000-867	50
4-conductor disconnect/test terminal block with mechanical interlock			- Individual arrangement: 10 A - Block arrangement: 5 A Protection against direct contact must be observed for 42 V and higher voltages.			230 V ≈ 2002-1811/1000-836 50		
gray	2002-1871/401-000	50				4-conductor fuse terminal block with end plate, without blown fuse indication		
blue	2002-1874/401-000	50				gray	2002-1811	50
orange	2002-1872/401-000	50						
4-conductor through terminal block, same profile								
gray	2002-1801	50						
blue	2002-1804	50						
orange	2002-1802	50						

Item-Specific Accessories

End and intermediate plate, 1 mm thick

orange	2002-1892	100 (4x25)
gray	2002-1891	100 (4x25)

End and intermediate plate, 1 mm thick

orange	2002-1892	100 (4x25)
gray	2002-1891	100 (4x25)

End plate for fuse terminal blocks, 2 mm thick

orange	2002-992	100 (4x25)
gray	2002-991	100 (4x25)

Accessories, 2002 Series

Appropriate marking systems: WMB/Marking Strips/WMB Inline/Miniature WSB

Adjacent jumper for continuous commoning, insulated,

I _N 25 A, light gray		
2-way	2002-400	100 (4x25)
1 to 3	2002-423	100 (4x25)

Push-in type jumper bar, insulated,

I _N 25 A, light gray		
2-way	2002-402	200 (8x25)
:	:	:
10-way	2002-410	100 (4x25)
.../000-005	.../000-006	

Staggered jumper, insulated,

I _N 25 A, light gray		
2-way	2002-472	100 (4x25)
3-way	2002-473	100 (4x25)
:	:	:
12-way	2002-482	50 (2x25)

Insulation stop, 5 pcs/strip

○	2002-171	0.25-0.5 mm ²	
●	2002-172	0.75-1 mm ²	200 (8x25)

Test plug adapter, for 4 mm Ø test plug

	2009-174	100 (4x25)
Testing tap, for max. 2.5 mm ²	2009-182	100 (4x25)

Double-deck marker carrier, pivoting

○	2002-121	50 (2x25)
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Push-in type jumper bar, insulated,

I _N 25 A, light gray		
1 to 3	2002-433	200 (8x25)
1 to 4	2002-434	200 (8x25)
1 to 5	2002-435	100 (4x25)
:	:	:
1 to 10	2002-440	100 (4x25)

Modular TOPJOB® S connector, can be snapped
together, I_N 24 A, for jumper
contact slot

○	2002-511	100 (4x25)
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Spacer module, can be snapped together

○	2002-549	100 (4x25)
---	----------	------------

Protective warning marker, with high-voltage symbol,

○	2002-115	100 (4x25)
---	----------	------------

WMB Multi marking system, plain,

○	793-5501	5
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Push-in type jumper bar, insulated,

I _N 25 A, light gray		
2-way	2004-402	200 (8x25)
:	:	:
10-way	2004-410	100 (4x25)

Push-in type jumper bar, insulated,

I _N 25 A, light gray		
1 ... 3	2004-433	200 (8x25)
:	:	:
1 ... 10	2004-440	100 (4x25)

Note: Due to the 6.2 mm width of fuse disconnect terminal blocks with pivoting fuse holder, 2004 Series Push-In Type Jumper Bars must be used.

Test plug, with 500 mm cable

○	2 mm Ø	210-136	50
●	2.3 mm Ø	210-137	50

Insulated ferrules, extra long,

for TOPJOB® S terminal blocks,
see page 259

Operating tool with a partially insulated shaft,

	type 2, (3.5 x 0.5) mm blade	210-720	1
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② Nominal voltage and current are given by the fuse or blown fuse indicator.










③ For all approvals and corresponding ratings, visit www.wago.com.

For technical information and abbreviations, see technical section.

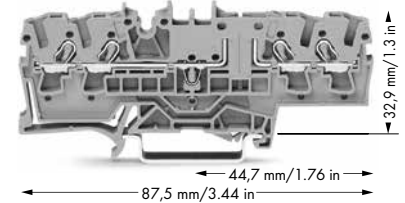
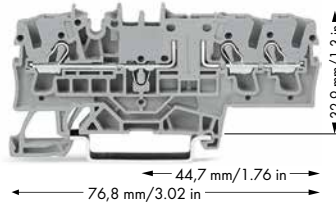
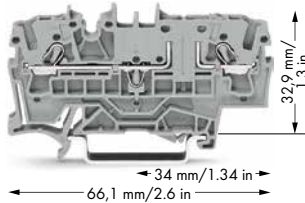
TOPJOB® S

2-, 3- and 4-Conductor Carrier Terminal Blocks, 2002 Series

Fuse Plugs, 2004 Series, Double-fuse Plugs, 2003 Series




<p>0.25 ... 2.5 (4) mm² ①</p> <p>22 ... 12 AWG</p> <p>400 V/6 kV/3</p> <p>I_N 6.3 A</p> <p>Terminal block width: 5.2 mm / 0.205 in.</p> <p> 10 ... 12 mm / 0.43 in.</p> <p>③ Approvals</p>	<p>22 ... 12 AWG</p> <p>300 V, 15 A </p> <p>300 V, 10 A </p>	<p>0.25 ... 2.5 (4) mm² ①</p> <p>22 ... 12 AWG</p> <p>400 V/6 kV/3</p> <p>I_N 6.3 A</p> <p>Terminal block width: 5.2 mm / 0.205 in.</p> <p> 10 ... 12 mm / 0.43 in.</p> <p>③ Approvals</p>	<p>22 ... 12 AWG</p> <p>300 V, 15 A </p> <p>300 V, 10 A </p>	<p>0.25 ... 2.5 (4) mm² ①</p> <p>22 ... 12 AWG</p> <p>400 V/6 kV/3</p> <p>I_N 6.3 A</p> <p>Terminal block width: 5.2 mm / 0.205 in.</p> <p> 10 ... 12 mm / 0.43 in.</p> <p>③ Approvals</p>	<p>22 ... 12 AWG</p> <p>300 V, 15 A </p> <p>300 V, 10 A </p>
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① Conductor range: 0.25 ... 4 mm² "s+fst"
 Push-in termination: 0.75 ... 4 mm² "s" and
 0.75 ... 2.5 mm² "insulated ferrule, 12 mm"




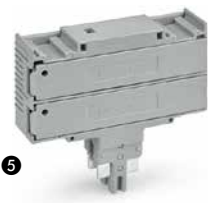
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
2-conductor carrier terminal block			3-conductor carrier terminal block			4-conductor carrier terminal block		
● gray	2002-1661	50	● gray	2002-1761	50	● gray	2002-1861	50

Item-Specific Accessories

<p>End and intermediate plate, 1 mm thick</p> <p> ● 2002-1692 100 (4x25)</p> <p>● 2002-1691 100 (4x25)</p>	<p>End and intermediate plate, 1 mm thick</p> <p> ● 2002-1792 100 (4x25)</p> <p>● 2002-1791 100 (4x25)</p>	<p>End and intermediate plate, 1 mm thick</p> <p> ● 2002-1892 100 (4x25)</p> <p>● 2002-1891 100 (4x25)</p>
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Accessories, 2002 Series

Appropriate marking systems: **WMB/Marking Strips/WMB Inline**

<p>Adjacent jumper for continuous commoning, insulated,</p> <p>I_N 25 A, light gray</p> <p>2-way 2002-400 100 (4x25)</p> <p>1 to 3 2002-423 100 (4x25)</p>	<p>Push-in type jumper bar, insulated,</p> <p>I_N 25 A, light gray</p> <p>1 to 3 2002-433 200 (8x25)</p> <p>1 to 4 2002-434 200 (8x25)</p> <p>1 to 5 2002-435 100 (4x25)</p> <p>: : 1 to 10 2002-440 100 (4x25)</p>	 ④  ⑤
<p>Push-in type jumper bar, insulated,</p> <p>I_N 25 A, light gray</p> <p>2-way 2002-402 200 (8x25)</p> <p>3-way 2002-403 200 (8x25)</p> <p>4-way 2002-404 200 (8x25)</p> <p>: : 10-way 2002-410 100 (4x25)</p> <p>● .../000-005 ● .../000-006</p>	<p>Modular TOPJOB® S L-test plug, can be snapped together, I_N 18 A, for conductor entry</p> <p>● 2002-611 100 (4x25)</p>	
<p>Staggered jumper, insulated,</p> <p>I_N 25 A, light gray</p> <p>2-way 2002-472 100 (4x25)</p> <p>3-way 2002-473 100 (4x25)</p> <p>4-way 2002-474 100 (4x25)</p> <p>5-way 2002-475 50 (2x25)</p> <p>: : 12-way 2002-482 50 (2x25)</p>	<p>Spacer module, can be snapped together</p> <p>● 2002-649 100 (4x25)</p>	<p>④ Fuse plug, with pull-tab,</p> <p>for 5 x 20 mm miniature metric fuses</p> <p>2004-911 50</p>
<p>Insulation stop, 5 pcs/strip</p> <p>○ 2002-171 0.25-0.5 mm²</p> <p>● 2002-172 0.75-1 mm²</p> <p>200 (8x25)</p>	<p>Disconnect plug for fuse terminal blocks,</p> <p>suitable when using a fuse terminal block as disconnect terminal block</p> <p>2002-401 100 (4x25)</p>	<p>with LED, can be used in both switching directions</p> <p>LED, AC/DC 12 ... 30 V</p> <p>2004-911/1000-541 50</p> <p>LED, AC/DC 30 ... 65 V</p> <p>2004-911/1000-542 50</p> <p>LED, AC/DC 120 ... 250 V</p> <p>2004-911/1000-836 50</p>
<p>Test plug adapter, for 4 mm Ø test plug</p> <p>2009-174 100 (4x25)</p> <p>Testing tap, for max. 2.5 mm²</p> <p>2009-182 100 (4x25)</p>	<p>Protective warning marker, with high-voltage symbol, for 5 terminal blocks</p> <p>● 2002-115 100 (4x25)</p>	<p>Double-fuse plug, for 2x 5 x 20 mm</p> <p>type 1 ⑤, 2-pole, 10.4 mm</p> <p>2003-911 100</p> <p>type 2 ⑤, 2-pole, 10.4 mm, LED 250 V</p> <p>2003-911/1000-923 100</p>
<p>Marking strips, plain</p> <p>11 mm wide, 50 m roll</p> <p>○ 2009-110 1</p>	<p>Banana plugs, only for safety extra-low voltage (42 V)</p> <p>● 215-212 50</p> <p>● 215-311 50</p> <p>For additional colors, see page 262.</p>	<p>Shorting link, 5 x 20 mm, 6.3 A,</p> <p>suitable when using the fuse plug as a disconnect plug</p> <p>281-503 250 (10x25)</p>
<p>End plate for fuse terminal blocks, 2 mm thick</p> <p>● 2002-992 100 (4x25)</p> <p>● 2002-991 100 (4x25)</p>	<p>WMB Multi marking system, plain,</p> <p>10 strips with 10 markers per card, stretchable from 5 ... 5.2 mm</p> <p>○ 793-5501 5</p>	<p>For pluggable diode and LED modules, see page 28.</p> <p>For empty component plug housings, see page 236.</p>
<p>Operating tool with a partially insulated shaft,</p> <p>type 2, (3.5 x 0.5) mm blade</p> <p>○ 210-720 1</p>		

TOPJOB® S

Disconnect and Fuse Terminal Blocks 6 (10) mm²

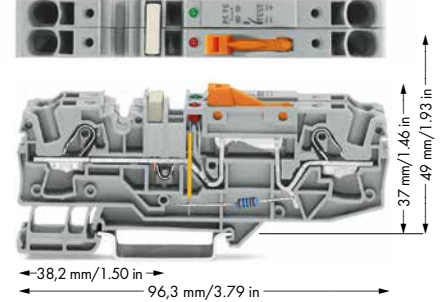
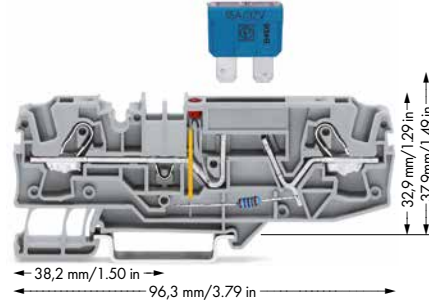
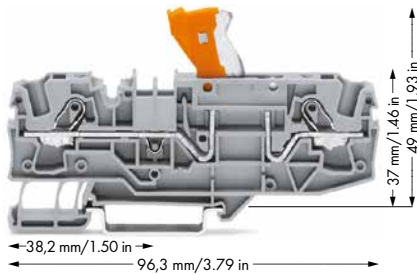
2006 Series

PUSH-IN CAGE CLAMP®

1

<p>0.5 ... 6 (10) mm² ① 20 ... 8 AWG 800 V/6 kV/3 I_N 30 A Terminal block width: 7.5 mm / 0.295 in. 13 ... 15 mm / 0.55 in. ③ Approvals</p>	<p>0.2 ... 6 (10) mm² ① 20 ... 8 AWG 800 V/8 kV/3 ② I_N 25/30 A ② Terminal block width: 7.5 mm / 0.295 in. 13 ... 15 mm / 0.55 in. ③ Approvals</p>	<p>0.5 ... 6 (10) mm² ① 20 ... 8 AWG 500 V/6 kV/3 I_N 30 A Terminal block width: 15 mm / 0.59 in. 13 ... 15 mm / 0.55 in. ③ Approvals</p>
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① see page 29



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
2-conductor disconnect terminal block, with test point, orange disconnect link			2-conductor fuse terminal block for mini-automotive blade-style fuses, with blown fuse indication by LED, with test point, gray			Ground conductor disconnect terminal block, gray		
gray	2006-1671	25	12 V			24 V AC/DC	2006-1671/1000-848	12
blue	2006-1674	25	24 V			48 V AC/DC	2006-1671/1000-849	12
2-conductor through terminal block, same profile			12 V			120 V AC/DC	2006-1671/1000-850	12
gray	2006-1601	25	24 V			230 V AC/DC	2006-1671/1000-851	12
blue	2006-1604	25	48 V					
			without blown-fuse indication, with test option					
			gray	2006-1681	25			

Item-Specific Accessories

End and intermediate plate, 1 mm thick

orange	2006-1692	100 (4x25)
gray	2006-1691	100 (4x25)

End and intermediate plate, 1 mm thick

orange	2006-1692	100 (4x25)
gray	2006-1691	100 (4x25)

Accessories, 2006 Series

Push-in type jumper bar, insulated, I_N 41 A, light gray

2-way	2006-402	50 (2x25)
3-way	2006-403	50 (2x25)
4-way	2006-404	50 (2x25)
5-way	2006-405	50 (2x25)

Appropriate marking systems:

WMB/Marking Strips/WMB Inline

Push-in type jumper bar, insulated, I_N 41 A, light gray

1 to 3	2006-433	50 (2x25)
1 to 4	2006-434	50 (2x25)
1 to 5	2006-435	50 (2x25)

Disconnect plug for fuse terminal blocks, suitable when using a fuse terminal block as disconnect terminal block

orange	2006-401	100 (4x25)
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Protective warning marker, with high-voltage symbol, for 5 terminal blocks

yellow	2006-115	100 (4x25)
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Disconnect plug for carrier terminal blocks, suitable when using a carrier terminal block as disconnect terminal block

white	2006-401/000-005	100 (4x25)
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Test plug adapter, for 4 mm Ø test plug

gray	2009-174	100 (4x25)
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Blind plug for fuse terminal blocks, indicates a disconnection

red	2006-451	100 (4x25)
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Banana plugs, only for safety extra-low voltage (42 V)

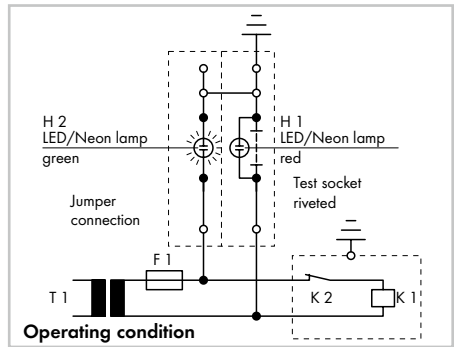
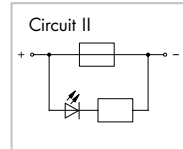
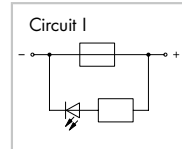
red	215-212	50
black	215-311	50

For additional colors, see page 262.

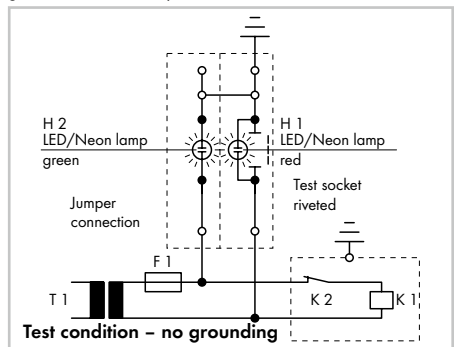
Blade-style fuses, per DIN 72581-3c/ISO 8820 (not offered by WAGO)

Overcurrent circuit breaker*, thermal (not offered by WAGO)

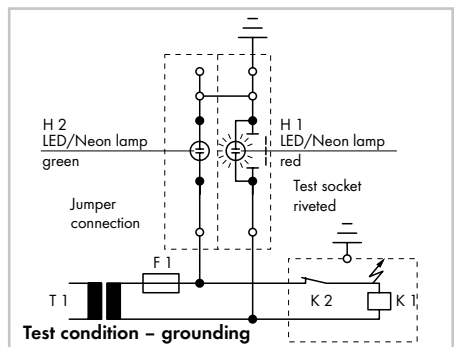
*WAGO recommends using overcurrent circuit breakers from ETA, Elektrotechnische Apparate GmbH, Postfach 1061, D-90514 Aldorf/Nürnberg; Types 1170-02, 1621-21 or 1610-22; Individual or block arrangement up to 25 A for 4 mm² conductors.



Slide link closed, auxiliary circuit grounded, green LED/neon lamp illuminates.



Slide link open, auxiliary circuit not grounded.



Slide link open, auxiliary circuit not grounded, red LED/neon lamp illuminates.

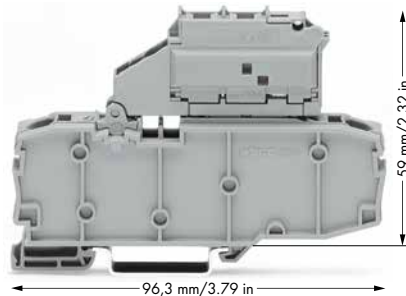
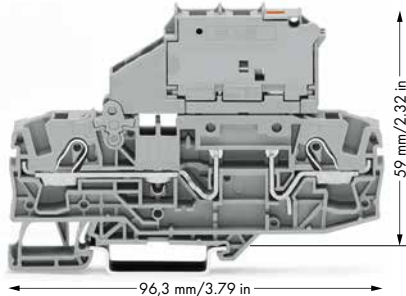
② Nominal voltage and current are given by the fuse or blown fuse indicator.
③ For all approvals and corresponding ratings, visit www.wago.com.

TOPJOB® S

Fuse Disconnect Terminal Blocks with Pivoting Fuse Holder, for 5 x 20 mm, 5 x 30 mm and 1/4" x 1 1/4" Miniature Metric Fuses, 2006 Series

0.5 ... 6 (10) mm ² ① 800 V/8 kV/3 ② I _N 10 A Terminal block width: 7.5 mm / 0.295 in. 13 ... 15 mm / 0.55 in. ③ Approvals	20 ... 8 AWG 600 V, 15 A ③ Terminal block width: 7.5 mm / 0.295 in. 13 ... 15 mm / 0.55 in. ③ Approvals	0.5 ... 6 (10) mm ² ① 800 V/8 kV/3 ② I _N 10 A Terminal block width: 10.4 mm / 0.409 in. 13 ... 15 mm / 0.55 in. ③ Approvals	20 ... 8 AWG 600 V, 15 A ③ Terminal block width: 10.4 mm / 0.409 in. 13 ... 15 mm / 0.55 in. ③ Approvals
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- ① Conductor range: 0.5 ... 10 mm² "s+fst"
Push-in termination: 1 ... 10 mm² "s"
and 1.5 ... 6 mm² "insulated ferrules, 12 mm"
- ② 800 V = Rated voltage
8 kV = Rated impulse voltage
3 = Pollution degree



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Accessories, 2006 Series (7.5 mm-wide terminal blocks)
2-conductor fuse disconnect terminal block with pivoting fuse holder, with blown fuse indication, nominal voltage/current given by the fuse, for 5 x 20 mm miniature metric fuse			2-conductor fuse disconnect terminal block with pivoting fuse holder and end plate, with blown fuse indication, nominal voltage/current given by the fuse, for 1/4" x 1 1/4" miniature metric fuse			Push-in type jumper bar, insulated, I _N 41 A, light gray
gray	2006-1611	25	gray	2006-1631/099-000	25	2-way 2006-402 50 (2x25) 3-way 2006-403 50 (2x25) 4-way 2006-404 50 (2x25) 5-way 2006-405 50 (2x25)
for 5 x 30 mm miniature metric fuse						Push-in type jumper bar, insulated, I _N 41 A, light gray
gray	2006-1621	25				1 to 3 2006-433 50 (2x25) 1 to 4 2006-434 50 (2x25) 1 to 5 2006-435 50 (2x25)
for 1/4" x 1 1/4" miniature metric fuse						Star point jumper, insulated, I _N = I _N terminal block, light gray
gray	2006-1631	25				1-3-5 2006-405/011-000 50 (2x25)
with blown fuse indication by LED, nominal voltage/current given by LED or fuse, leakage current in case of blown fuse: LED 2 mA, for 5 x 20 mm miniature metric fuse			with blown fuse indication by LED, nominal voltage/current given by LED or fuse, leakage current in case of blown fuse: LED 2 mA, for 1/4" x 1 1/4" miniature metric fuse			Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks
12 ... 30 V	2006-1611/1000-541	25	12 ... 30 V	2006-1631/1099-541	25	④ 2006-115 100 (4x25)
30 ... 65 V	2006-1611/1000-542	25	30 ... 65 V	2006-1631/1099-542	25	
120 V	2006-1611/1000-867	25	120 V	2006-1631/1099-867	25	Accessories, 2006 Series (10.4 mm-wide terminal blocks)
230 V	2006-1611/1000-836	25	230 V	2006-1631/1099-836	25	*Note: Due to the 10.4 mm width of fuse disconnect terminal blocks with a pivoting fuse holder, 2002 Series Push-In Type Jumper Bars must be used.
for 5 x 30 mm miniature metric fuse						Push-in type jumper bar, insulated, I _N 25 A, light gray
12 ... 30 V	2006-1621/1000-541	25				1 to 2* 2002-433 200 (8x25) 1 to 3* 2002-435 100 (4x25) 1 to 4* 2002-437 100 (4x25) 1 to 5* 2002-439 100 (4x25)
30 ... 65 V	2006-1621/1000-542	25				Star point jumper, insulated, I _N = I _N terminal block, light gray
120 V	2006-1621/1000-867	25				1-2-3* 2002-405/011-000 100 (4x25)
230 V	2006-1621/1000-836	25				
380 ... 500 V	2006-1621/1000-859	25				
for 1/4" x 1 1/4" miniature metric fuse						
12 ... 30 V	2006-1631/1000-541	25				
30 ... 65 V	2006-1631/1000-542	25				
120 V	2006-1631/1000-867	25				
230 V	2006-1631/1000-836	25				
380 ... 500 V	2006-1631/1000-859	25				

Item-Specific Accessories	Appropriate marking systems: WMB/Marking Strips	Accessories, 2006 Series
End and intermediate plate, 1 mm thick	End plate for fuse terminal blocks, 2 mm thick	WMB Multi marking system, plain, 10 strips with 10 markers per card, stretchable from 5 ... 5.2 mm
2006-1692 100 (4x25)	2006-992 100 (4x25)	793-5501 5
2006-1691 100 (4x25)	2006-991 100 (4x25)	Screwless end stop, for DIN-35 rail, 6 mm wide
2006-992 100 (4x25)		249-116 100 (4x25)
2006-991 100 (4x25)		

③ For all approvals and corresponding ratings, visit www.wago.com.

For technical information and abbreviations, see technical section.

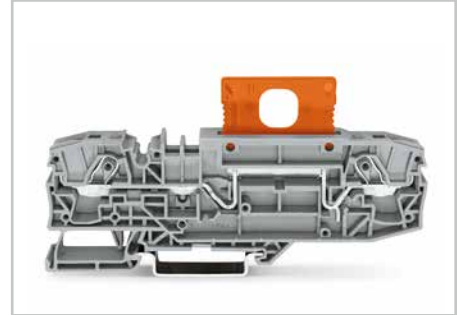
TOPJOB® S

PUSH-IN CAGE CLAMP®

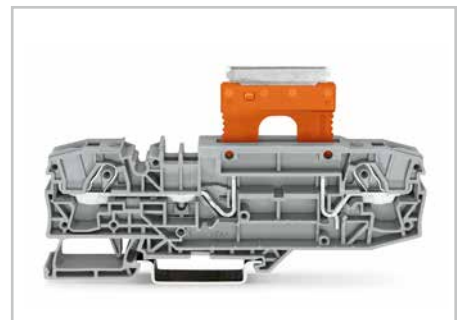
Disconnect/Test Terminal Blocks, 1500 VDC, Carrier Terminal Blocks and Through Terminal Blocks of Same Profile 6 (10) mm² / 30 A, 2006 Series

0.5 ... 6 (10) mm² ① | 20 ... 8 AWG
 AC/DC 1000 V/ DC 1500 V/12 kV/3 ②
 I_N 30 A 600 V, 30 A_{VA}, 1000 V, 30 A_{AE}
 Terminal block width: 15 mm / 0.59 in.
 13 ... 15 mm / 0.55 in.
 ③ Approvals

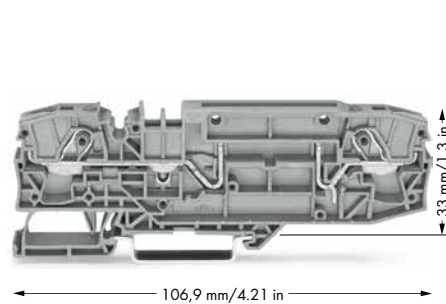
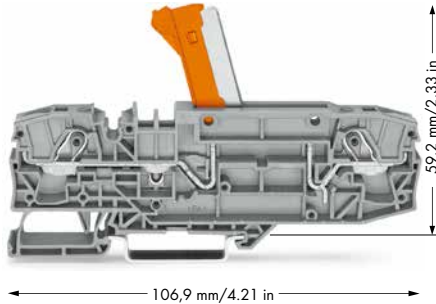
0.5 ... 6 (10) mm² ① | 20 ... 8 AWG
 AC/DC 1000 V/ DC 1500 V/12 kV/3 ②
 I_N 30 A 600 V, 30 A_{VA}, 1000 V, 30 A_{AE}
 Terminal block width: 15 mm / 0.59 in.
 13 ... 15 mm / 0.55 in.
 ③ Approvals



Orange disconnect plug (2006-8401) in operating position



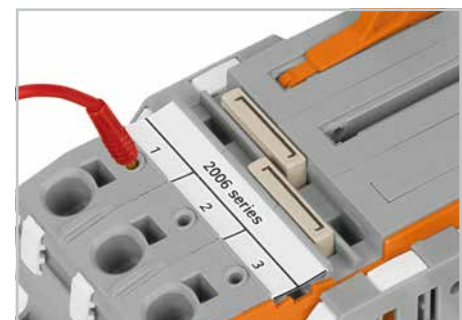
Orange disconnect plug (2006-8401) in "visible disconnection" position



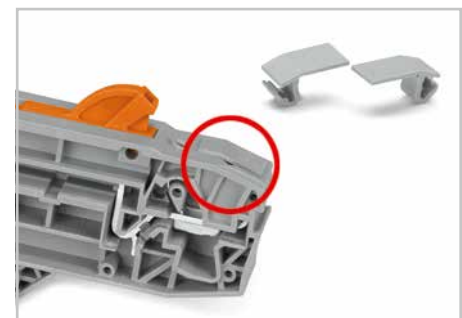
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
2-conductor disconnect/test terminal block, with test point, orange disconnect link			2-conductor carrier terminal block, with test point		
gray	2006-8671	12	gray	2006-8661	12
blue	2006-8674	12	blue	2006-8664	12
2-conductor through terminal block, with test point, same profile as 2-conductor disconnect terminal block			Item-Specific Accessories		
gray	2006-8601	12	Disconnect plug for carrier terminal blocks, suitable when using a carrier terminal block as disconnect terminal block		
blue	2006-8604	12		2006-8401	48 (4x12)

Accessories, 2006 Series

End and intermediate plate, 1 mm thick 2006-8692 48 (4x12) 2006-8691 48 (4x12)	WMB Multi marking system, plain, 10 strips with 10 markers per card, for 5 ... 17.5 mm terminal block width 793-501 5
Protective warning marker, ④ with high-voltage symbol, black, for 5 terminal blocks 2006-115 100 (4x25)	WMB Multi marking system, plain 10 strips with 10 markers per card, for 5 ... 17.5 mm terminal block width 793-501/000-002 5 793-501/000-005 5 793-501/000-006 5 793-501/000-007 5 793-501/000-012 5 793-501/000-017 5 793-501/000-023 5 793-501/000-024 5
Push-in type jumper bar, insulated, I _N 41 A, light gray 1 to 2 2006-433 50 (2x25) 1 to 3 2006-435 50 (2x25)	Marking strip, plain, 11 mm wide, 50 m roll 2009-110 1
Star point jumper (as push-in type jumper bar), insulated, I _N = I _N terminal block, light gray 1-2-3 2006-405/011-000 50 (2x25)	WMB Inline, plain, stretchable from 5 ... 5.2 mm, 1,500 WMB markers (5 mm) per roll 2009-115 1
Lockout cap, for conductor entry and operating slot 2006-191 25	Screwless end stop, for DIN-35 rail, 10 mm wide 249-117 50(2x25)
Test plug, with 500 mm cable, 2 mm Ø 210-136 50	



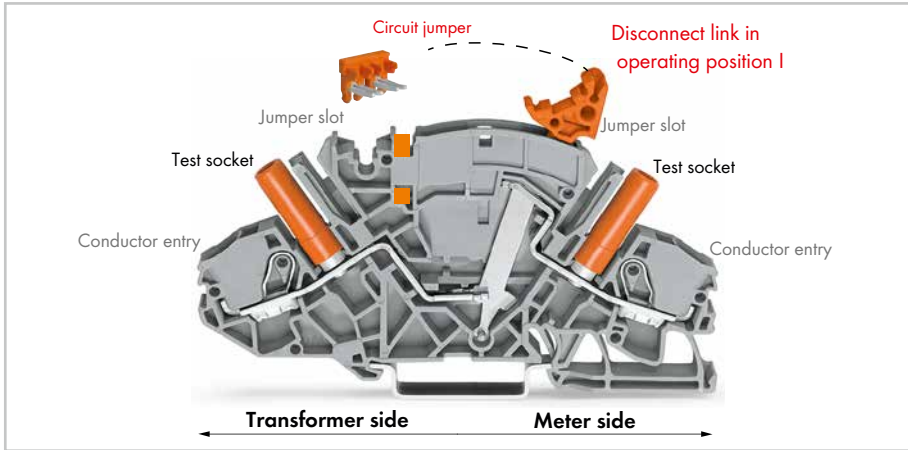
Commoning a 15 mm-wide terminal block via push-in type jumper bars: 1 to 3 (2006-433) and 1 to 5 (2006-435). Test slots on both terminal block sides allow for direct measurement.



Cover seals unused conductor entry.

④ Protective warning markers must be applied individually.

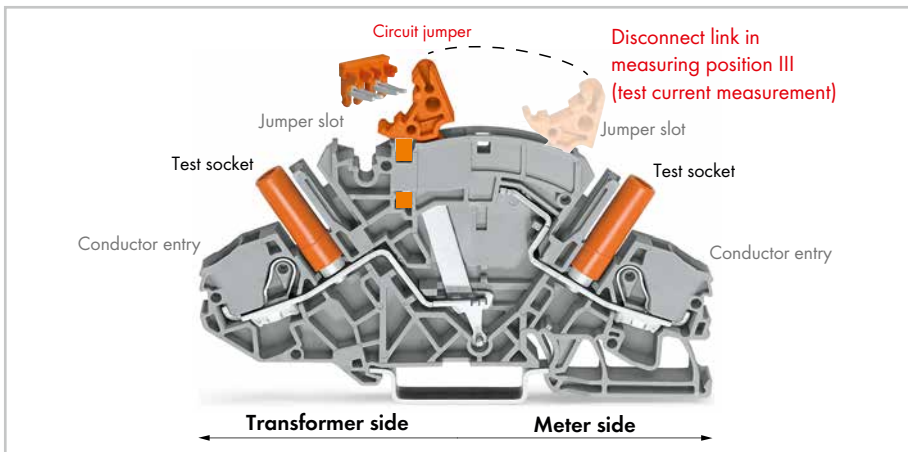
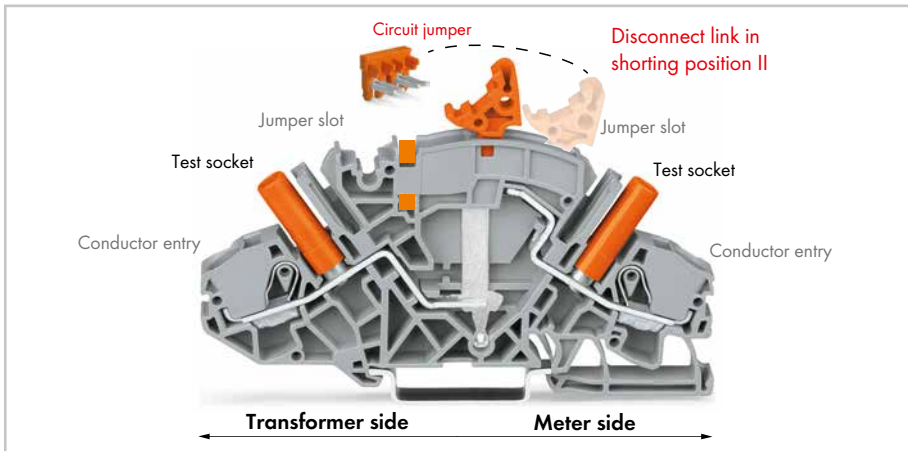
TOPJOB® S Current Transformer Terminal Blocks, 2007-8821 (Orange Disconnect Link)



WAGO's TOPJOB® S Current Transformer (Disconnect/Test) Terminal Block (2007-8821) is designed for current transformer circuits.

First, the current transformer is shorted via disconnect link and circuit jumper (insert jumper, move disconnect link from operating position I to shorting position II, activate shorting path). Connecting a measurement device via test socket on the meter side can only be performed once circuit disconnection is complete (disconnect link in measuring position III).

- Features top-of-unit circuit jumper slot for shorting path activation.
- Disconnect link provides intuitive and easy operation, as well as exact switching status indication.
- Combines high functionality with compact design (99.6 mm long and 8 mm wide).
- All 2007 Series terminal blocks are rated at 30 A/500 V (IEC) and 300 V (UL).
- With a terminal block width of 8 mm, the maximum cross-section for solid and fine-stranded conductors is 10 mm² (8 AWG) and 6 mm² (10 AWG) for ferruled conductors.
- Touch-proof test sockets for 4 mm Ø test plugs on transformer and meter side.
- Compatible with through and ground conductor terminal blocks of same profile.



Preparing the shorting path for current transformer circuits:

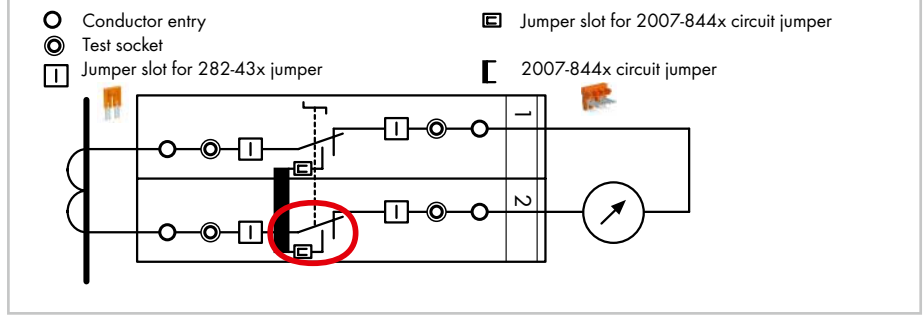
Insert insulated, touch-proof circuit jumpers into jumper slot. Using locking covers or profiles for adjacent terminal blocks allows disconnect links to be operated simultaneously.

TOPJOB® S Current Transformer Circuit Positions

Disconnect link in operating position I

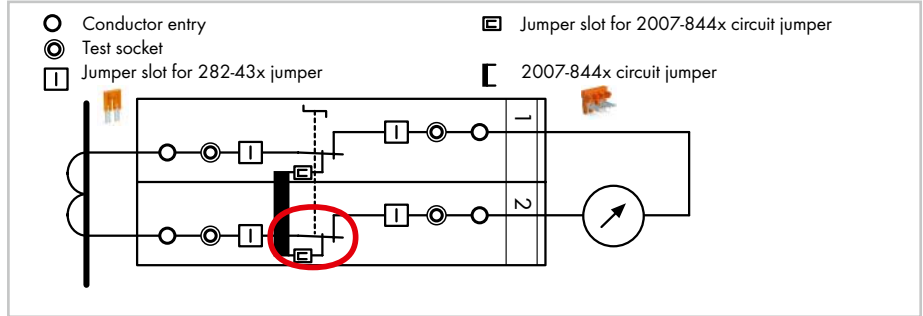


Terminal blocks required:
 2 x disconnect/test terminal block 2007-8821
 1 x circuit jumper, orange 2007-8442
 locking covers or interlocking links (option)



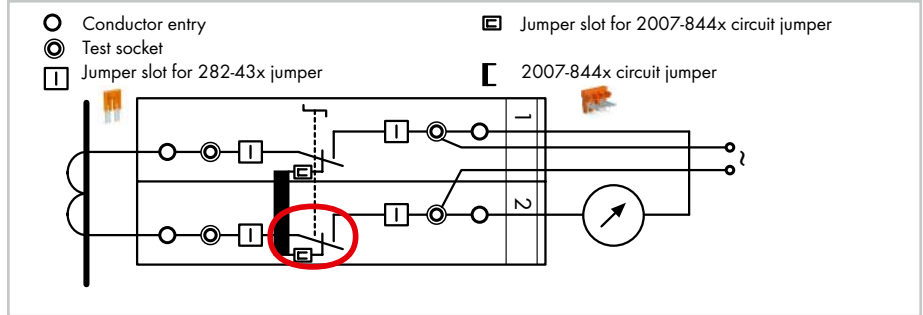
In the operating position, the measurement device is connected to the transformer, the circuit jumper is inserted and the disconnect link is in position I.

Disconnect link in shorting position II



The transformer is **not** disconnected from the measurement device, yet, the shorting path is activated by moving the disconnect link into shorting position II and the transformer is safely shorted.

Test current measurement: Disconnect link in measuring position III

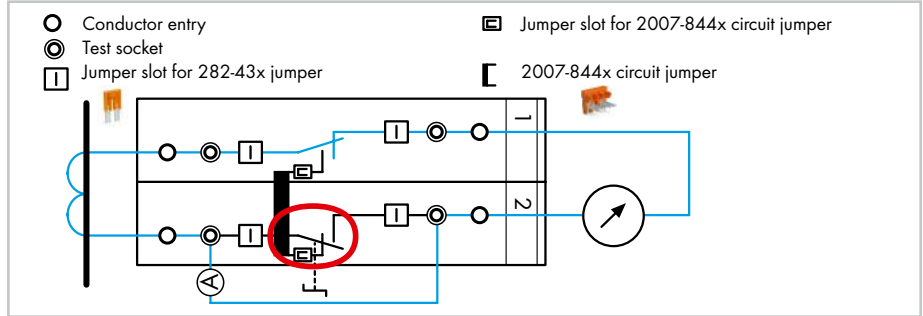


The measuring device is electrically disconnected from the transformer. If required, an external voltage can be applied to the measuring device via the test socket.

Measurement testing (using both test sockets)



Terminal block 1: Disconnect link in operating position I
 Terminal block 2: Disconnect link in measuring position III



Measurement testing: First insert the reference current meter (A) into the test socket, then move the disconnect link into measurement position III (test current measurement).

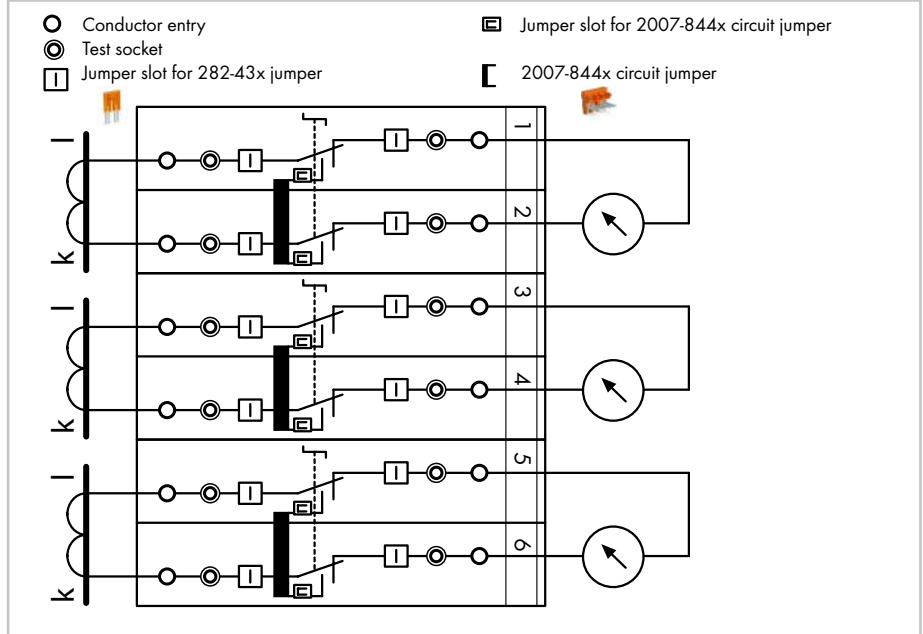
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Examples for Current Transformer Circuits

Measuring set for a three-phase current transformer



Terminal blocks required:
 6 x disconnect/test terminal block 2007-8821
 3 x circuit jumper, orange 2007-8442
 In addition: interlocking links, locking covers, lock-outs

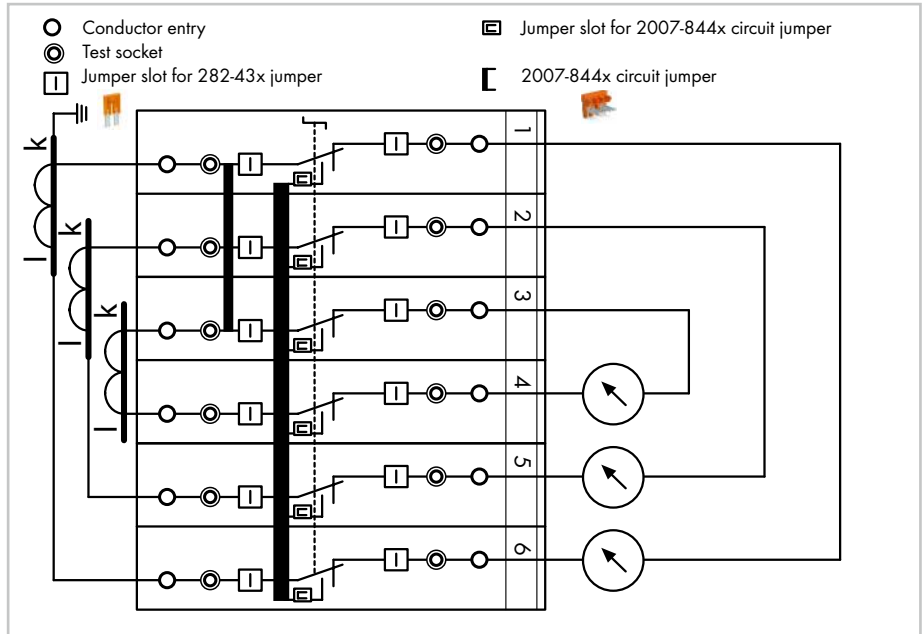


Pairs of disconnect links are interconnected via locking cover or interlocking link. Measurement testing is performed after the interlocking is released.

Measuring set for a three-phase current transformer with 'Y' point



Terminal blocks required:
 6 x disconnect/test terminal block 2007-8821
 1 x circuit jumper, orange 2007-8446
 1 x jumper, orange 282-433
 In addition: interlocking links, locking covers, lock-outs



All six disconnect links are interconnected via locking cover or interlocking link.

Interlocking link



Interlocking link mechanically locks multiple links for multi-pole switching applications.

Lock-out seal



A lock-out seal can be used on the disconnect link in operating position I in connection with an end and separator plate (2007-8893 or 2007-8894).

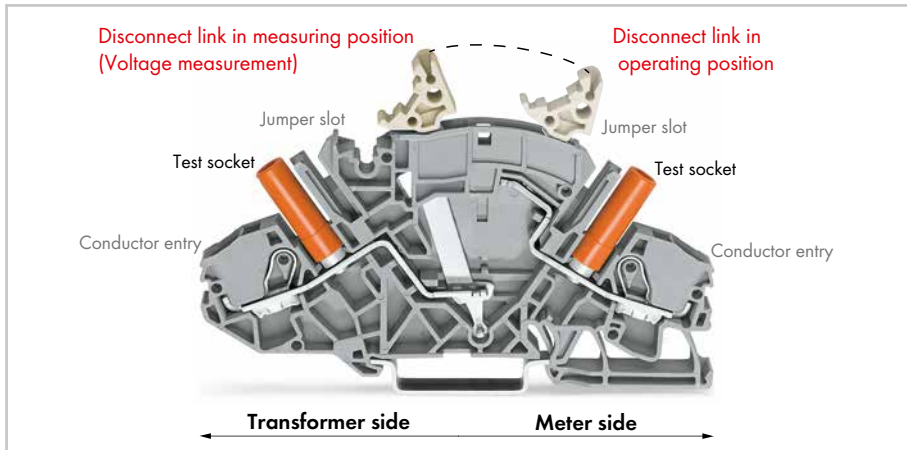
Lock-out



Lock-out prevents accidental operation of disconnect link and snaps into one of two notched positions.

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Voltage Transformer Terminal Blocks, 2007-8811 (Light Gray Disconnect Link)



WAGO's TOPJOB® S Voltage Transformer (Disconnect/Test) Terminal Block (2007-8811) is designed for current transformer circuits.

First, disconnect the voltage transformer from the circuit (move disconnect link from operating position to measuring position). Connecting a measuring device via test socket on the meter side can only be performed after disconnection is complete (measuring position).

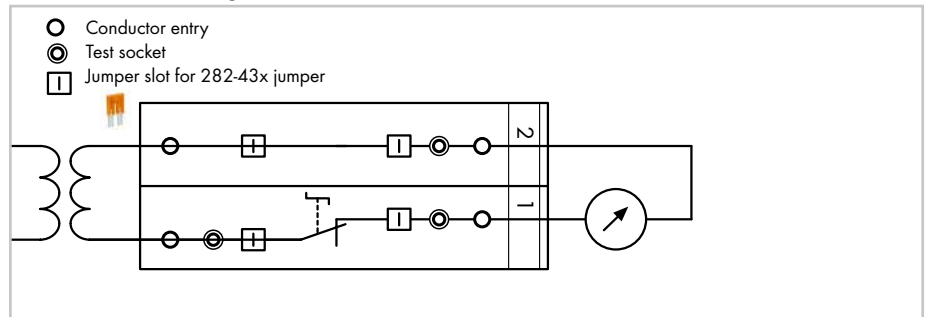
- For voltage transformer circuits (no circuit jumper slot required as for 2007-8821 Current Transformer Terminal Block)
- Disconnect link provides intuitive and easy operation, as well as exact switching status indication.
- Combines high functionality with compact design (99.6 mm long and 8 mm wide).
- All 2007 Series terminal blocks are rated at 30 A/500 V (IEC) and 300 V (UL).
- With a terminal block width of 8 mm, the maximum cross-section for solid and fine-stranded conductors is 10 mm² (8 AWG) and 6 mm² (10 AWG) for ferruled conductors.
- Touch-proof test sockets for 4 mm Ø test plugs on transformer and meter side.
- Compatible with through and ground conductor terminal blocks of same profile.

Example for voltage transformer testing

Measuring set for single-phase voltage transformer testing



Terminal blocks required:
 1 x disconnect/test terminal block 2007-8811
 1 x through terminal block 2007-8801
 1 x end plate, orange 2007-8892
 In addition: locking cover, lock-out



Disconnecting the voltage transformer from the circuit: Move disconnect link from operating position to measuring position.

Voltage measurement: Connecting a measuring device via test socket on the meter side can only be performed after disconnection is complete (measuring position).

Marking



Marking via WMB Multi markers or marking strips.

Commoning



Additional commoning option on the transformer side

Locking cover for disconnect links



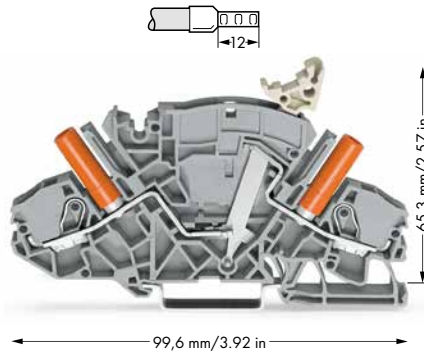
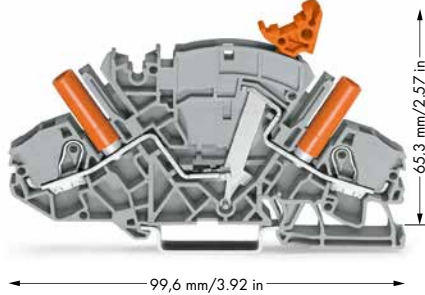
Multipole switching via snap-on type, transparent (locking) cover for disconnect links.

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Disconnect/Test Terminal Blocks 6 (10) mm² / 30 A, Through and Ground Conductor Terminal Blocks for Current and Voltage Transformer Circuits, 2007 Series

0.5 ... 6 (10) mm ² ①	20 ... 8 AWG	0.5 ... 6 (10) mm ² ①	20 ... 8 AWG
500 V/6 kV/3	300 V, 30 A	500 V/6 kV/3	300 V, 10 A
I _N 30 A		I _N 30 A	
Terminal block width: 8 mm / 0.315 in.		Terminal block width: 8 mm / 0.315 in.	
13 ... 15 mm / 0.55 in.		13 ... 15 mm / 0.55 in.	
② Approvals		② Approvals	

① Conductor range: 0.5 ... 10 mm² "s+f-st"
 Push-in termination: 1 ... 10 mm² "s" and
 1.5 ... 6 mm² "insulated ferrule, 12 mm"



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
	2-conductor disconnect/test terminal block, e.g., current transformer circuits, with circuit jumper slot, with touch-proof test sockets, for 4 mm Ø test plugs			2-conductor disconnect/test terminal block, e.g., voltage transformer circuits, with touch-proof test sockets, for 4 mm Ø test plugs	
	2007-8821	20		2007-8811	20

Accessories, 2007 Series

End and separator plate, 1.5 mm thick, without lock-out seal option	
	2007-8892 50 (5x10)
	2007-8891 50 (5x10)

End and separator plate, 1.5 mm thick, with lock-out seal option	
	2007-8894 50 (5x10)
	2007-8893 50 (5x10)

Lock-out device, for disconnect link	
	2007-8899 100 (5x20)

Locking cover, transparent, mechanically locks multiple links	
	1-pole 282-881 50 (5x10)
	2-pole 282-882 50 (5x10)
	8-pole 282-888 50 (5x10)

Jumper, insulated, I _N 30 A, orange	
	2-way 282-432 50 (5x10)
	3-way 282-433 50 (5x10)
	9-way 282-439 50 (5x10)
	10-way 282-440 50 (5x10)

Jumper with safety lid, insulated, I _N 30 A, orange	
	2-way 282-432/100-000
	3-way 282-433/100-000
	4-way 282-434/100-000
	50 (5x10)

Interlocking link, mechanically locks multiple links, 1 m long	
	transparent 210-254 1

Jumper, special design (other versions upon request), I _N 30 A, orange	
	1-3-5 282-435/011-000
	1-2-4-6 282-436/301-000
	1-3-5-7 282-437/011-000
	1-4-7 282-437/012-000
	1-2-5-8 282-438/300-000
	1-4-7-8 282-438/301-000
	1-3-5-7-9 282-439/011-000
	50 (5x10)

Protective warning marker, with high-voltage symbol, black, for 5 terminal blocks	
	2006-115 100 (4x25)

WMB Multi marking system, plain 10 strips with 10 markers per card, for 5 ... 17.5 mm terminal block width	
	793-501 5

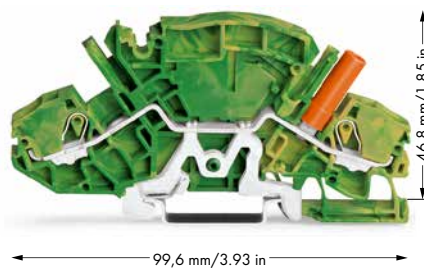
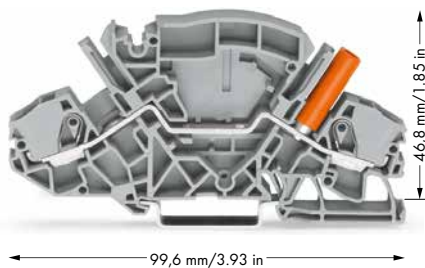
Marking strip, plain, 11 mm wide, 50 m roll	
	2009-110 1

Banana plugs, only for safety extra-low voltage (42 V)	
	215-212 50
	215-311 50
For additional colors, see page 262.	

Operating tool with a partially insulated shaft, type 2, (5.5 x 0.8) mm blade	
	210-721 1

Item-Specific Accessories

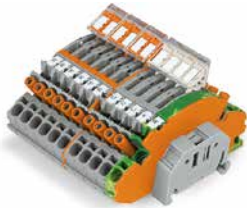
Circuit jumper, insulated, I _N 30 A, orange	
	2-way 2007-8442 50 (5x10)
	3-way 2007-8443 50 (5x10)
	4-way 2007-8444 50 (5x10)
	5-way 2007-8445 50 (5x10)
	6-way 2007-8446 50 (5x10)
	7-way 2007-8447 50 (5x10)
	8-way 2007-8448 50 (5x10)



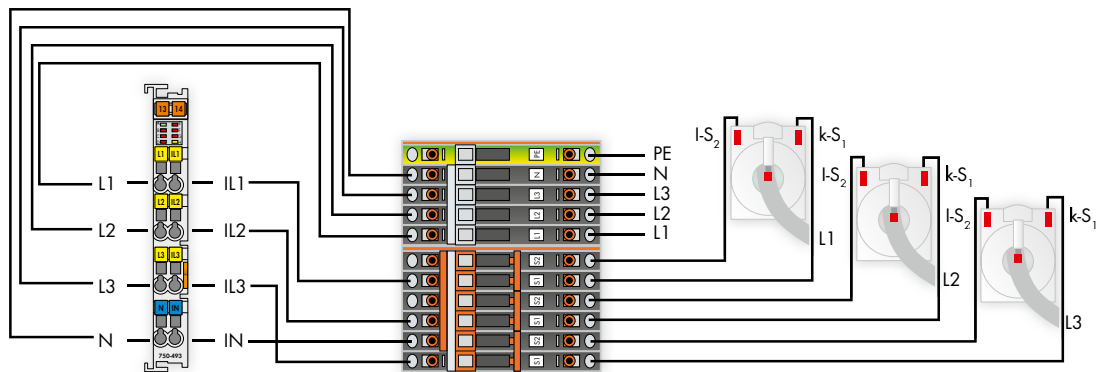
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
	2-conductor through terminal block, with touch-proof test socket, for 4 mm Ø test plug			2-cond. ground conductor terminal block, with touch-proof test socket, for 4 mm Ø test plug	
	2007-8801	20		2007-8807	20

② For all approvals and corresponding ratings, visit www.wago.com.

For technical information and abbreviations, see technical section.

TOPJOB® S**PUSH-IN CAGE CLAMP®****Terminal Block Assemblies for Current and Voltage Transformers****2007 Series**

Item No. for Set: 2007-8873	Designation: Current and Voltage Transformer Terminal Block Assembly	Quantity
249-117	Screwless end stop, 10 mm wide	2
282-882	Locking cover, mechanically locks multiple links, 2-pole	3
282-884	Locking cover, mechanically locks multiple links, 4-pole	1
2007-8442	Circuit jumper, insulated, 2-way	3
2007-8807	2-cond. ground conductor terminal block, with touch-proof test socket, for 4 mm Ø test plug	1
2007-8811	2-conductor disconnect/test terminal block, with touch-proof test sockets, for 4 mm Ø test plugs	4
2007-8821	2-conductor disconnect/test terminal block, with touch-proof test sockets, for 4 mm Ø test plugs	6
2007-8892	End and separator plate, 1.5 mm thick, without lock-out seal option	2
2009-135	WMB Inline, plain, 8,000 WMB markers (5 mm) per roll	21 markers
282-435/011-000	Jumper, insulated, 1-3-5	1
Assembly width incl. end stop: 11.2 cm		



3-Phase Power Measurement Module
750 Series

Terminal Block Assembly for
Current and Voltage Transformers
2007 Series

Current Transformers
855 Series





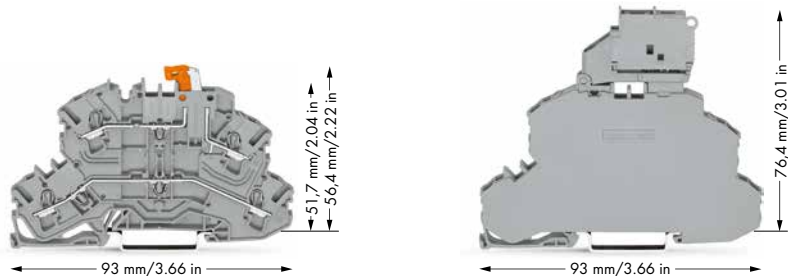
Item No. for Set: 2007-8876	Designation: Current Transformer Terminal Block Assembly	Quantity
249-117	Screwless end stop, 10 mm wide	2
282-369	Collective jumper carrier, for DIN-35 rail, compatible with jumpers for transverse switching (282-811) and longitudinal switching disconnect (282-821) terminal blocks	1
282-882	Locking cover, mechanically locks multiple links, 2-pole	3
2007-8442	Circuit jumper, insulated, 2-way	3
2007-8821	2-conductor disconnect/test terminal block, with touch-proof test sockets, for 4 mm Ø test plugs	6
2007-8892	End and separator plate, 1.5 mm thick, without lock-out seal option	1
2009-135	WMB Inline, plain, 8,000 WMB markers (5 mm) per roll	12 markers
282-435/011-000	Jumper, insulated, 1-3-5	1
Assembly width incl. end stop: 8.5 cm		

TOPJOB® S


Double-Deck Disconnect, Carrier and Fuse Terminal Blocks 2.5 (4) mm²

2002 Series

0.25 ... 2.5 (4) mm ² ①	22 ... 12 AWG	0.25 ... 2.5 (4) mm ² ①	22 ... 12 AWG
400 V/6 kV/3 ②	300 V, 20 A ③	250 V/6 kV/3 ②	30 V, 6.3 A ③
I _N 16 A		I _N 6.3 A	
Terminal block width: 5.2 mm / 0.205 in.		Terminal block width: 6.2 mm / 0.244 in.	
 10 ... 12 mm / 0.43 in.		 10 ... 12 mm / 0.43 in.	
④ Approvals		④ Approvals	



- ① Conductor range: 0.25 ... 4 mm² "s+f-st"
Push-in termination: 0.75 ... 4 mm² "s"
and 0.75 ... 2.5 mm² "insulated ferrules, 12 mm"
- ② 400 V = Rated voltage
6 kV = Rated impulse voltage
3 = Pollution degree
- ③ Due to the 6.2 mm width of fuse disconnect terminal blocks with a pivoting fuse holder, 2004 Series Push-In Type Jumper Bars must be used.

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Accessories, 2002 Series
Double-deck disconnect terminal block, with movable knife disconnect, gray housing <input type="radio"/> L/L 2002-2671 50 <input type="radio"/> N/L 2002-2672 50			Double-deck fuse disconnect terminal block with pivoting fuse holder, through/fuse terminal block, for 5 x 20 mm miniature metric fuse, without blown fuse indication, nominal voltage/current given by the fuse <input type="radio"/> L/L 2002-2611 25 <input type="radio"/> N/L 2002-2612 25			Double-deck marker carrier, pivoting  2002-121 50 (2x25)
Double-deck carrier terminal block, upper-deck base, gray housing <input type="radio"/> L/L 2002-2661 50 <input type="radio"/> N/L 2002-2662 50			Double-deck fuse disconnect terminal block with pivoting fuse holder, through/fuse terminal block, for 5 x 20 mm miniature metric fuse, with blown fuse indication by LED, gray, nominal voltage/current given by LED or fuse; Leakage current in case of blown fuse: LED 2 mA <input type="radio"/> 12 ... 30 V 2002-2611/1000-541 25 <input type="radio"/> 30 ... 65 V 2002-2611/1000-542 25 <input type="radio"/> 230 V 2002-2611/1000-836 25			Insulation stop, 5 pcs/strip <input type="radio"/> 2002-171 0.25-0.5 mm ² <input type="radio"/> 2002-172 0.75-1 mm ² 200 (8x25)
Double-deck carrier terminal block, upper-deck base, gray housing <input type="radio"/> PE/L 2002-2667 50			Item-Specific Accessories End and intermediate plate, 1 mm thick <input type="radio"/> 2002-2692 100 (4x25) <input type="radio"/> 2002-2691 100 (4x25)			Test plug, with 500 mm cable <input type="radio"/> 2 mm Ø 210-136 50 <input type="radio"/> 2.3 mm Ø 210-137 50
Item-Specific Accessories Adjacent jumper for continuous commoning, insulated, I _N 25 A, light gray 2-way 2002-400 100 (4x25) 1 to 3 2002-423 100 (4x25)			Item-Specific Accessories End plate for fuse terminal blocks, 2 mm thick <input type="radio"/> 2002-1092 100 (4x25) <input type="radio"/> 2002-1091 100 (4x25)			Marking strip, plain, 11 mm wide, 50 m roll <input type="radio"/> 2009-110 1
Push-in type jumper bar, insulated, I _N 25 A, light gray 2-way 2002-402 200 (8x25) : : 10-way 2002-410 100 (4x25) <input type="radio"/> .../000-005 <input type="radio"/> .../000-006			Push-in type jumper bar, insulated, I _N 32 A, light gray 2-way 2004-402 200 (8x25) 3-way 2004-403 200 (8x25) : : 10-way 2004-410 100 (4x25)			Operating tool, 3.5 mm and 2.5 mm blades <input type="radio"/> 2009-309 1
Push-in type jumper bar, insulated, I _N 25 A, light gray 1 to 3 2002-433 200 (8x25) : : 1 to 10 2002-440 100 (4x25)			Push-in type jumper bar, insulated, I _N 32 A, light gray 1 to 3 2004-433 200 (8x25) : : 1 to 10 2004-440 100 (4x25)			Operating tool with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade <input type="radio"/> 210-720 1
Double-deck vertical jumper, insulated, I_N 24 A <input type="radio"/> 2002-492 <input type="radio"/> 2002-492/000-012 100 (4x25)			Double-deck vertical jumper, insulated, I_N 24 A <input type="radio"/> 2002-492 <input type="radio"/> 2002-492/000-012 100 (4x25)			Diode module, 5.2 mm wide, gray Circuit I 2002-800/1000-411 100 Circuit II 2002-800/1000-410 100
Protective warning marker, ⑤ with high-voltage symbol, black, for 5 terminal blocks <input type="radio"/> 2002-115 100 (4x25)			Protective warning marker, ⑤ with high-voltage symbol, black, for 5 terminal blocks <input type="radio"/> 2004-115 100 (4x25)			LED module, 5.2 mm wide, gray 12 ... 30 V 2002-800/1000-541 100 30 ... 65 V 2002-800/1000-542 100 230 V 2002-800/1000-836 100
						Fuse plugs, see page 48 Empty component plug housings, see page 236

④ For all approvals and corresponding ratings, visit www.wago.com.

⑤ Protective warning markers must be applied individually.




TOPJOB® S

Double-Deck Disconnect Terminal Blocks 2.5 (4) mm²

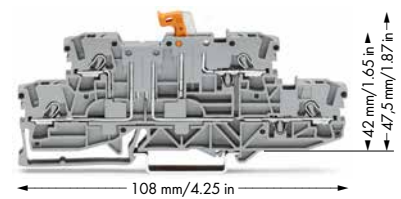
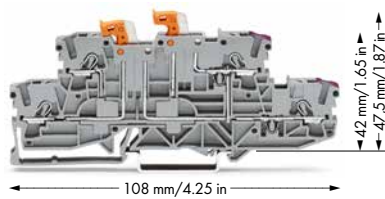
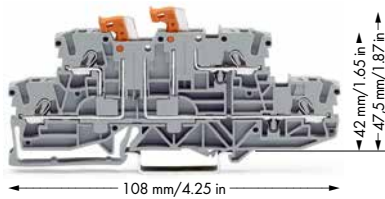
2002 Series

PUSH-IN CAGE CLAMP®

1




0.25 ... 2.5 (4) mm ² ① 22 ... 12 AWG 400 V/6 kV/3 I _N 16 A Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in. ④ Approvals	0.25 ... 2.5 (4) mm ² ① 22 ... 12 AWG 400 V/6 kV/3 I _N 16 A Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in. ④ Approvals	0.25 ... 2.5 (4) mm ² ① 22 ... 12 AWG 400 V/6 kV/3 I _N 16 A Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in. ④ Approvals
---	---	---

① Conductor range: 0.25 ... 4 mm² "s+f-st"
 Push-in termination: 0.75 ... 4 mm² "s" and
 0.75 ... 2.5 mm² "insulated ferrule, 12 mm"



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
4-conductor, double-deck, double-disconnect terminal block			4-conductor, double-deck, double-disconnect terminal block,			4-conductor, double-deck disconnect terminal block,		
● gray	2002-2951	50	lower and upper decks internally commoned on right			● gray	2002-2971	50
● blue	2002-2954	50	side, violet marking			● blue	2002-2974	50
● gray N/L	2002-2952	50	● gray	2002-2958	50	● gray N/L	2002-2972	50
			● blue	2002-2959	50			

Item-Specific Accessories

End and intermediate plate, 1 mm thick  <ul style="list-style-type: none"> ● 2002-2992 100 (4x25) ○ 2002-2991 100 (4x25) 	End and intermediate plate, 1 mm thick  <ul style="list-style-type: none"> ● 2002-2992 100 (4x25) ○ 2002-2991 100 (4x25) 	End and intermediate plate, 1 mm thick  <ul style="list-style-type: none"> ● 2002-2992 100 (4x25) ○ 2002-2991 100 (4x25)
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Accessories, 2002 Series




Appropriate marking systems: **WMB/Marking Strips/WMB Inline**

Adjacent jumper for continuous commoning, insulated, I _N 25 A, light gray 2-way 2002-400 100 (4x25) 1 to 3 2002-423 100 (4x25)	Push-in type jumper bar, insulated, I _N 25 A, light gray 2-way 2002-402 200 (8x25) : : 10-way 2002-410 100 (4x25) ● .../000-005 ● .../000-006	Push-in type jumper bar, insulated, I _N 25 A, light gray 1 to 3 2002-433 200(8x25) : : 1 to 10 2002-440 100(4x25)
Staggered jumper, insulated, I _N 25 A, light gray 2-way 2002-472 100 (4x25) 3-way 2002-473 100 (4x25) : : 12-way 2002-482 50 (2x25)	Insulation stop, 5 pcs/strip ○ 2002-171 0.25-0.5 mm ² ● 2002-172 0.75-1 mm ² 200 (8x25)	Modular TOPJOB® S connector, can be snapped together, I _N 24 A, for jumper con- tact slot ○ 2002-511 100(4x25)
Test plug adapter, for 4 mm Ø test plug 2009-174 100 (4x25) Testing tap, for max. 2.5 mm² 2009-182 100 (4x25)	Banana plugs, only for safety extra-low voltage (42 V) ● 215-212 50 ● 215-311 50 For additional colors, see page 262.	Spacer module, can be snapped together ○ 2002-549 100(4x25)
Protective warning marker, with high-voltage symbol, for 5 terminal blocks ● 2002-115 100 (4x25)	Marking strips, plain 11 mm wide, 50 m roll ○ 2009-110 1	Operating tool with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade 210-720 1
		Test plug, with 500 mm cable ● 2 mm Ø 210-136 50 ● 2.3 mm Ø 210-137 50

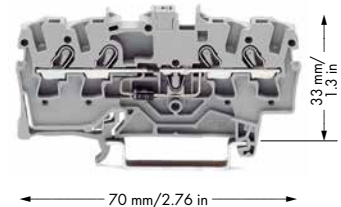
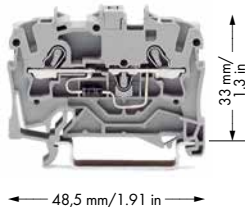
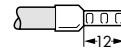
TOPJOB® S

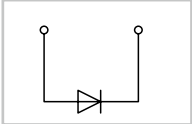
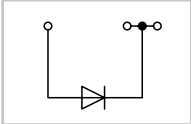
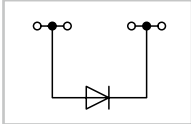
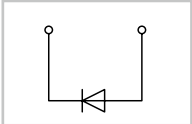
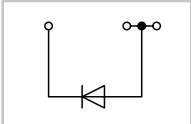
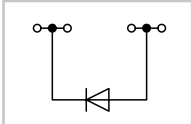
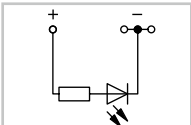
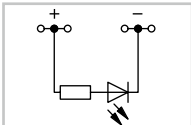
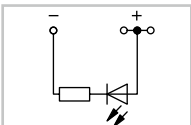
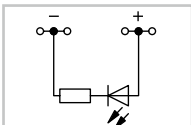



Diode and LED Terminal Blocks 2.5 (4) mm²

2002 Series




<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG U_N 250 V; U_{RM} 1000 V 1N4007 – 0.5 A continuous current</p> <p>Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in.</p> <p>④ Approvals</p>	<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG ② U_N 250 V; U_{RM} 1000 V 1N4007 – 0.5 A continuous current ③ 24 VDC / I_F 0.025 A max.</p> <p>Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in.</p> <p>④ Approvals</p>	<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG ② U_N 250 V; U_{RM} 1000 V 1N4007 – 0.5 A continuous current ③ 24 VDC / I_F 0.025 A max.</p> <p>Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in.</p> <p>④ Approvals</p>
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① Conductor range: 0.25 ... 4 mm² "s+f-st"
 Push-in termination: 0.75 ... 4 mm² "s" and
 0.75 ... 2.5 mm² "insulated ferrule, 12 mm"







Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
	2-conductor diode terminal block with 1N4007 diode 2002-1211/1000-410 100		② 3-conductor diode terminal block with 1N4007 diode 2002-1311/1000-410 100		② 4-conductor diode terminal block with 1N4007 diode 2002-1411/1000-410 100
	2-conductor diode terminal block with 1N4007 diode 2002-1211/1000-411 100		② 3-conductor diode terminal block with 1N4007 diode 2002-1311/1000-411 100		② 4-conductor diode terminal block with 1N4007 diode 2002-1411/1000-411 100
			③ 3-conductor LED terminal block with red LED, 24 VDC 2002-1321/1000-434 100		③ 4-conductor LED terminal block with red LED, 24 VDC 2002-1421/1000-434 100
			③ 3-conductor LED terminal block with red LED, 24 VDC 2002-1321/1000-413 100		③ 4-conductor LED terminal block with red LED, 24 VDC 2002-1421/1000-413 100
	Through terminal block of same profile 2002-1201 100		Through terminal block of same profile 2002-1301 100		Through terminal block of same profile 2002-1401 100

Item-Specific Accessories

<p>End and intermediate plate, 0.8 mm thick</p>  <ul style="list-style-type: none"> ② 2002-1292 100 (4x25) ① 2002-1291 100 (4x25) 	<p>End and intermediate plate, 0.8 mm thick</p>  <ul style="list-style-type: none"> ② 2002-1392 100 (4x25) ① 2002-1391 100 (4x25) 	<p>End and intermediate plate, 0.8 mm thick</p>  <ul style="list-style-type: none"> ② 2002-1492 100 (4x25) ① 2002-1491 100 (4x25)
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Accessories, 2002 Series Appropriate marking systems: WMB/Marking Strips/WMB Inline

<p>Adjacent jumper for continuous commoning, insulated, I_N 25 A, light gray</p>  <ul style="list-style-type: none"> 2-way 2002-400 100 (4x25) 1 to 3 2002-423 100 (4x25) 	<p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p>  <ul style="list-style-type: none"> 2-way 2002-402 200 (8x25) 3-way 2002-403 200 (8x25) 4-way 2002-404 200 (8x25) : : 10-way 2002-410 100 (4x25) 	<p>Staggered jumper, insulated, I_N 25 A, light gray</p>  <ul style="list-style-type: none"> 2-way 2002-472 100 (4x25) 3-way 2002-473 100 (4x25) 4-way 2002-474 100 (4x25) 5-way 2002-475 50 (2x25) : : 12-way 2002-482 50 (2x25)
<p>Push-in type jumper bar, insulated, I_N 25 A, light gray</p>  <ul style="list-style-type: none"> 1 to 3 2002-433 200 (8x25) : : 1 to 10 2002-440 100 (4x25) 	<p>② .../000-005</p> <p>③ .../000-006</p>	

④ For all approvals and corresponding ratings, visit www.wago.com.




For technical information and abbreviations, see technical section.

TOPJOB® S

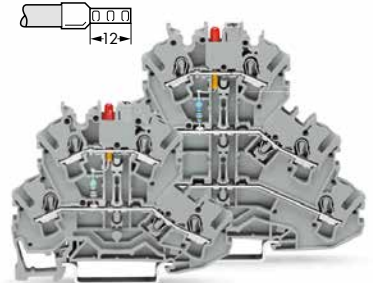
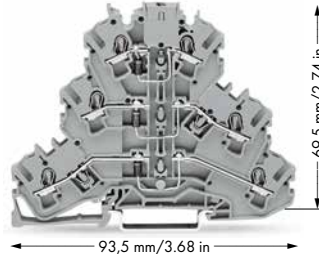
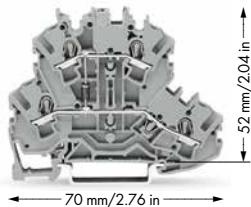
PUSH-IN CAGE CLAMP®

Double- and Triple-Deck Diode Terminal Blocks

Double- and Triple-Deck LED Terminal Blocks, 2.5 (4) mm², 2002 Series



0.25 ... 2.5 (4) mm ² ① 22 ... 12 AWG U _N 250 V; U _{RM} 1000 V 1N4007 – 0.5 A continuous current Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in. ④ Approvals	0.25 ... 2.5 (4) mm ² ① 22 ... 12 AWG U _N 250 V; U _{RM} 1000 V 1N4007 – 0.5 A continuous current Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in. ④ Approvals	0.25 ... 2.5 (4) mm ² ① 22 ... 12 AWG 24 VDC I _f 25 mA max. Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in. ④ Approvals
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① Conductor range: 0.25 ... 4 mm² "s+f-st"
 Push-in termination: 0.75 ... 4 mm² "s" and
 0.75 ... 2.5 mm² "insulated ferrule, 12 mm"









Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
	Double-deck diode terminal block with 1N4007 diode (I) 2002-2211/1000-410 50		Double-deck diode terminal block with 1N4007 diode (II) 2002-2211/1000-411 50		Triple-deck diode terminal block with 1N4007 diode (I) 2002-3211/1000-410 50
	Double-deck diode terminal block with 2 1N4007 diodes (I) 2002-2214/1000-492 50		Double-deck diode terminal block with 2 1N4007 diodes (II) 2002-2214/1000-491 50		Triple-deck diode terminal block with 1N4007 diode (II) 2002-3212/1000-673 50
	Double-deck diode terminal block with 2 1N4007 diodes (I) 2002-2213/1000-487 50		Double-deck diode terminal block with 2 1N4007 diodes (II) 2002-2213/1000-488 50		Triple-deck diode terminal block with 1N4007 diode (III) 2002-3211/1000-675 50
	Double-deck diode terminal block with 2 1N4007 diodes (I) 2002-2214/1000-489 50		Double-deck diode terminal block with 2 1N4007 diodes (II) 2002-2214/1000-490 50		Triple-deck diode terminal block with 1N4007 diode (I) 2002-3211/1000-676 50
					Triple-deck diode terminal block with red LED, 24 VDC 2002-2221/1000-434 50
					Double-deck diode terminal block with red LED, 24 VDC 2002-2221/1000-413 50
					Triple-deck diode terminal block with red LED, 24 VDC 2002-3221/1000-434 50
					Triple-deck diode terminal block with red LED, 24 VDC 2002-3221/1000-413 50
	Through terminal block of same profile 2002-2201 100		Through terminal block of same profile 2002-3201 100		Through terminal block with same profile Double-deck terminal block 2002-2201 Triple-deck terminal block 2002-3201

Item-Specific Accessories

End and intermediate plate, 0.8 mm thick  ● 2002-2292 100 (4x25) ○ 2002-2291 100 (4x25)	End and intermediate plate, 0.8 mm thick  ● 2002-3292 100 (4x25) ○ 2002-3291 100 (4x25)	End and intermediate plate, 0.8 mm thick Double-deck terminal block ● 2002-2292 ○ 2002-2291 Triple-deck terminal block ● 2002-3292 ○ 2002-3291
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Accessories, 2002 Series

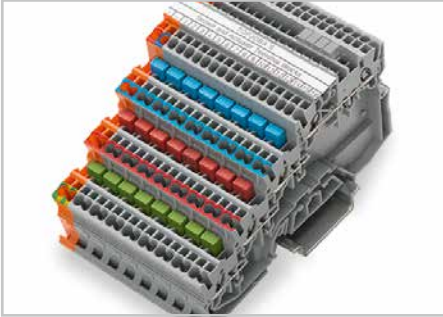
Appropriate marking systems: **WMB/Marking Strips/WMB Inline**

Insulation stop, 5 pcs/strip  ○ 2002-171 0.25–0.5 mm ² ● 2002-172 0.75–1 mm ² 200 (8x25)	Test plug adapter, for 4 mm Ø test plug  2009-174 100 (4x25) Testing tap, for max. 2.5 mm² 2009-182 100 (4x25)	Operating tool with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade  210-720 1
Insulated ferrules, extra long, for TOPJOB® S terminal blocks, see page 259 	Banana plugs, only for safety extra-low voltage (42 V)  ● 215-212 50 ● 215-311 50 For additional colors, see page 262.	WMB Multi marking system, plain, 10 strips with 10 markers per card, stretchable from 5 ... 5.2 mm  ○ 793-5501 5

Please find the entire product range in our Full Line Catalog. For additional information, visit www.wago.com.

Sensor and Actuator Terminal Blocks – Description and Handling –

Commoning (potential level)



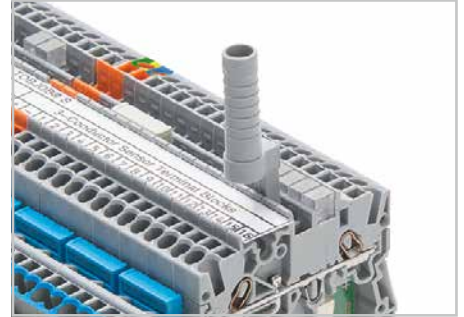
Continuous commoning in the potential level via push-in type jumper bars for even pole numbers.

Ground commoning



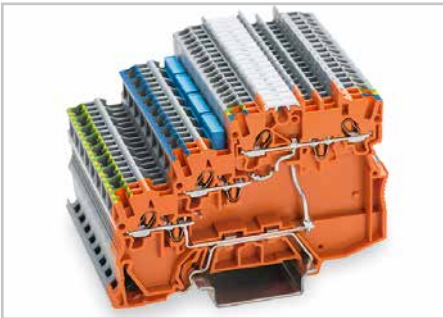
For sensor and actuator terminal blocks without ground connection to the DIN-rail, the ground connection can be performed by commoning to the terminal block with a ground foot.

Commoning and testing (signal level)

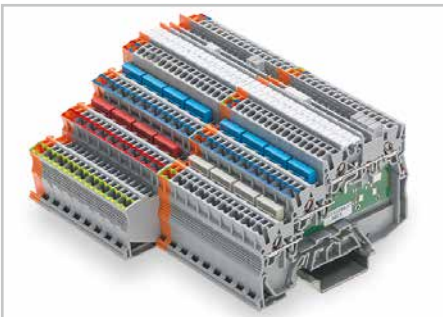


Commoning the signal level with push-in type jumper bars. Models with an LED can only be commoned in one jumper slot. TOPJOB® S Test Plug Adapter can be used in all jumper slots.

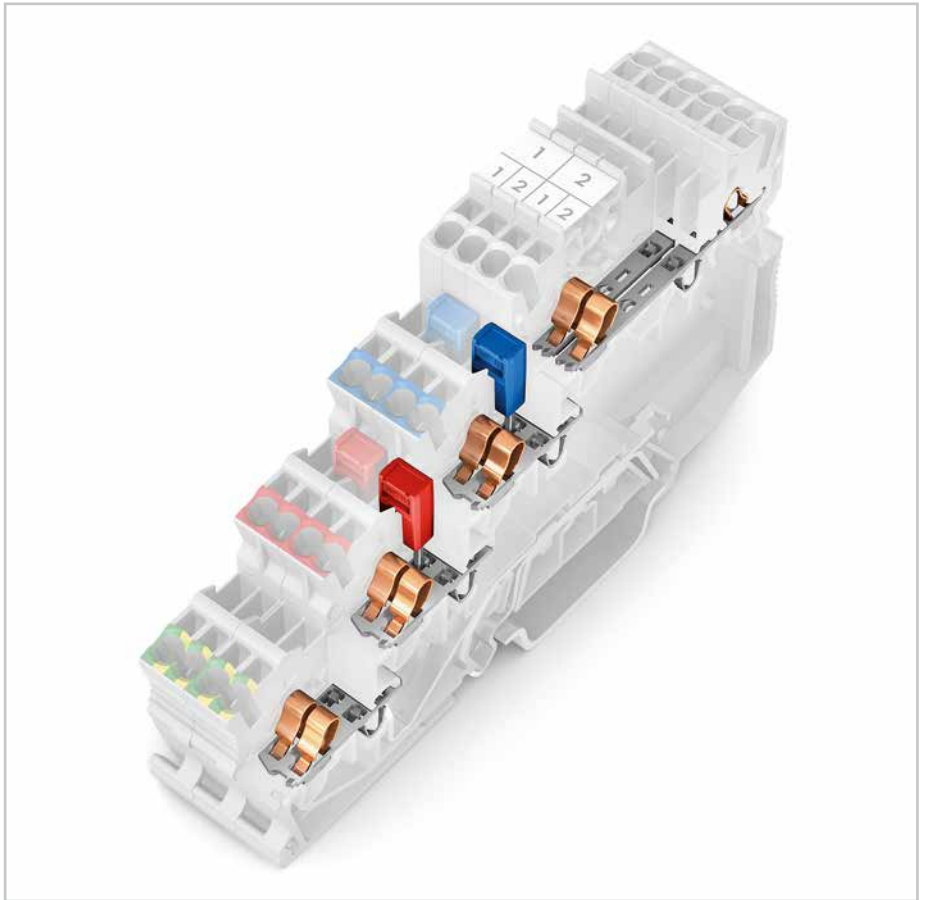
Power supply



Orange supply terminal block of same profile with a power supply option from both the cabinet and sensor sides

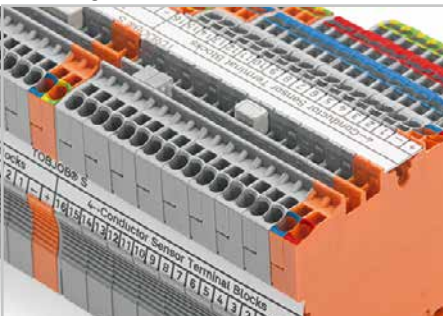


Terminal block assembly with 4-conductor sensor terminal blocks and 3-conductor actuator terminal blocks



Upper level: two independent signal pathways in 3.5 mm spacing per pole, with dual jumper slot
Lower levels: two interconnected potential clamping units, with a single jumper slot, can be commoned in both directions

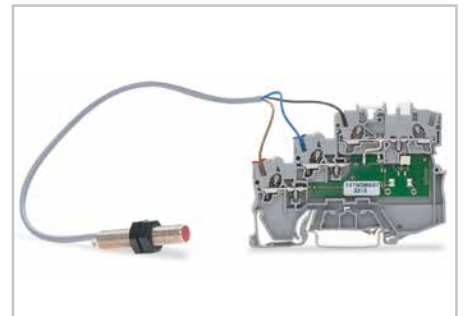
Marking



Marking strips (2009-110) or 3.5 mm WMB markers (793-35xx), marking from the top or the side, additional marking option via marker carrier



3-conductor sensor LED terminal block with a connected sensor



For information on Push-in CAGE CLAMP® connection, see page 14.

TOPJOB® S

3-Conductor Sensor Terminal Blocks 1 (1.5) mm²

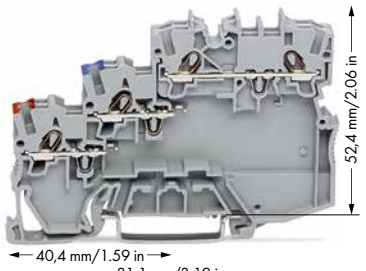
2000 Series

PUSH-IN CAGE CLAMP®

0.14 ... 1 (1.5) mm ² ① 250 V/4 kV/3 ② I _N 13.5 A	24 ... 16 AWG 300 V, 10 A	0.14 ... 1 (1.5) mm ² ① 24 VDC I _N 13.5 A	24 ... 16 AWG 24 VDC, 10 A
Terminal block width: 7 mm / 0.276 in. ③ 9 ... 11 mm / 0.39 in.		Terminal block width: 7 mm / 0.276 in. ③ 9 ... 11 mm / 0.39 in.	
④ Approvals		④ Approvals	

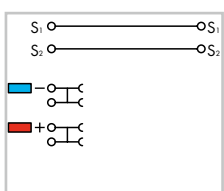
- ① Conductor range: 0.14 ... 1.5 mm² "s+f-st"
Push-in termination: 0.5 ... 1.5 mm² "s"
and 0.5 ... 0.75 mm²
"insulated ferrules, 10 mm"
- ② 250 V = Rated voltage
4 kV = Rated impulse voltage
3 = Pollution degree
(see Full Line Catalog)
- ③ 3.5 mm spacing per signal (2 x 3.5 mm = 7 mm)
- ④ For all approvals and corresponding ratings, visit www.wago.com.
- ⑤ See application notes in our Full Line Catalog.

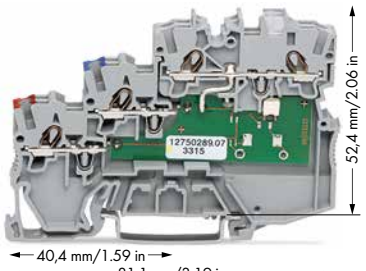
1



40,4 mm/1.59 in
81,1 mm/3.19 in
52,4 mm/2.06 in

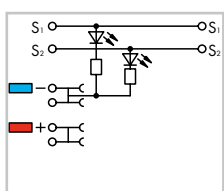
2000-5311

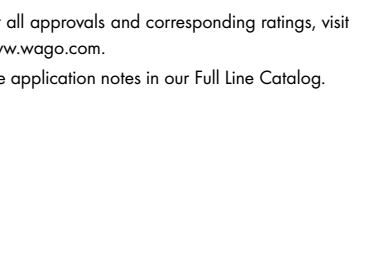




40,4 mm/1.59 in
81,1 mm/3.19 in
52,4 mm/2.06 in

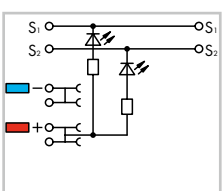
2000-5311/1102-950





40,4 mm/1.59 in
81,1 mm/3.19 in
52,4 mm/2.06 in

2000-5311/1101-951



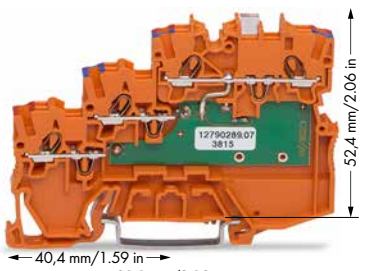
Note:
The double spacing per pole of this terminal block series maximizes connectivity. For example **ten** sensors may be connected using only **five** sensor terminal blocks plus power supply terminal block.

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
3-conductor sensor terminal block			3-conductor sensor LED terminal block, for PNP (high-side) switching sensors, yellow LED		
○ gray	2000-5311	50	○ gray	2000-5311/1102-950	50
3-conductor sensor LED terminal block, for NPN (low-side) switching sensors, yellow LED					
○ gray	2000-5311/1101-951	50			

Accessories for 3-Conductor Terminal Blocks

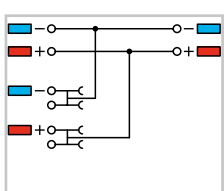
Appropriate marking systems:
WMB/Marking Strips/WMB Inline

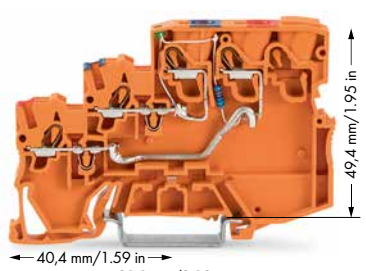
End and intermediate plate, 1 mm thick, for 3-conductor terminal blocks	
○	2000-5391 100 (4x25)
Push-in type jumper bar, insulated,	
⑤	I _N 14 A, light gray
	2-way 2000-402 200 (8x25)
	3-way 2000-403 200 (8x25)
	⋮
	10-way 2000-410 100 (4x25)
● .../000-005	● .../000-006
Push-in type jumper bar, insulated,	
	I _N 14 A, light gray
	1 to 3 2000-433 200 (8x25)
	1 to 4 2000-434 200 (8x25)
	⋮
	1 to 10 2000-440 100 (4x25)
Double-deck marker carrier,	
	pivoting
○	2000-121 50 (2x25)
Marking strip, plain,	
	11 mm wide, 50 m roll
○	2009-110 1
WMB Multi marking system, plain,	
	10 strips with 10 markers per card, for 3.5 mm terminal block width
○	793-3501 5
Operating tool with a partially insulated shaft,	
	type 1, (2.5 x 0.4) mm blade
○	210-719 1
Insulated ferrules, extra long,	
	for TOPJOB® S terminal blocks, see page 259



40,4 mm/1.59 in
81,1 mm/3.19 in
52,4 mm/2.06 in

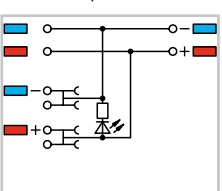
2000-5372

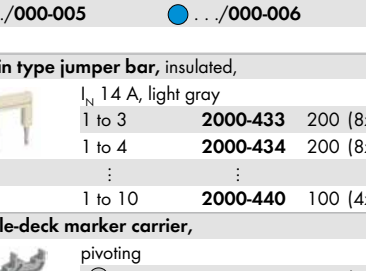




40,4 mm/1.59 in
81,1 mm/3.19 in
52,4 mm/2.06 in

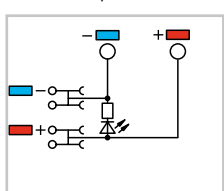
2000-5372/1102-953





40,4 mm/1.59 in
81,1 mm/3.19 in
49,4 mm/1.95 in

2000-5352/1102-953



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
3-conductor sensor supply terminal block, max. 250 V,			3-conductor sensor supply terminal block, max. 250 V, control panel side: 2.5 (4) mm², max. 28 A		
● orange	2000-5372	15	● orange	2000-5352	15
3-conductor sensor LED supply terminal block, 24 VDC, green LED			3-conductor sensor LED supply terminal block, 24 VDC, green LED, control panel side: 2.5 (4) mm², max. 28 A		
● orange	2000-5372/1102-953	15	● orange	2000-5352/1102-953	15

For technical information and abbreviations, see technical section.

TOPJOB® S

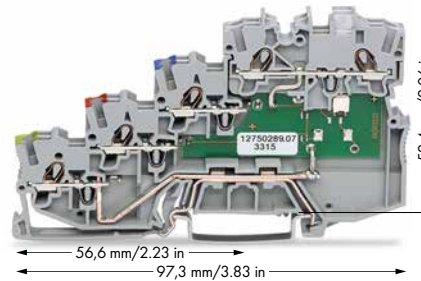
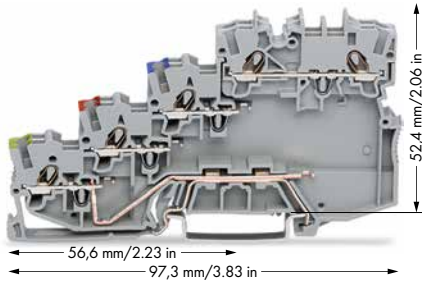
4-Conductor Sensor Terminal Blocks 1 (1.5) mm²

2000 Series

PUSH-IN CAGE CLAMP®

0.14 ... 1 (1.5) mm ² ① 250 V/4 kV/3 ② I _N 13.5 A	24 ... 16 AWG 300 V, 10 A	0.14 ... 1 (1.5) mm ² ① 24 VDC I _N 13.5 A	24 ... 16 AWG 24 VDC, 10 A
Terminal block width: 7 mm / 0.276 in. ③ 9 ... 11 mm / 0.39 in.		Terminal block width: 7 mm / 0.276 in. ③ 9 ... 11 mm / 0.39 in.	
④ Approvals		④ Approvals	

- ① Conductor range: 0.14 ... 1.5 mm² "s+f-st"
Push-in termination: 0.5 ... 1.5 mm² "s"
and 0.5 ... 0.75 mm² "insulated ferrules, 10 mm"
- ② 250 V = Rated voltage
4 kV = Rated impulse voltage
3 = Pollution degree
(see Full Line Catalog)
- ③ 3.5 mm spacing per signal (2 x 3.5 mm = 7 mm)
- ④ For all approvals and corresponding ratings, visit www.wago.com.
- ⑤ See application notes in our Full Line Catalog.
- ⑥ Ground connection via commoning to terminal blocks with ground foot

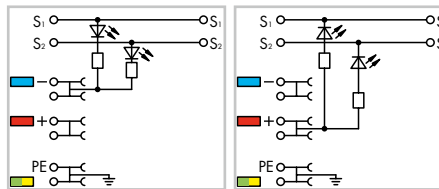
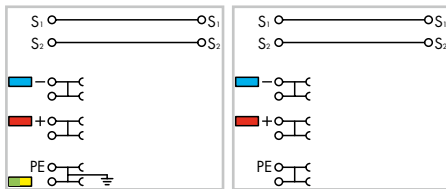


2000-5417

2000-5410

2000-5417/1102-950

2000-5417/1101-951



Note:
The double spacing per pole of this terminal block series maximizes connectivity. For example **ten** sensors may be connected using only **five** sensor terminal blocks plus power supply terminal block.

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
4-conductor sensor terminal block, with ground connection			4-conductor sensor LED terminal block, for PNP (high-side) switching sensors, yellow LED, with ground connection		
○ gray	2000-5417	50	○ gray	2000-5417/1102-950	50
○ gray	2000-5410	50 ⑥	○ gray	2000-5410/1102-950	50 ⑥
4-conductor sensor LED terminal block, for NPN (low-side) switching sensors, yellow LED, with ground connection			4-conductor sensor LED terminal block, for NPN (low-side) switching sensors, yellow LED, with ground connection		
○ gray	2000-5417/1101-951	50	○ gray	2000-5417/1101-951	50 ⑥
○ gray	2000-5410/1101-951	50 ⑥	○ gray	2000-5410/1101-951	50 ⑥

Accessories for 4-Conductor Terminal Blocks

Appropriate marking systems:

WMB/Marking Strips/WMB Inline

End and intermediate plate, 1 mm thick,
for 4-conductor terminal blocks
○ 2000-5491 100

Push-in type jumper bar, insulated,
⑤ IN 14 A, light gray
2-way 2000-402 200
3-way 2000-403 200
:
10-way 2000-410 100
● .../000-005 ● .../000-006
● .../000-018

Push-in type jumper bar, insulated,
IN 14 A, light gray
1 to 3 2000-433 200
1 to 4 2000-434 200
:
1 to 10 2000-440 100

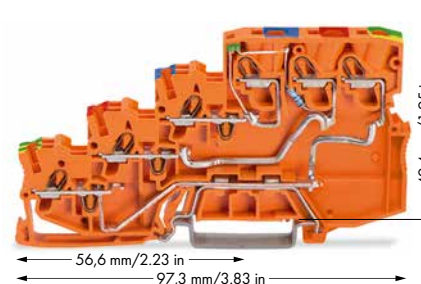
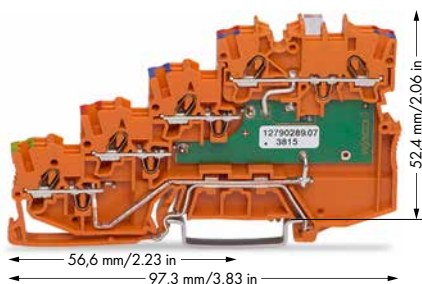
Double-deck marker carrier,
pivoting
○ 2000-121 50

Marking strip, plain,
11 mm wide,
50 m roll
○ 2009-110 1

WMB Multi marking system, plain,
10 strips with 10 markers per card,
for 3.5 mm terminal block width
○ 793-3501 5

Operating tool with a partially insulated shaft,
type 1, (2.5 x 0.4) mm blade
210-719 1

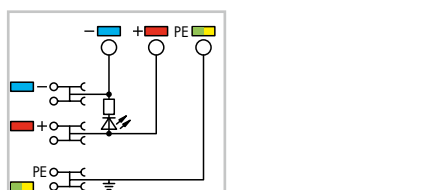
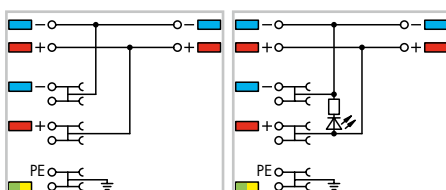
Insulated ferrules, extra long,
for TOPJOB® S terminal blocks,
see page 259



2000-5477

2000-5477/1102-953

2000-5457/1102-953



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
4-conductor sensor supply terminal block, max. 250 V, with ground connection			4-conductor sensor supply terminal block, max. 250 V, control panel side: 2.5 (4) mm², max. 28 A, with ground connection		
○ orange	2000-5477	15	○ orange	2000-5457	15
4-conductor sensor LED supply terminal block, 24 VDC green LED, with ground connection			4-conductor sensor LED supply terminal block, 24 VDC, green LED, control panel side: 2.5 (4) mm², max. 28 A, with ground connection		
○ orange	2000-5477/1102-953	15	○ orange	2000-5457/1102-953	15

For technical information and abbreviations, see technical section.

TOPJOB® S

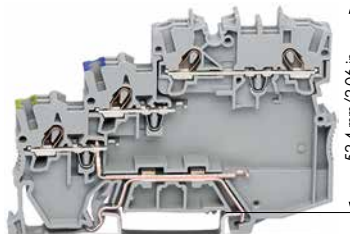
3-Conductor Actuator Terminal Blocks 1 (1.5) mm²

2000 Series

PUSH-IN CAGE CLAMP®

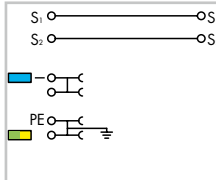
0.14 ... 1 (1.5) mm ² ① 250 V/4 kV/3 ② I _N 13.5 A	24 ... 16 AWG 300 V, 10 A	0.14 ... 1 (1.5) mm ² ① 24 VDC I _N 13.5 A	24 ... 16 AWG 24 VDC, 10 A
Terminal block width: 7 mm / 0.276 in. ③ 9 ... 11 mm / 0.39 in.		Terminal block width: 7 mm / 0.276 in. ③ 9 ... 11 mm / 0.39 in.	
④ Approvals		④ Approvals	


- Conductor range: 0.14 ... 1.5 mm² "s+f-st"
Push-in termination: 0.5 ... 1.5 mm² "s"
and 0.5 ... 0.75 mm²
"insulated ferrules, 10 mm"
- 250 V = Rated voltage
4 kV = Rated impulse voltage
3 = Pollution degree
(see Full Line Catalog)
- 3.5 mm spacing per signal (2 x 3.5 mm = 7 mm)
- For all approvals and corresponding ratings, visit www.wago.com.
- See application notes in our Full Line Catalog.
- Ground connection via commoning to terminal blocks with ground foot



40,4 mm / 1.59 in
81,1 mm / 3.19 in

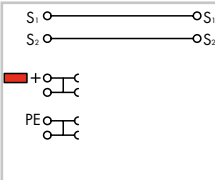
2000-5317/102-000






40,4 mm / 1.59 in
81,1 mm / 3.19 in

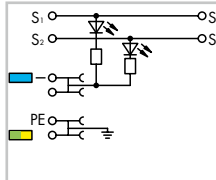
2000-5310/101-000






40,4 mm / 1.59 in
81,1 mm / 3.19 in

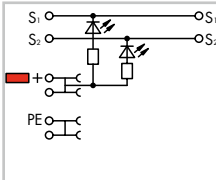
2000-5317/1102-950





40,4 mm / 1.59 in
81,1 mm / 3.19 in

2000-5310/1101-951













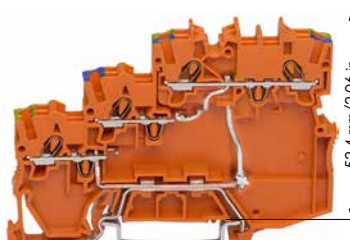
Note:
The double spacing per pole of this terminal block series maximizes connectivity. For example **ten** sensors may be connected using only **five** sensor terminal blocks plus power supply terminal block.

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
3-conductor actuator terminal block, for PNP (high-side) switching actuators, with ground connection			3-conductor actuator LED terminal block, for PNP (high-side) switching actuators, yellow LED, with ground connection		
gray	2000-5317/102-000	50	gray	2000-5317/1102-950	50
gray	2000-5310/102-000	50 ⑥	gray	2000-5310/1102-950	50 ⑥
3-conductor actuator terminal block, for NPN (low-side) switching actuators			3-conductor actuator LED terminal block, for NPN (low-side) switching actuators, yellow LED, with ground connection		
gray	2000-5317/101-000	50	gray	2000-5317/1101-951	50
gray	2000-5310/101-000	50 ⑥	gray	2000-5310/1101-951	50 ⑥

Accessories for 3-Conductor Terminal Blocks

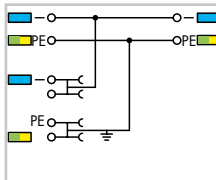
Appropriate marking systems:
WMB/Marking Strips/WMB Inline


End and intermediate plate, 1 mm thick, for 3-conductor terminal blocks	
	2000-5391 100
Push-in type jumper bar, insulated, IN 14 A, light gray	
⑤ 	2-way 2000-402 200
	3-way 2000-403 200
	10-way 2000-410 100
	2000-005
	2000-018
Push-in type jumper bar, insulated, IN 14 A, light gray	
	1 to 3 2000-433 200
	1 to 4 2000-434 200
	1 to 10 2000-440 100
Double-deck marker carrier, pivoting	
	2000-121 50
Marking strip, plain, 11 mm wide, 50 m roll	
	2009-110 1
WMB Multi marking system, plain, 10 strips with 10 markers per card, for 3.5 mm terminal block width	
	793-3501 5
Operating tool with a partially insulated shaft, type 1, (2.5 x 0.4) mm blade	
	210-719 1
Insulated ferrules, extra long, for TOPJOB® S terminal blocks, see page 259	
	



40,4 mm / 1.59 in
81,1 mm / 3.19 in

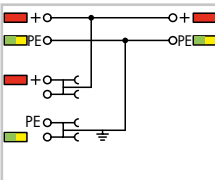
2000-5377/102-000






40,4 mm / 1.59 in
81,1 mm / 3.19 in

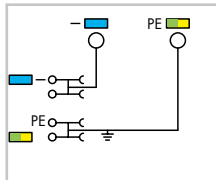
2000-5377/101-000






40,4 mm / 1.59 in
81,1 mm / 3.19 in

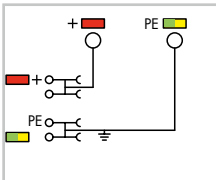
2000-5357/102-000





40,4 mm / 1.59 in
81,1 mm / 3.19 in

2000-5357/101-000



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
3-conductor actuator supply terminal block, max. 250 V, for PNP (high-side) switching actuators, with ground connection			3-conductor actuator supply terminal block, max. 250 V, control panel side: 2.5 (4) mm ² , max. 28 A, for PNP (high-side) switching actuators, with ground connection		
orange	2000-5377/102-000	15	orange	2000-5357/102-000	15
3-conductor actuator supply terminal block, max. 250 V, for NPN (low-side) switching actuators, with ground connection			3-conductor actuator supply terminal block, max. 250 V, control panel side: 2.5 (4) mm ² , max. 28 A, for NPN (low-side) switching actuators, with ground connection		
orange	2000-5377/101-000	15	orange	2000-5357/101-000	15

X-COM®S-SYSTEM-MINI / X-COM®S-SYSTEM – Description and Installation –

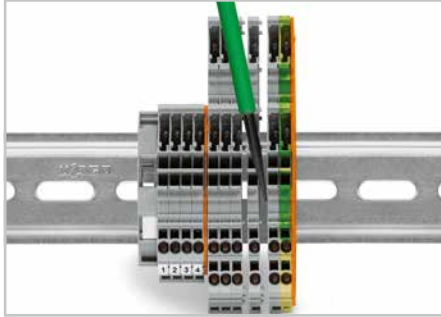
PUSH-IN CAGE CLAMP®

Mounting



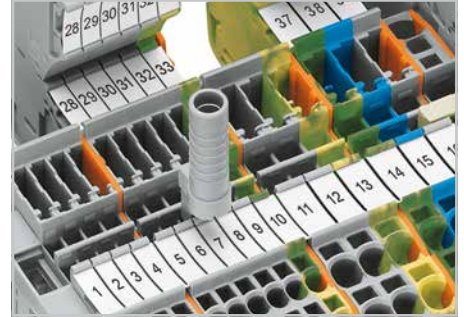
Snapping terminal block onto carrier rail.

Removal



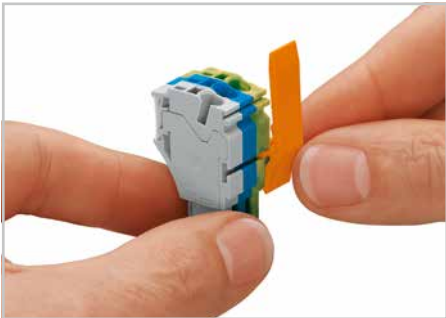
Separate terminal block assembly and slide individual terminal blocks laterally using an operating tool.

Testing



Test plug adapter for 4 mm test plugs or banana plugs – also suitable for X-COM®S-MINI Terminal Blocks.

Locking lever

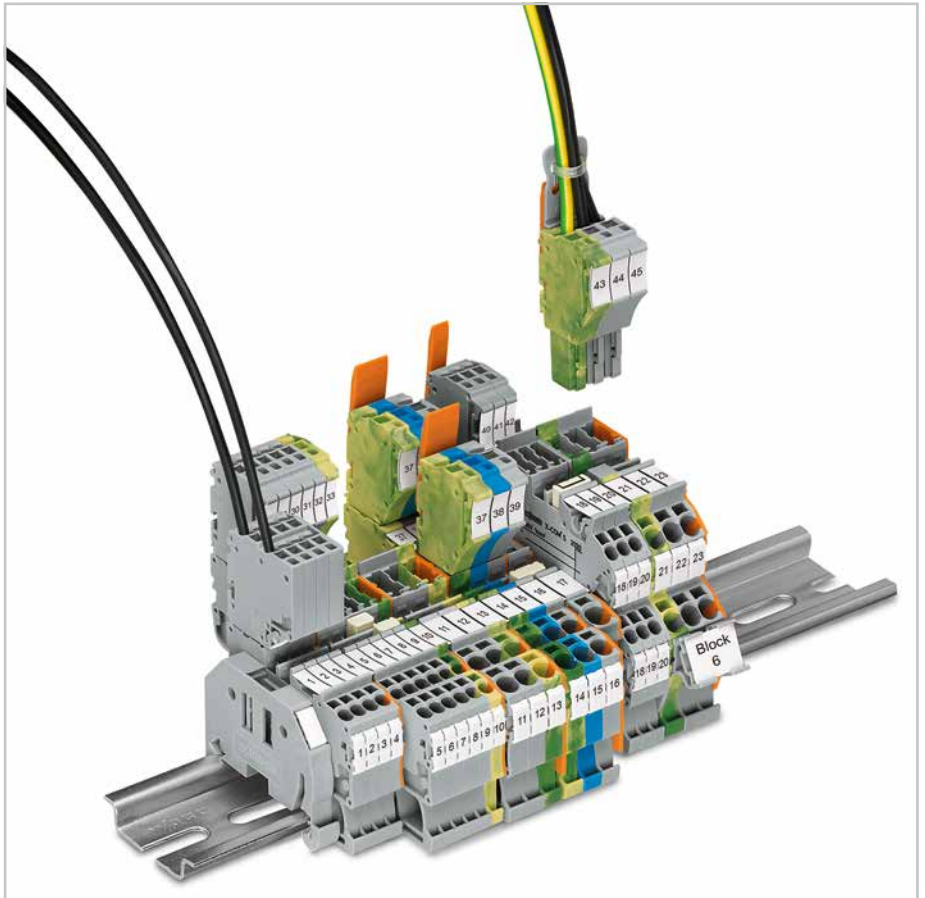


Slide locking lever into position.

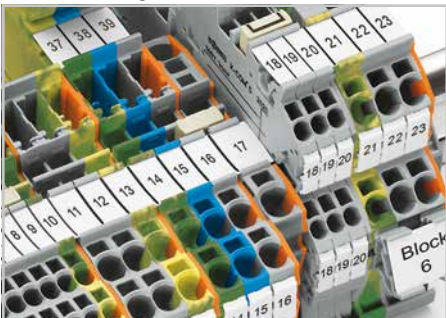
Locking lever



Female plugs can be individually locked.

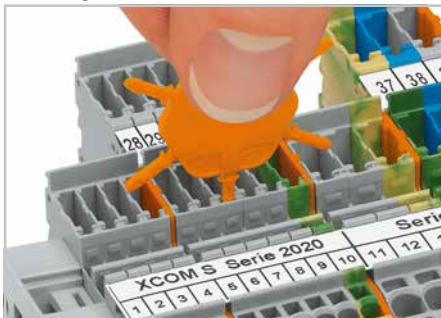


Commoning



Commoning X-COM® S Terminal Blocks with TOPJOB® S Jumpers. An end plate provides connection to TOPJOB® S Terminal Blocks. 2020 and 2022 Series Terminal Blocks are combinable. Jumper slots are on the same level for both series.

Coding






Insert coding pin into the corresponding slot and twist it off.

Coding

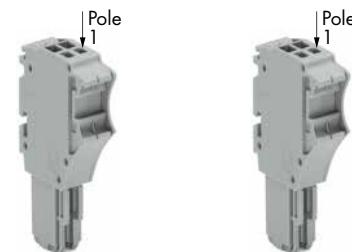
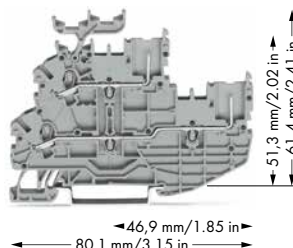
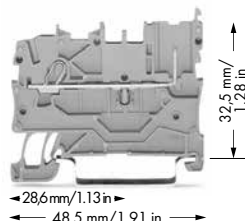


Remove coding finger using a cutting tool.









X-COM®S-SYSTEM-MINI**Carrier Terminal Blocks and Female Plugs****2020 Series****PUSH-IN CAGE CLAMP®**

0.14 ... 1 (1.5) mm² ① 24 ... 16 AWG 500 V/6 kV/3 I_N 13.5 A ② Terminal block width: 3.5 mm / 0.138 in.  9 ... 11 mm / 0.39 in. ③ Approvals	0.14 ... 1 (1.5) mm² ① 24 ... 16 AWG 500 V/6 kV/3 I_N 13.5 A ② Terminal block width: 3.5 mm / 0.138 in.  9 ... 11 mm / 0.39 in. ③ Approvals	0.14 ... 1 (1.5) mm² ① 24 ... 16 AWG 500 V/6 kV/3 I_N 13.5 A ② Module width: 3.5 mm / 0.138 in.  9 ... 11 mm / 0.39 in. ③ Approvals
--	--	--

- ① Conductor range: 0.14 ... 1.5 mm² "s+f-st"
 Push-in termination: 0.5 ... 1.5 mm² "s" and 0.5 ... 0.75 mm² "insulated ferrule, 10 mm"



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color/Pole No.	Item No.	Pack. Unit
1-conductor/1-pin carrier terminal block, for DIN-35 rail, per EN 60715			1-conductor/1-pin double-deck carrier terminal block, through/through terminal block, for DIN-35 rail, per EN 60715			1-conductor female plug, to be inserted into carrier terminal blocks, with coding fingers, gray		
● gray	2020-1201	50	● L/L	2020-2231	50	● 2-pole	2020-102	100
● blue	2020-1204	50	● N/L	2020-2232	50	● 3-pole	2020-103	50
1-conductor/1-pin ground carrier terminal block			● L/N	2020-2233	50	● 4-pole	2020-104	50
● green-yellow	2020-1207	50	● N/N	2020-2234	50	● 5-pole	2020-105	50
2-conductor/1-pin carrier terminal block,			without marker carrier			● 6-pole	2020-106	50
● gray	2020-1301	50	● L/L	2020-2201	50	● 7-pole	2020-107	25
● blue	2020-1304	50	● N/L	2020-2202	50	● 8-pole	2020-108	25
2-conductor/1-pin ground carrier terminal block			● L/N	2020-2203	50	● 9-pole	2020-109	25
● green-yellow	2020-1307	50	● N/N	2020-2204	50	● 10-pole	2020-110	25
2-conductor/2-pin carrier terminal block			Ground conductor/through terminal block			● 11-pole	2020-111	20
● gray	2020-1401	50	● PE/N	2020-2247	50	● 12-pole	2020-112	20
● blue	2020-1404	50	● PE/L	2020-2257	50	● 13-pole	2020-113	10
2-conductor/2-pin ground carrier terminal block			without marker carrier			● 14-pole	2020-114	10
● green-yellow	2020-1407	50	● PE/N	2020-2217	50	● 15-pole	2020-115	10
Notice: An appropriate end plate must be applied to the carrier terminal blocks after each female plug.			2-conductor/2-pin double-deck carrier terminal block, through/through terminal block, for DIN-35 rail, per EN 60715			2-conductor female plug, to be inserted into carrier terminal blocks, with coding fingers, gray		
			● L	2020-2238	50	● 2-pole	2020-202	100
			● N	2020-2239	50	● 3-pole	2020-203	50
			without marker carrier			● 4-pole	2020-204	50
			● L	2020-2208	50	● 5-pole	2020-205	50
			● N	2020-2209	50	● 6-pole	2020-206	50
			2-conductor/2-pin ground terminal block			● 7-pole	2020-207	25
			● PE	2020-2237	50	● 8-pole	2020-208	25
			without marker carrier			● 9-pole	2020-209	25
			● PE	2020-2207	50	● 10-pole	2020-210	25
						● 11-pole	2020-211	20
						● 12-pole	2020-212	20
						● 13-pole	2020-213	10
						● 14-pole	2020-214	10
						● 15-pole	2020-215	10

Item-Specific Accessories	Item-Specific Accessories	Accessories, Female Plugs										
End and intermediate plate, 1 mm thick, for 1-conductor/1-pin carrier terminal block  <ul style="list-style-type: none"> ● 2020-1292 100 (4x25) ● 2020-1291 100 (4x25) 	End and intermediate plate, 1 mm thick, for 1-conductor/1-pin carrier terminal block  <ul style="list-style-type: none"> ● 2020-2292 100 (4x25) ● 2020-2291 100 (4x25) 	Locking lever, 4.8 mm wide  <ul style="list-style-type: none"> ● 2022-142 100 (4x25) ● 2022-141 100 (4x25) 										
End and intermediate plate, 1 mm thick, for 2-conductor/1-pin carrier terminal block  <ul style="list-style-type: none"> ● 2020-1392 100 (4x25) ● 2020-1391 100 (4x25) 		Locking lever, 9.6 mm wide  <ul style="list-style-type: none"> ● 2022-152 100 (4x25) ● 2022-151 100 (4x25) 										
End and intermediate plate, 1 mm thick, for 2-conductor/2-pin carrier terminal block  <ul style="list-style-type: none"> ● 2020-1492 100 (4x25) ● 2020-1491 100 (4x25) 	Accessories, 2020 Series (see 2020 Series, page 25) Carrier with 6 coding pins, for coding female plugs  <ul style="list-style-type: none"> ● 2020-100 100 (4x25) 	Strain relief plate, gray  <table border="1"> <tr> <td>Width</td> <td></td> </tr> <tr> <td>6 mm</td> <td>734-327 100 (4x25)</td> </tr> <tr> <td>12.5 mm</td> <td>734-328 100 (4x25)</td> </tr> <tr> <td>25 mm</td> <td>734-329 100 (4x25)</td> </tr> <tr> <td>35 mm</td> <td>734-326 100 (4x25)</td> </tr> </table>	Width		6 mm	734-327 100 (4x25)	12.5 mm	734-328 100 (4x25)	25 mm	734-329 100 (4x25)	35 mm	734-326 100 (4x25)
Width												
6 mm	734-327 100 (4x25)											
12.5 mm	734-328 100 (4x25)											
25 mm	734-329 100 (4x25)											
35 mm	734-326 100 (4x25)											

- ② Current-carrying capacity curves upon request ③ For all approvals and corresponding ratings, visit www.wago.com.

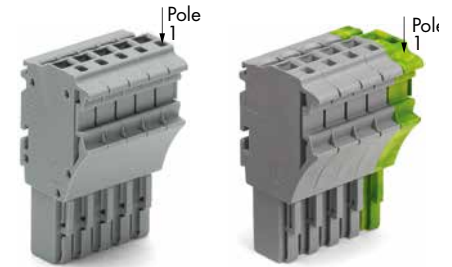
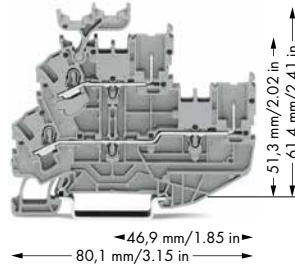
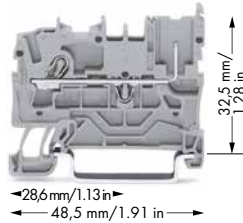
X-COM®S-SYSTEM









Carrier Terminal Blocks and Female Plugs

2022 Series

<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG 690 V/6 kV/3 I_N 24 A (32 A) ②</p> <p>Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.</p> <p>③ Approvals</p>	<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG 690 V/6 kV/3 I_N 24 A (32 A) ②</p> <p>Terminal block width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.</p> <p>③ Approvals</p>	<p>0.25 ... 2.5 (4) mm² ① 22 ... 12 AWG 690 V/6 kV/3 I_N 24 A (32 A) ②</p> <p>Module width: 5.2 mm / 0.205 in. 10 ... 12 mm / 0.43 in.</p> <p>③ Approvals</p>
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- ① Conductor range: 0.25 ... 4 mm² "s+f-st"
Push-in termination: 0.75 ... 4 mm² "s" and 0.75 ... 2.5 mm² "insulated ferrule, 12 mm"



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color/Pole No.	Item No.	Pack. Unit
1-conductor/1-pin carrier terminal block, for DIN-35 rail, per EN 60715			1-conductor/1-pin double-deck carrier terminal block, through/through terminal block, for DIN-35 rail, per EN 60715			1-conductor female plug, to be inserted into carrier terminal blocks, with coding fingers, gray		
gray	2022-1201	100	L/L	2022-2231	50	1-pole	2022-101	200
blue	2022-1204	100	N/L	2022-2232	50	2-pole	2022-102	200
orange	2022-1202	100	L/N	2022-2233	50	3-pole	2022-103	100
1-conductor/1-pin ground carrier terminal block			without marker carrier			15-pole 2022-115 25		
green-yellow	2022-1207	100	L/L	2022-2201	50	1-conductor female plug with ground base module, to be inserted into carrier terminal blocks, with coding fingers, gray/green-yellow		
2-conductor/1-pin carrier terminal block			L/N 2022-2202 50			3-pole 2022-103/000-036 100		
gray	2022-1301	100	L/N	2022-2203	50	4-pole 2022-104/000-036 100		
blue	2022-1304	100	N/N	2022-2204	50	5-pole 2022-105/000-036 50		
orange	2022-1302	100	Ground conductor/through terminal block			15-pole 2022-115/000-036 25		
2-conductor/1-pin ground carrier terminal block			PE/N 2022-2247 50			1-conductor female plug with ground end module, to be inserted into carrier terminal blocks, with coding fingers, gray/green-yellow		
green-yellow	2022-1307	100	without marker carrier			3-pole 2022-103/000-037 100		
2-conductor/2-pin carrier terminal block			PE/L 2022-2257 50			4-pole 2022-104/000-037 100		
gray	2022-1401	50	PE/N 2022-2217 50			5-pole 2022-105/000-037 50		
blue	2022-1404	50	PE/L 2022-2227 50			15-pole 2022-115/000-037 25		
orange	2022-1402	50	2-conductor/2-pin double-deck carrier terminal block, through/through terminal block, for DIN-35 rail, per EN 60715					
2-conductor/2-pin ground carrier terminal block			L 2022-2238 50					
green-yellow	2022-1407	50	N 2022-2239 50					
			without marker carrier					
			L 2022-2208 50					
			N 2022-2209 50					
			2-conductor/2-pin ground terminal block					
			PE 2022-2237 50					
			without marker carrier					
			PE 2022-2207 50					
Item-Specific Accessories			Item-Specific Accessories			Accessories, Female Plugs		
End and intermediate plate, 1 mm thick, for 1-conductor/1-pin carrier terminal block			End and intermediate plate, 1 mm thick, for 1-conductor/1-pin carrier terminal block			Locking lever, 4.8 mm wide		
								
orange	2022-1292	100 (4x25)	orange	2022-2292	100 (4x25)	orange	2022-142	100 (4x25)
gray	2022-1291	100 (4x25)	gray	2022-2291	100 (4x25)	gray	2022-141	100 (4x25)
End and intermediate plate, 1 mm thick, for 2-conductor/1-pin carrier terminal block						Locking lever, 9.6 mm wide		
								
orange	2022-1392	100 (4x25)				orange	2022-152	100 (4x25)
gray	2022-1391	100 (4x25)				gray	2022-151	100 (4x25)
End and intermediate plate, 1 mm thick, for 2-conductor/2-pin carrier terminal block						Strain relief plate, gray		
								
orange	2022-1492	100 (4x25)				Width		
gray	2022-1491	100 (4x25)				6 mm 734-327 100 (4x25)		
Accessories, 2022 Series (see 2022 Series, page 27)						12.5 mm 734-328 100 (4x25)		
Carrier with 6 coding pins, for coding female plugs						25 mm 734-329 100 (4x25)		
						35 mm 734-326 100 (4x25)		
orange	2022-100	100 (4x25)				55 mm 734-430 100 (4x25)		
						75 mm 734-431 100 (4x25)		

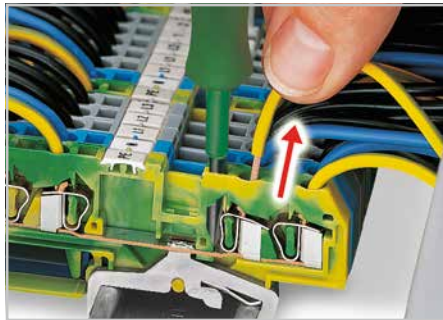
② Current-carrying capacity curves upon request ③ For all approvals and corresponding ratings, visit www.wago.com.

Classic Rail-Mounted Terminal Blocks - Description and Handling -

Conductor termination/removal

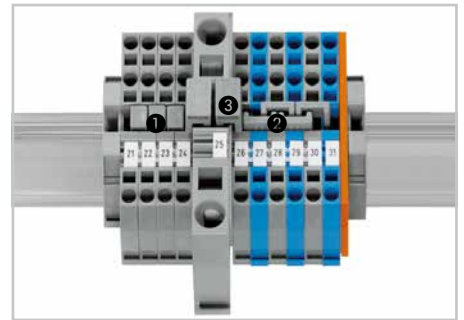


Inserting conductor via screwdriver.



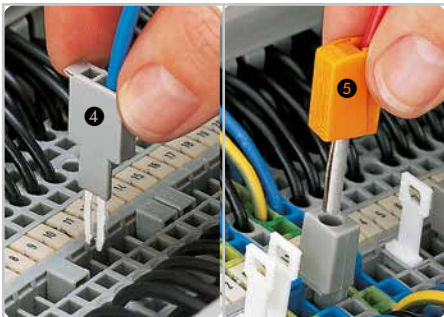
Removing conductor via screwdriver.

Commoning



Commoning with adjacent jumpers **1** or staggered jumpers **2**.
Commoning terminal blocks of different sizes - with step down jumpers **3**.

Testing

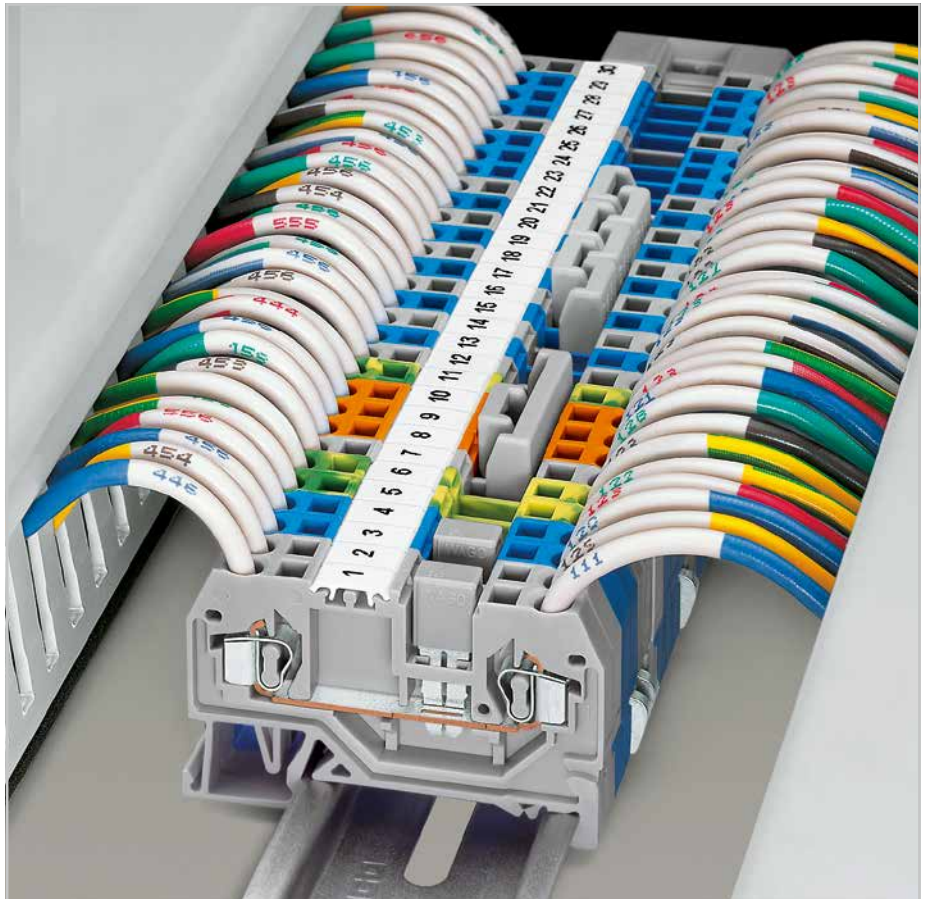


4 CAGE CLAMP®-equipped test plug
5 Test plug (4 mm Ø) via test plug adapter (209-170)

Protective warning marker/ Insulation stop



6 Protective warning marker accommodated in operating tool slots
7 Inserting insulation stop.



Finger guard



8 Touch-proof cover protects unused conductor entries.
9 Marking via WMB Multi markers.

Marking



Marking WMB markers via IP200 Plotter or smartPRINTER.

Compact rail-mounted terminal blocks 870 Series, see Full Line Catalog


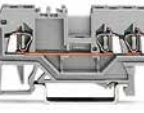





CAGE CLAMP®-equipped rail-mounted terminal blocks

For information on Push-in CAGE CLAMP® connection, see page 14.

Classic Rail-Mounted Terminal Blocks 1.5 / 2.5 / 4 mm²

279 ... 281 Series



		279 Series 800 V, I _N 18 A 0.08 ... 1.5 mm ² / 28 ... 16 AWG			280 Series 800 V, I _N 24 A 0.08 ... 2.5 mm ² / 28 ... 12 AWG			281 Series 800 V, I _N 32 A 0.08 ... 4 mm ² / 28 ... 12 AWG			
	Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	
	Through terminal block	Grey	279-901	100	Grey	280-901	100	Grey	281-901	100	
	Through terminal block (Ex i)	Blue	279-904	100	Blue	280-904	100	Blue	281-904	100	
	Through terminal block	Orange	279-902	100	Orange	280-902	100	Orange	281-902	100	
	Through terminal block	Red	279-903	100	Red	280-903	100	Red	281-903	100	
	Through terminal block	Black	279-905	100	Black	280-905	100	Black	281-905	100	
	Through terminal block	Yellow	279-906	100	Yellow	280-906	100	Yellow	281-906	100	
	Through terminal block (Ex e II)	White	279-992 ☒	100	White	280-992 ☒	100	White	281-992 ☒	100	
	Carrier terminal block		-		Grey	280-916	100	Grey	281-916	50	
	Ground conductor terminal block		Green/Yellow	279-907	100	Green/Yellow	280-907	100	Green/Yellow	281-907	100
	End and intermediate plate		Orange	279-328	100	Orange	280-309	100	Orange	281-329	100
	Through terminal block	Grey	279-681	100	Grey	280-681	100	Grey	281-681	100	
	Through terminal block (Ex i)	Blue	279-684	100	Blue	280-684	100	Blue	281-684	100	
	Through terminal block	Orange	279-682	100	Orange	280-650	100	Orange	281-678	100	
	Through terminal block	Red	279-683	100	Red	280-653	100	Red	281-679	100	
	Through terminal block	Black	279-685	100	Black	280-671	100	Black	281-685	100	
	Through terminal block	Yellow	279-686	100	Yellow	280-672	100	Yellow	281-686	100	
	Through terminal block (Ex e II)	White	279-993 ☒	100	White	280-993 ☒	100	White	281-993 ☒	100	
	Carrier terminal block		-		Grey	280-610	100	Grey	281-610	50	
	Ground conductor terminal block		Green/Yellow	279-687	100	Green/Yellow	280-687	100	Green/Yellow	281-687	100
	End and intermediate plate		Orange	279-339	100	Orange	280-326	100	Orange	281-326	100
	Through terminal block	Grey	279-831	50	Grey	280-833	50	Grey	281-652	50	
	Through terminal block (Ex i)	Blue	279-834	50	Blue	280-834	50	Blue	281-654	50	
	Through terminal block	Orange	279-832	50	Orange	280-835	50	Orange	281-653	50	
	Through terminal block	Red	279-833	50	Red	280-830	50	Red	281-663	50	
	Through terminal block	Black	279-835	50	Black	280-831	50	Black	281-664	50	
	Through terminal block	Yellow	279-836	50	Yellow	280-832	50	Yellow	281-668	50	
	Through terminal block (Ex e II)	White	279-994 ☒	50	White	280-994 ☒	50	White	281-994 ☒	50	
	Carrier terminal block		-		Grey	280-816	100	Grey	281-816	50	
	Ground conductor terminal block		Green/Yellow	279-837	50	Green/Yellow	280-837	50	Green/Yellow	281-657	50
	End and intermediate plate		Orange	279-346	100	Orange	280-315	100	Orange	281-335	100
		Grey	279-344	100	Grey	280-314	100	Grey	281-334	100	

		280 Series, 800 V, I _N 24 A 0.08 ... 2.5 mm ² / 28 ... 12 AWG			281 Series, 800 V, I _N 32 A 0.08 ... 4 mm ² / 28 ... 12 AWG			
Technical Data	Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	
	Through terminal block	Grey	280-641	100	Grey	281-631	100	
	Through terminal block (Ex i)	Blue	280-651	100	Blue	281-651	100	
	Through terminal block	Orange	280-654	100	-	-	-	
	Through terminal block (Ex e II)	White	280-998 ☒	100	White	281-998 ☒	100	
	Ground conductor terminal block		Green/Yellow	280-637	100	Green/Yellow	281-637	100
3-Conductor	End and intermediate plate, 2.5 mm thick		Orange	280-313	100	Orange	281-313	100
			Grey	280-312	100	Grey	281-312	100
	Through terminal block	Grey	280-646	100	-	-	-	
	Through terminal block (Ex i)	Blue	280-656	100	-	-	-	
	Through terminal block	Orange	280-946	100	-	-	-	
	Through terminal block (Ex e II)	White	280-996 ☒	100	-	-	-	
	Ground conductor terminal block		-	-	-	-	-	
4-Conductor	End and intermediate plate, 2.5 mm thick		Orange	280-313	100	-	-	
			Grey	280-312	100	-	-	



For suitable adjacent jumpers, see page 72.

Notice: 280-646 blocks and their colored variants cannot be commoned.


Classic Rail-Mounted Terminal Blocks 6 / 10 / 16 / 35 mm² 282 ... 285 Series

		282 Series, 800 V, I _N 41 A 0.2 ... 6 mm ² / 24 ... 10 AWG			284 Series, 800 V, I _N 57 A 0.2 ... 10 mm ² / 24 ... 8 AWG			283 Series, 800 V, I _N 76 A 0.2 ... 16 mm ² / 24 ... 6 AWG		
Technical Data	Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
 2-Conductor	Through terminal block	Gray	282-901	50	Gray	284-901	25	Gray	283-901	20
	Through terminal block (Ex i)	Blue	282-904	50	Blue	284-904	25	Blue	283-904	20
	Through terminal block	Orange	282-902	50	Orange	284-902	25	Orange	283-902	20
	Through terminal block (Ex e II)	White	282-992	50	White	284-992	25	White	283-992	20
	Ground conductor terminal block	Green/Yellow	282-907	50	Green/Yellow	284-907	25	Green/Yellow	283-907	20
	End and intermediate plate	Orange	282-328	100	Orange	284-328	100	Orange	283-328	50
 3-Conductor	Through terminal block	Gray	282-681	25	Gray	284-681	25	Gray	283-671	20
	Through terminal block (Ex i)	Blue	282-684	25	Blue	284-684	25	Blue	283-674	20
	Through terminal block	Orange	282-682	25	Orange	284-682	25	Orange	283-672	20
	Through terminal block (Ex e II)	White	282-993	25	White	284-993	25	White	283-998	20
	Ground conductor terminal block	Green/Yellow	282-687	25	Green/Yellow	284-687	25	Green/Yellow	283-677	20
	End and intermediate plate	Orange	282-339	100	Orange	284-339	100	Orange	283-352	50
		Gray	282-308	100	Gray	284-308	100	Gray	283-350	50


<p>285 Series with integrated end plate 1000 V, I_N 125 A 6 ... 35 mm² / 8 ... 2 AWG</p>
--

Technical Data	Description	Color	Item No.	Pack. Unit
 2-Conductor	Through terminal block	Gray	285-635	15
	Through terminal block (Ex i)	Blue	285-634	15
	Through terminal block (Ex e II)	White	285-992 	15
	Ground conductor terminal block	Green/Yellow	285-637	15


<p>284 Series 800 V, I_N 125 A 3 x CAGE CLAMP® 0.2 ... 10 mm² / 24 ... 8 AWG 1 x screw clamp 6 ... 35 mm / 10 ... 2 AWG</p>

Technical Data	Description	Color	Item No.	Pack. Unit
 	Distribution terminal block	Gray	284-621	15
	Distribution terminal block	Blue	284-624	15
	Comb-style jumper bar	Gray	284-412	100


Adjacent Jumpers for 279 ... 284 Series

	Compatible with	Nominal Current	Color	Item No.	Pack. Unit
	279 Series	I _N 15 A	Gray	279-402	200
			Yellow	279-422	200
	280 Series	I _N = I _N terminal block	Gray	280-402	200
			Yellow	280-422	200
	281 Series	I _N = I _N terminal block	Gray	281-402	200
			Yellow	281-422	200
	282 Series	I _N 41 A	Gray	282-402	100
			Yellow	282-422	100
	284 Series	I _N 57 A	Gray	284-402	100
			Yellow	284-422	100
	283 Series	I _N 70 A	Gray	283-402	50
			Yellow	283-422	50

Staggered Jumpers for 280 and 281 Series

	Description	Color	Item No.	Pack. Unit
	for 280 Series 5 mm wide I _N 24 A		1 to 2	Gray 780-452 100
			1 to 3	Gray 780-453 100
			1 to 4	Gray 780-454 100
			1 to 5	Gray 780-455 50
			1 to 6	Gray 780-456 50
			1 to 7	Gray 780-457 50
			1 to 8	Gray 780-458 50
		for 281 Series 6 mm wide I _N 32 A		1 to 2
			1 to 3	Gray 781-453 100
			1 to 4	Gray 781-454 100
			1 to 5	Gray 781-455 50
		1 to 6	Gray 781-456 50	

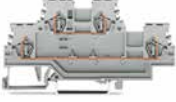
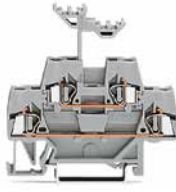



Vertical Jumper for Double- and Triple-Deck Terminal Blocks

	Description	Item No.	Pack. Unit
	insulated, I _N 24 A, gray	Gray 281-421	200

Classic Double-/Triple-Deck and Electric Motor Wiring Rail-Mounted Terminal Blocks

279 ... 281 Series







CAGE CLAMP®

	Technical Data	Description	Color	Item No.	Pack. Unit
	279 Series 0.08 ... 1.5 mm ² / 28 ... 16 AWG I _N 18 A, 500 V	Through/through terminal block, L/L	○	279-501	50
		Through/through terminal block, N/L	○	279-512	50
		Through/through terminal block, L/N	○	279-513	50
		Through/through terminal block, N/N (Ex i)	●	279-504	50
		Ground conductor/through terminal block, PE/N	○	279-517	50
		Ground conductor/through terminal block, PE/L	○	279-527	50
		3-conductor through terminal block, L	○	279-508	50
		4-conductor through terminal block, N (Ex i)	●	279-509	50
		4-conductor ground terminal block, PE	●	279-507	50
		End and intermediate plate	○	279-519	100
			○	279-518	100
	280 Series 0.08 ... 2.5 mm ² / 28 ... 12 AWG I _N 20 A, 500 V	Through/through terminal block	○	280-519	50
		Through/through terminal block (Ex i)	●	280-529	50
		Through/through terminal block (blue/gray)	■	280-523	50
		Through/through terminal block (gray/blue)	■	280-533	50
		Ground conductor/through terminal block (green-yellow/gray)	■	280-527	50
		Ground conductor/through terminal block (green-yellow/blue)	■	280-537	50
		4-conductor ground terminal block, internally commoned	●	280-517	50
	280 Series 0.08 ... 2.5 mm ² / 28 ... 12 AWG I _N 20 A, 500 V	Through/through terminal block*	○	280-520	50
		Through/through terminal block*	●	280-530	50
		Through/through terminal block*	■	280-524	50
		Through/through terminal block*	■	280-534	50
		End and intermediate plate	○	280-341	50
			○	280-340	50
		End and intermediate plate (for additional horizontal commoning)	○	280-343	50
	○	280-342	50		
	280 Series 0.08 ... 2.5 mm ² / 28 ... 12 AWG I _N 20 A, 500 V	Through/through/through terminal block	○	280-549	40
		Through/through/through terminal block (Ex i)	●	280-551	40
		Through/through/through terminal block	■	280-552	40
		Ground conductor/through/through terminal block	■	280-557	40
		Ground conductor/through/through terminal block	■	280-547	40
		Shield conductor/through/through terminal block	■	280-548	40
		Shield conductor/through/through terminal block	■	280-558	40
		6-conductor ground terminal block, internally commoned	●	280-597	40
		Ground conductor/through/carrier terminal block	■	280-510	50
		Through/through/through terminal block with additional jumper position on lower level	○	280-550	40
		End and intermediate plate	○	280-304	50
			○	280-303	50
		End and intermediate plate (for additional horizontal commoning)	○	280-306	50
	○	280-305	50		
	281 Series 0.08 ... 4 mm ² / 28 ... 12 AWG I _N 26 A, 500 V	Through/through terminal block	○	281-619	50
		Through/through terminal block (Ex i)	●	281-629	50
		Through/through terminal block*	○	281-620	50
		Through/through terminal block*	●	281-630	50
		End and intermediate plate	○	281-341	100
			○	281-340	100
		End and intermediate plate (for additional horizontal commoning)	○	281-343	100
			○	281-342	100
	281 Series 0.08 ... 4 mm ² / 28 ... 12 AWG I _N 20 A (2.5 mm ²), 400 V I _N 25 A (4 mm ²), 400 V	Quadruple-deck terminal block, L1 - L2 - L3 - PE	○	281-530	50
		Quadruple-deck terminal block, L1 - L2	○	281-531	50
		Quadruple-deck terminal block, L1 - L2 - L3	○	281-532	50
		End and intermediate plate	○	281-366	100
			○	281-365	100

For 279, 280 and 281 Series accessories, see www.wago.com and Full Line Catalog.

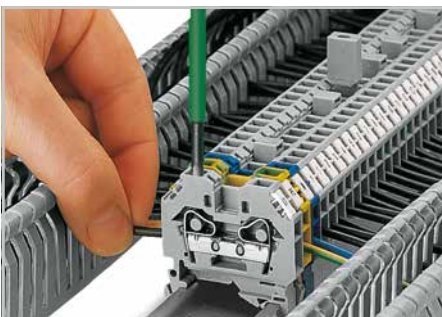
*with additional jumper position

Classic Side-Entry Rail-Mounted Terminal Blocks 1.5 ... 16 mm² 279 ... 284 Series

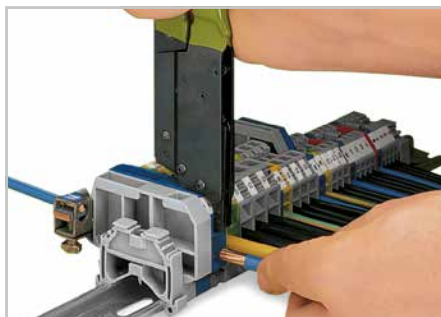
	Technical Data	Description	Color	Item No.	Pack. Unit
	279 Series 0.08 ... 1.5 mm ² / 28 ... 16 AWG I _N 18 A, 800 V Terminal block width: 4 mm / 0.157 in. Strip length: 8 ... 9 mm / 0.33 in.	2-conductor through terminal block	Grey	279-101	100
		2-conductor through terminal block (Ex i)	Blue	279-104	100
		End and intermediate plate, 2.5 mm thick	Orange	279-302	100
			Grey	279-301	100
	280 Series 0.08 ... 2.5 mm ² / 28 ... 12 AWG I _N 24 A, 800 V Terminal block width: 5 mm / 0.197 in. Strip length: 8 ... 9 mm / 0.33 in.	2-conductor through terminal block	Grey	280-101	100
		2-conductor through terminal block (Ex i)	Blue	280-104	100
		2-conductor ground terminal block	Yellow-Green	280-107	100
		End and intermediate plate, 2.5 mm thick	Orange	280-302	100
			Grey	280-301	100
	281 Series 0.08 ... 4 mm ² / 28 ... 12 AWG I _N 32 A, 800 V Terminal block width: 6 mm / 0.236 in. Strip length: 9 ... 10 mm / 0.37 in.	2-conductor through terminal block	Grey	281-101	100
		2-conductor through terminal block (Ex i)	Blue	281-104	100
		2-conductor ground terminal block	Yellow-Green	281-107	100
		End and intermediate plate, 3 mm thick	Orange	281-302	100
			Grey	281-301	100
	282 Series 0.2 ... 6 mm ² / 28 ... 12 AWG I _N 41 A, 800 V Terminal block width: 8 mm / 0.315 in. Strip length: 12 ... 13 mm / 0.49 in.	2-conductor through terminal block	Grey	282-101	50
		2-conductor through terminal block (Ex i)	Blue	282-104	50
		2-conductor ground terminal block	Yellow-Green	282-107	50
		End and intermediate plate, 4 mm thick	Orange	282-302	100
			Grey	282-301	100
	284 Series 0.2 ... 10 mm ² / 24 ... 8 AWG I _N 57 A, 800 V Terminal block width: 10 mm / 0.394 in. Strip length: 12 ... 13 mm / 0.49 in.	2-conductor through terminal block	Grey	284-101	50
		2-conductor through terminal block (Ex i)	Blue	284-104	50
		2-conductor ground terminal block	Yellow-Green	284-107	50
		End and intermediate plate, 2.5 mm thick	Orange	284-302	100
			Grey	284-301	100
	283 Series 0.2 ... 16 mm ² / 24 ... 6 AWG I _N 76 A, 800 V Terminal block width: 12 mm / 0.472 in. Strip length: 16 ... 17 mm / 0.65 in.	2-conductor through terminal block	Grey	283-101	50
		2-conductor through terminal block (Ex i)	Blue	283-104	50
		2-conductor ground terminal block	Yellow-Green	283-107	50
		End and intermediate plate, 4 mm thick	Orange	283-302	50
			Grey	283-301	50

For suitable jumpers, see page 72.

Conductor termination

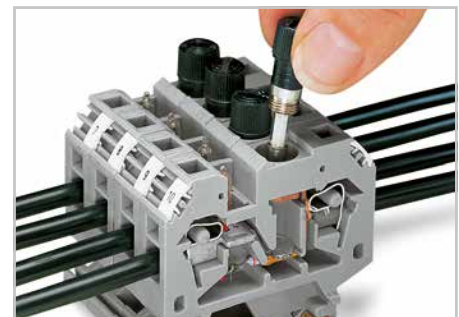


Open the clamping unit using a screwdriver and insert stripped conductor until it hits backstop.



The plunger (210-141) is placed into the upper operating slot of a side-entry terminal block and the clamp is hooked into the lateral operating slot. The contact is fully opened by pressing the handles together until they engage.
Insert stripped conductor until it hits backstop.

Fuse terminal blocks



Replacing a fuse.





Classic Side-Entry Function Terminal Blocks

Disconnect/Test Terminal Blocks, Fuse Terminal Blocks, Step-Down Jumpers




282 Series

CAGE CLAMP®


Disconnect/Test Terminal Blocks

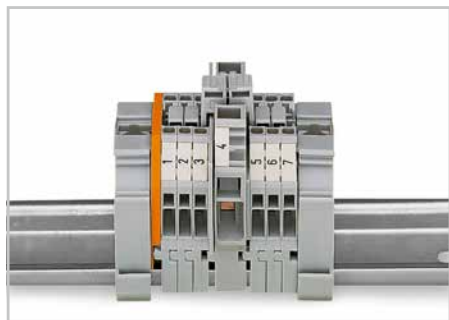
	Technical Data	Description	Color	Item No.	Pack. Unit
	282 Series 0.2 ... 6 mm ² / 24 ... 10 AWG I _N 41 A, 400 V Terminal block width: 8 mm / 0.315 in. Strip length: 12 ... 13 mm / 0.49 in.	Disconnect/test terminal block, with 4 mm Ø test sockets	●	282-131	25
		Through terminal block	●	282-133	25
		Disconnect/test terminal block, without test sockets	●	282-135	25
	282 Series 0.2 ... 6 mm ² / 24 ... 10 AWG Terminal block width: 16 mm / 0.63 in. Strip length: 12 ... 13 mm / 0.49 in.	Ground conductor disconnect terminal block, 24 V	●	282-140	12
		Ground conductor disconnect terminal block, 48 V	●	282-141	12
		Ground conductor disconnect terminal block, 120 V	●	282-138	12
		Ground conductor disconnect terminal block, 230 V	●	282-139	12
		End and intermediate plate, 4 mm thick	●	282-315	50
			●	282-314	50
		Lock-out, snap-on type, prevents reclosing of slide link	●	282-137	100

Fuse Terminal Blocks

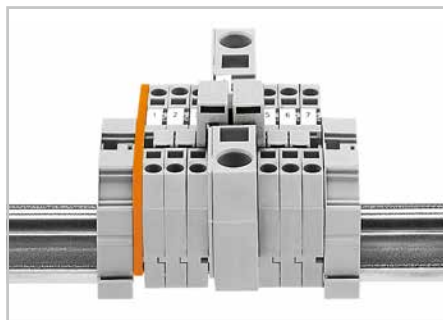
	Technical Data	Description	Color	Item No.	Pack. Unit
	282 Series 2-conductor fuse terminal blocks 0.2 ... 6 mm ² / 24 ... 10 AWG I _N 10 A, 500 V Terminal block width: 13 mm / 0.512 in. Strip length: 12 ... 13 mm / 0.49 in.	Without indicator, for 5 x 20 mm miniature metric fuses	●	282-122	40
		Without indicator, for 1/4" x 1" miniature metric fuses	●	282-120	40
		Without indicator, for 1/4" x 1 1/4" miniature metric fuses	●	282-128	40
		With indicator, for 5 x 25 mm miniature metric fuses	●	282-126	40
	282 Series 2-conductor fuse terminal blocks 0.2 ... 6 mm ² / 24 ... 10 AWG Terminal block width: 13 mm / 0.512 in. Strip length: 12 ... 13 mm / 0.49 in.	With red LED 24 VDC, for 1/4" x 1 1/4" miniature metric fuses	●	282-128/281-413	40
		With blown fuse indication by neon lamp, 250 VAC/220 VDC, for 1/4" x 1 1/4" miniature metric fuses	●	282-128/281-417	40
		With blown fuse indication by neon lamp, 250 VAC/220 VDC, for 5 x 20 mm miniature metric fuses	●	282-124	40
		With blown fuse indication by neon lamp, 120 V AC/DC, for 1/4" x 1 1/4" miniature metric fuses	●	282-128/281-418	40
		End and intermediate plate, 4 mm thick	●	282-312	50
			●	282-311	50

Step-Down Jumpers

	Technical Data	Description	Color	Item No.	Pack. Unit
	Insulated, I _N 15 A	From 10/6 mm ² to 4/2.5/1.5 mm ²	●	284-414	50
		From 10/6 mm ² to 6/4 mm ²	●	284-413	50
	Insulated, I _N 32 A	From 16 mm ² to 4 mm ²	●	283-414	50



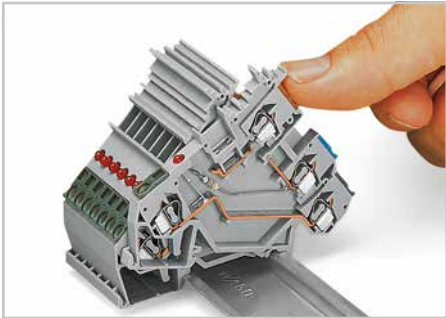
Commoning from 6 mm² (282 Series) to 1.5 mm² (279 Series) rail-mounted terminal blocks via step-down jumpers.



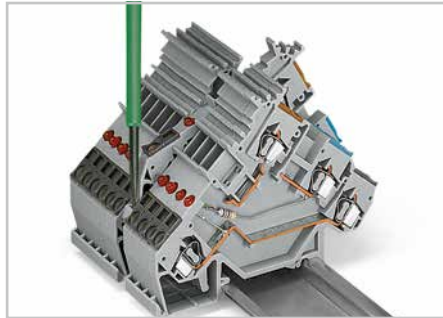
Commoning from 16 mm² (283 Series) to 4 mm² (281 Series) rail-mounted terminal blocks via step-down jumpers.

Classic Sensor and Actuator Terminal Blocks – Description and Installation –

Mounting

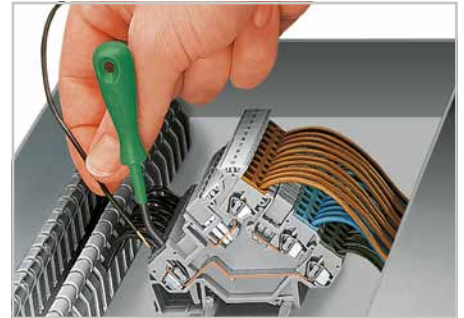


Snapping terminal block onto carrier rail. Terminal blocks with a grounding foot automatically establish a direct contact to the rail.



Removing the terminal block from carrier rail. Notice: Remove jumper contacts first.

CAGE CLAMP® connection



Inserting conductor via angled (3.5 x 0.5) mm screwdriver.

Commoning

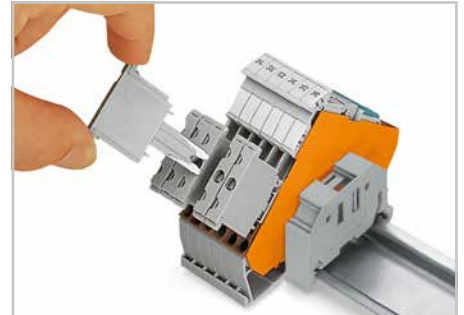


Commoning with adjacent jumpers – push jumper down until fully inserted.

Actuator terminal blocks (see Full Line Catalog)

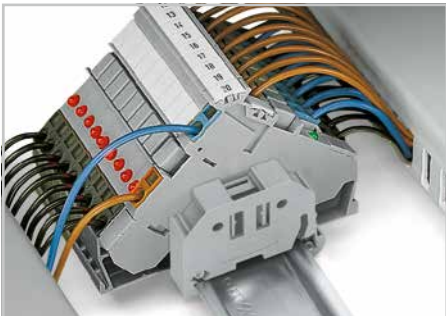


Actuator terminal blocks with fuse holders (281-511) – intermediate plates are also required!



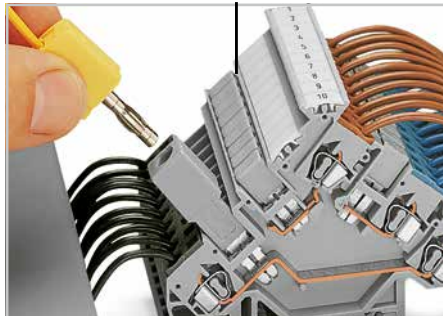
Actuator terminal blocks with component plugs (280-801)

Power supply

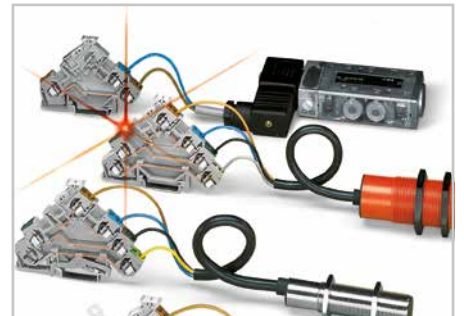


Sensor terminal blocks – power supply from control panel side

Testing

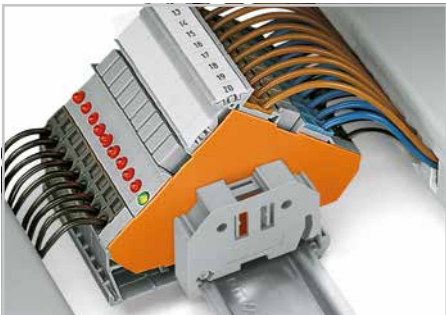


Testing via banana plug and 209-170 test plug adapter.



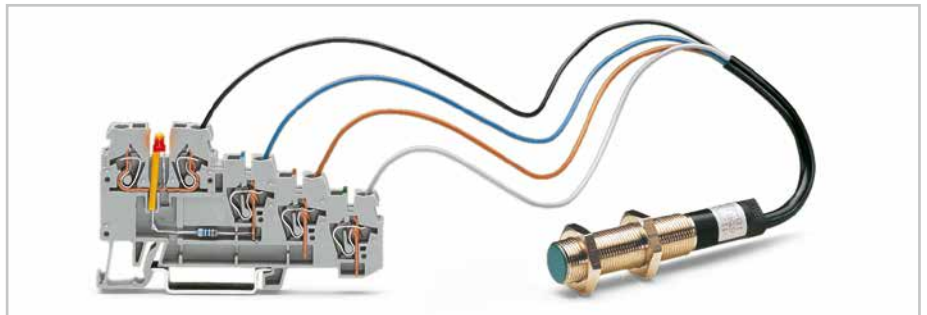
Clear assignment: one sensor – one terminal block

Power supply



Sensor terminal blocks – power supply from sensor side.

270 Series, see Full Line Catalog



Sensor LED terminal block

For information on Push-in CAGE CLAMP® connection, see page 14.

Classic Sensor and Actuator Terminal Blocks

280 Series

	+ Supply	- Supply	Signal	Ground/Shield	LED	PNP/NPN	Recovery Diode	Supply Terminal Block	End Plate	Color	Item No.	Pack. Unit
										●		
	X	X	1						a	●	280-560	50
	X	X	1		X	p			a	●	280-560/281-434	50
	X	X	1		X	n			a	●	280-560/281-413	50
	X	X						X	a	●	280-564	10
	X	X			X	p		X	a	●	280-564/281-483	10
	X	X			X	n		X	a	●	280-564/281-496	10
	X	X	1	X					b	●	280-570	50
	X	X	1	X	X	p			b	●	280-570/281-434	50
	X	X	1	X	X	n			b	●	280-570/281-413	50
	X	X		X				X	b	●	280-574	10
	X	X		X	X	p		X	b	●	280-574/281-483	10
	X	X		X	X	n		X	b	●	280-574/281-496	10
	X	X	2						b	●	280-580	50
	X	X	2		X	p			b	●	280-580/281-434	50
	X	X	2		X	n			b	●	280-580/281-413	50
	X	X						X	b	●	280-584	10
	X	X			X	p		X	b	●	280-584/281-483	10
	X	X			X	n		X	b	●	280-584/281-496	10
		X	1						a	●	280-562	50
		X	1				X		a	●	280-562/281-411	50
		X			X	p			a	●	280-562/281-434	50
		X	1		X	p	X		a	●	280-562/281-420	50
		X						X	a	●	280-592	10
		X	1	X					b	●	280-572	50
		X	1	X			X		b	●	280-572/281-411	50
		X	1	X	X	p			b	●	280-572/281-434	50
		X	1	X	X	p	X		b	●	280-572/281-420	50
		X						X	b	●	280-593	10
	X		1						a	●	280-555	50
	X							X	a	●	280-556	20
	X		1	X					b	●	280-585	50
	X			X			X	b	●	280-586	50	

Accessories

	Description	Color	Item No.	Pack. Unit
		●		
	End and intermediate plate, 1 mm thick	●	280-321	100
		●	280-319	100
		●	280-323	100
		●	280-320	100
	Adjacent jumper, insulated $I_N = I_N$ terminal block	●	280-402	200
		●	280-470	200
	Insulation stop, 5 pcs/strip 0.08 ... 0.2 mm ² "sol."	●	280-471	200
		●	280-472	200
		●	280-472	200

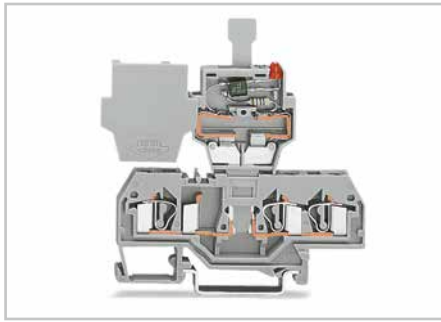
Classic Fuse Terminal Blocks and Fuse Plugs – Description and Installation –

Fuse terminal blocks



Blown fuse indication by LED or neon lamp

Fuse plug

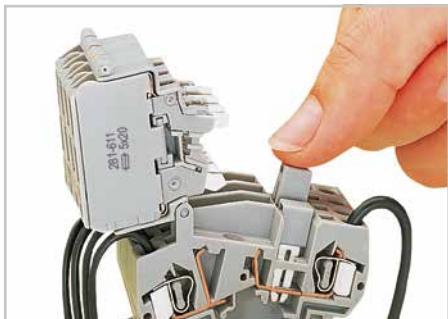


Fuse plug with blown fuse indication on a 3-conductor carrier terminal block.

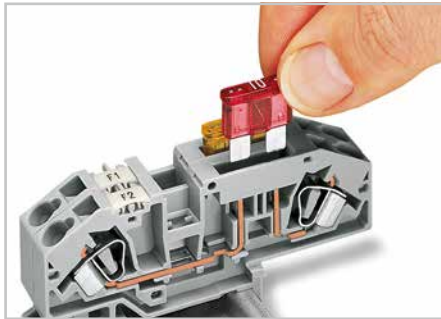


Conductor termination: Open the clamping unit via integrated lever.

Commoning



Distributing current to several fuse-protected circuits via insulated touch-proof jumpers.



Inserting a fuse.

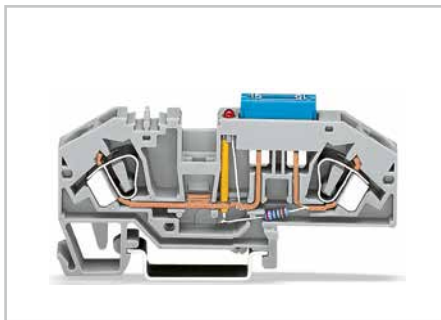


Open and close lever via screwdriver.

Fuse replacement 1



Before replacing the fuse, pivot the fuse holder into the locked open position.



2-conductor fuse terminal block with mini-automotive blade-style fuse



Jumper bar for quick and convenient commoning

Fuse replacement 2



One end of the fuse is automatically ejected from the holder when opening the cover.



Blown fuse indication by LED









Inserting a fuse.

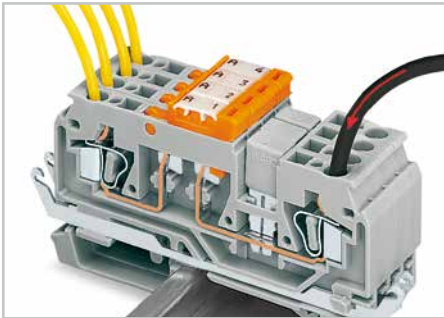
For information on Push-in CAGE CLAMP® connection, see page 14.

Classic Fuse Terminal Blocks and Fuse Plugs

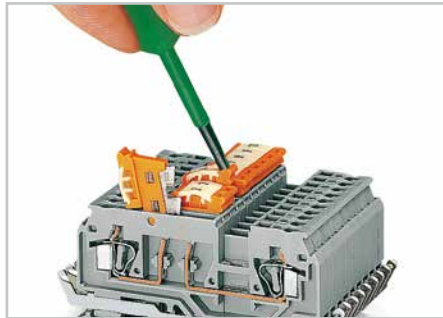
281 / 282 / 811 Series

	Description	Miniature Fuse	Blown Fuse Indication	Nominal Current	Nominal Voltage	Color	Item No.	Pack. Unit
	Fuse disconnect terminal block with pivoting fuse holder; without blown fuse indication 800 V / 10 A (6.3 A) 0.08 ... 4 mm ² / 28 ... 12 AWG	5 x 20 mm				Grey	281-611	50
		5 x 20 mm				Orange	281-616	50
		5 x 25 mm				Grey	281-612	50
		5 x 30 mm				Grey	281-622	50
		1/4" x 1"				Grey	281-613	50
		1/4" x 1 1/4"				Grey	281-623	50
	Fuse disconnect terminal block with pivoting fuse holder; with blown fuse indication by LED 800 V / 10 A (6.3 A) 0.08 ... 4 mm ² / 28 ... 12 AWG	5 x 20 mm	15 ... 30 V			Grey	281-611/281-541	50
		5 x 20 mm	30 ... 65 V			Grey	281-611/281-542	50
		5 x 25 mm	15 ... 30 V			Grey	281-612/281-541	50
		5 x 25 mm	30 ... 65 V			Grey	281-612/281-542	50
		5 x 30 mm	15 ... 30 V			Grey	281-622/281-541	50
		5 x 30 mm	30 ... 65 V			Grey	281-622/281-542	50
		1/4" x 1"	15 ... 30 V			Grey	281-613/281-541	50
		1/4" x 1"	30 ... 65 V			Grey	281-613/281-542	50
	Fuse disconnect terminal block with pivoting fuse holder; with blown fuse indication by neon lamp 800 V / 10 A (6.3 A) 0.08 ... 4 mm ² / 28 ... 12 AWG	5 x 20 mm	230 V			Grey	281-611/281-417	50
		5 x 20 mm	120 V			Grey	281-611/281-418	50
		5 x 25 mm	230 V			Grey	281-612/281-417	50
		5 x 25 mm	120 V			Grey	281-612/281-418	50
		5 x 30 mm	230 V			Grey	281-622/281-417	50
		5 x 30 mm	120 V			Grey	281-622/281-418	50
		1/4" x 1"	230 V			Grey	281-613/281-417	50
		1/4" x 1"	120 V			Grey	281-613/281-418	50
	1/4" x 1 1/4"	230 V			Grey	281-623/281-417	50	
	1/4" x 1 1/4"	120 V			Grey	281-623/281-418	50	
	Adjacent jumper, insulated, I _N = I _N terminal block					Grey	281-402	200
	End and intermediate plate, 2.5 mm thick					Orange	281-309	100
						Grey	281-311	100
	Fuse plugs on carrier terminal blocks (281 Series Carrier Terminal Blocks see page 73)	for 5 x 20 mm and 5 x 25 mm miniature metric fuses	LED, 48 VDC	6.3 A	250 V	Grey	281-511	50
			LED, 24 V AC/DC					
			Neon lamp, 120 V AC/DC					
			Neon lamp, 230 V AC/DC					
	Fuse terminal blocks for mini-automotive, blade-style fuses 0.2 ... 6 mm ² / 24 ... 10 AWG		12 V, LED, circuit I	25 A	400 V	Grey	282-698/281-429	25
			12 V, LED, circuit II					
			24 V, LED, circuit I					
			24 V, LED, circuit II					
			Without blown fuse indication					
	Adjacent jumper, insulated, I _N 41 A					Grey	282-402	100
	3-conductor through terminal block			41 A	800 V	Grey	282-699	25
						Blue	282-694	25
	End and intermediate plate, 2 mm thick					Orange	282-333	100
						Grey	282-334	100
	Fuse terminal block for cylindrical fuses	10 x 38 mm	Without blown fuse indication, 1-pole	32 A	1000 VDC	Grey	811-316	12
			Blown fuse indication, 1-pole					
	Fuse terminal block for cylindrical fuses 2.5 ... 16 mm ² / 16 ... 6 AWG	10 x 38 mm	Without blown fuse indication, 1-pole	32 A	690 VAC 1000 VDC	Grey	811-310	12
			Without blown fuse indication, 2-pole					
			Without blown fuse indication, 3-pole					
			Blown fuse indication, 1-pole					
			Blown fuse indication, 2-pole					
			Blown fuse indication, 3-pole					
	Fuse terminal block for class CC fuses 2.5 ... 16 mm ² / 16 ... 6 AWG	10 x 38 mm	Without blown fuse indication, 1-pole	32 A	690 VAC 1000 VDC	Grey	811-311	12
			Without blown fuse indication, 2-pole					
			Without blown fuse indication, 3-pole					
			Blown fuse indication, 1-pole					
			Blown fuse indication, 2-pole					
			Blown fuse indication, 3-pole					
Push-in type jumper bar, I _N 63 A, 1000 V			2-way			Grey	811-472	50
			3-way					
			4-way					
			6-way					
			8-way					
			12-way					
						Grey	811-482	20

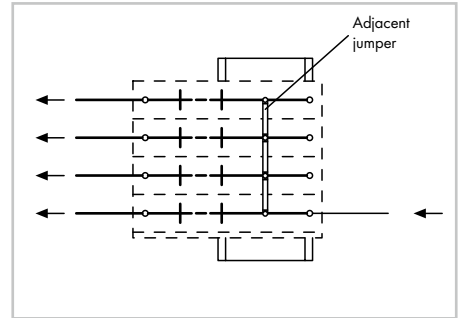
Classic Test/Disconnect Terminal Blocks with Pivoting Knife Disconnect – Description and Installation –



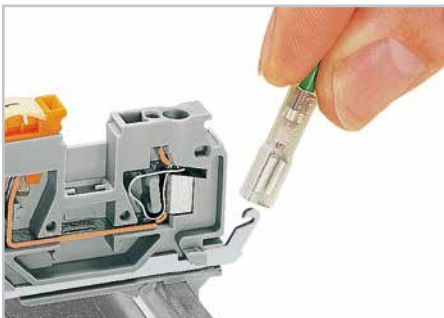
Power distribution using adjacent jumper – knife disconnects used to disconnect individual outputs



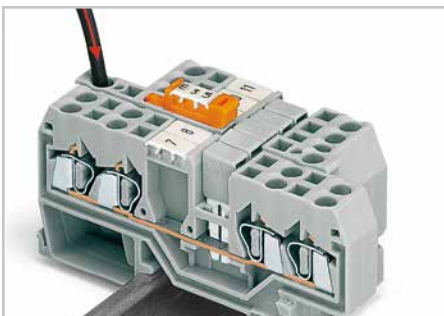
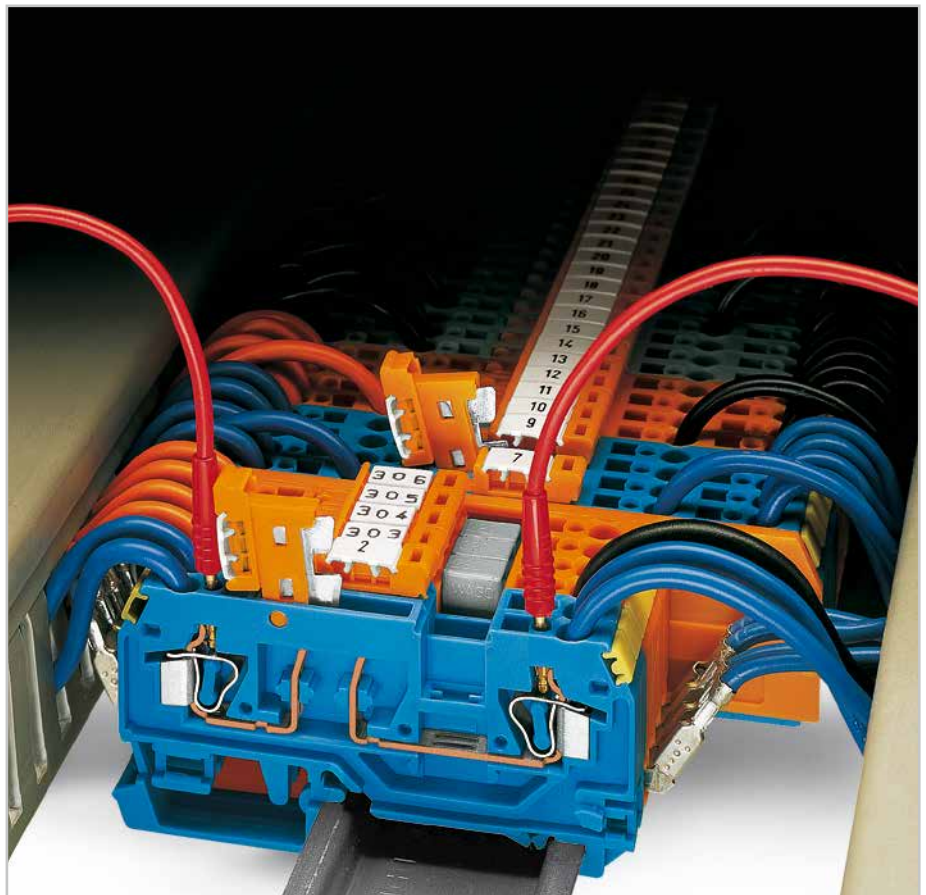
Pivoting knife disconnect



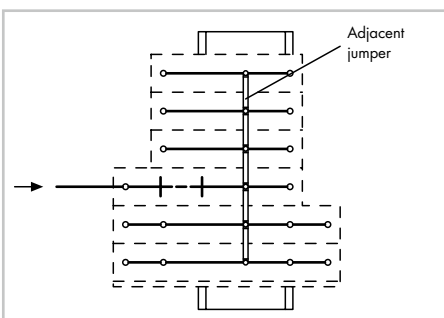
Circuit of assembly shown above



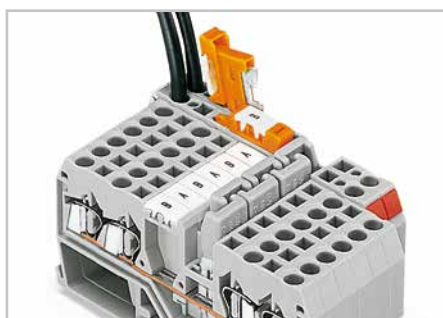
Shield contact via (2.5 x 0.8) mm solder/crimp quick disconnect terminal



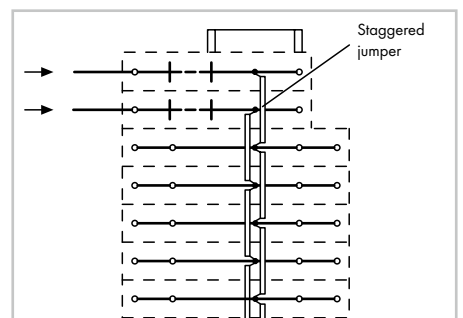
Power distribution using knife disconnect in supply line – disconnection of all outputs



Circuit of assembly shown above







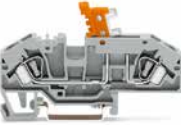


Staggered jumpers for sophisticated circuit requirements – push jumpers down firmly until fully inserted.



Circuit of assembly shown opposite

Classic Disconnect/Test Terminal Blocks

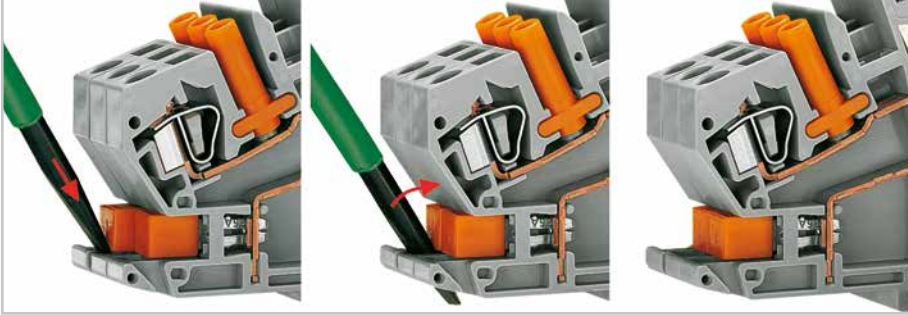
280 / 282 Series

	Description	Technical Data		Terminal Block Width	Color	Item No.	Pack. Unit
	2-conductor disconnect/test terminal block with test slot for 2 mm and 2.3 mm Ø test plugs	0.08 ... 2.5 mm ² / 28 ... 12 AWG	I_N 16 A, 400 V	5 mm / 0.197 in.	●	280-870	100
					●	280-868	100
					●	280-876 [Ⓢ]	100
					●	280-879	100
	2-conductor disconnect/test terminal block with shield contact and test slot for 2 mm and 2.3 mm Ø test plugs	0.08 ... 2.5 mm ² / 28 ... 12 AWG	I_N 16 A, 250 V	5 mm / 0.197 in.	●	280-871	50
					●	280-869	50
					●	280-880	50
	End and intermediate plate, 2.5 mm thick				●	280-371	100
					●	280-374	100
	4-conductor disconnect/test terminal block with test slot for 2 mm and 2.3 mm Ø test plugs	0.08 ... 2.5 mm ² / 28 ... 12 AWG	I_N 16 A, 400 V	5 mm / 0.197 in.	●	280-874	50
					●	280-881	50
					●	280-885 [Ⓢ]	50
					●	280-883	50
	4-conductor disconnect/test terminal block with shield contact and test slot for 2 mm and 2.3 mm Ø test plugs	0.08 ... 2.5 mm ² / 28 ... 12 AWG	I_N 16 A, 250 V	5 mm / 0.197 in.	●	280-875	50
					●	280-882	50
					●	280-884	50
	End and intermediate plate, 2.5 mm thick				●	280-373	100
					●	280-376	100
	2-conductor disconnect terminal block, with test point	0.2 ... 6 mm ² / 24 ... 10 AWG	I_N 30 A, 400 V	8 mm / 0.315 in.	●	282-697	25
					●	282-695	25
	Ground conductor disconnect terminal block with test point (circuit diagrams, see page 49)	0.2 ... 6 mm ² / 24 ... 10 AWG		16 mm / 0.63 in.	●	282-640	12
					●	282-641	12
					●	282-638	12
					●	282-639	12
	3-conductor through terminal block with test point, same profile as disconnect terminal blocks	0.2 ... 6 mm ² / 24 ... 10 AWG	I_N 41 A, 800 V	8 mm / 0.315 in.	●	282-699	25
					●	282-694	25
	End and intermediate plate, 2 mm thick				●	282-333	100
					●	282-334	100

For suitable jumpers, see page 72.

Classic Disconnect/Test Terminal Blocks for Current and Voltage Transformer Circuits – Description and Installation –

Shorting path preparation for current transformer circuits



Inserting insulated, touch-proof adjacent jumpers into the protected shorting position.



Terminal strip permanently prepared for current transformer circuits

Lock-out

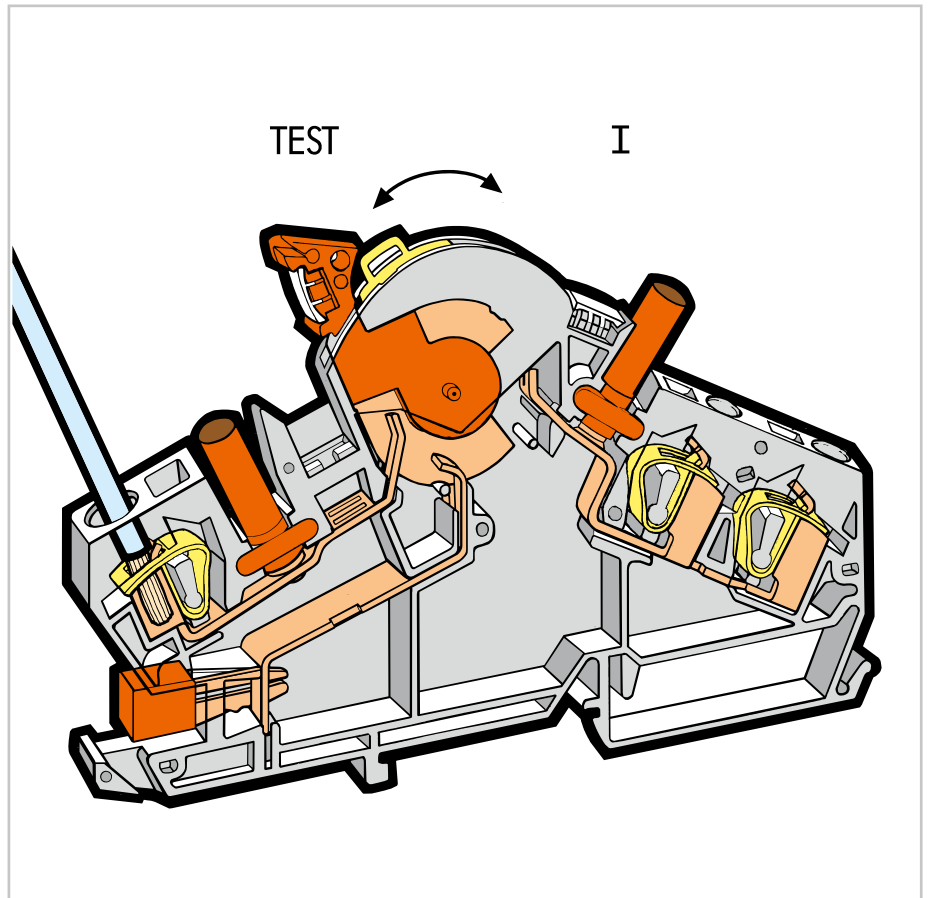


Lock-out snaps into one of two notched positions, preventing accidental operation of the disconnect link.

Locking cover for disconnect links



Snapping transparent locking cover onto 1-8 disconnect links:
a) Mechanically lock several links for multi-pole switching applications
b) Protect markers



Interlocking link



Interlocking link mechanically locks multiple links for multi-pole switching applications.

Touch-proof test sockets



Touch-proof 4 mm Ø test plugs are not available from WAGO, but are offered by industry suppliers such as, Fabrikat Multi-Contact.

Marking


























Marking with WMB Multi marking system – for other systems, see Section 11.

For information on Push-in CAGE CLAMP® connection, see page 14.

Classic Disconnect/Test Terminal Blocks 6 (10) mm² and Through Terminal Blocks for Current and Voltage Transformer Circuits





282 Series

CAGE CLAMP®

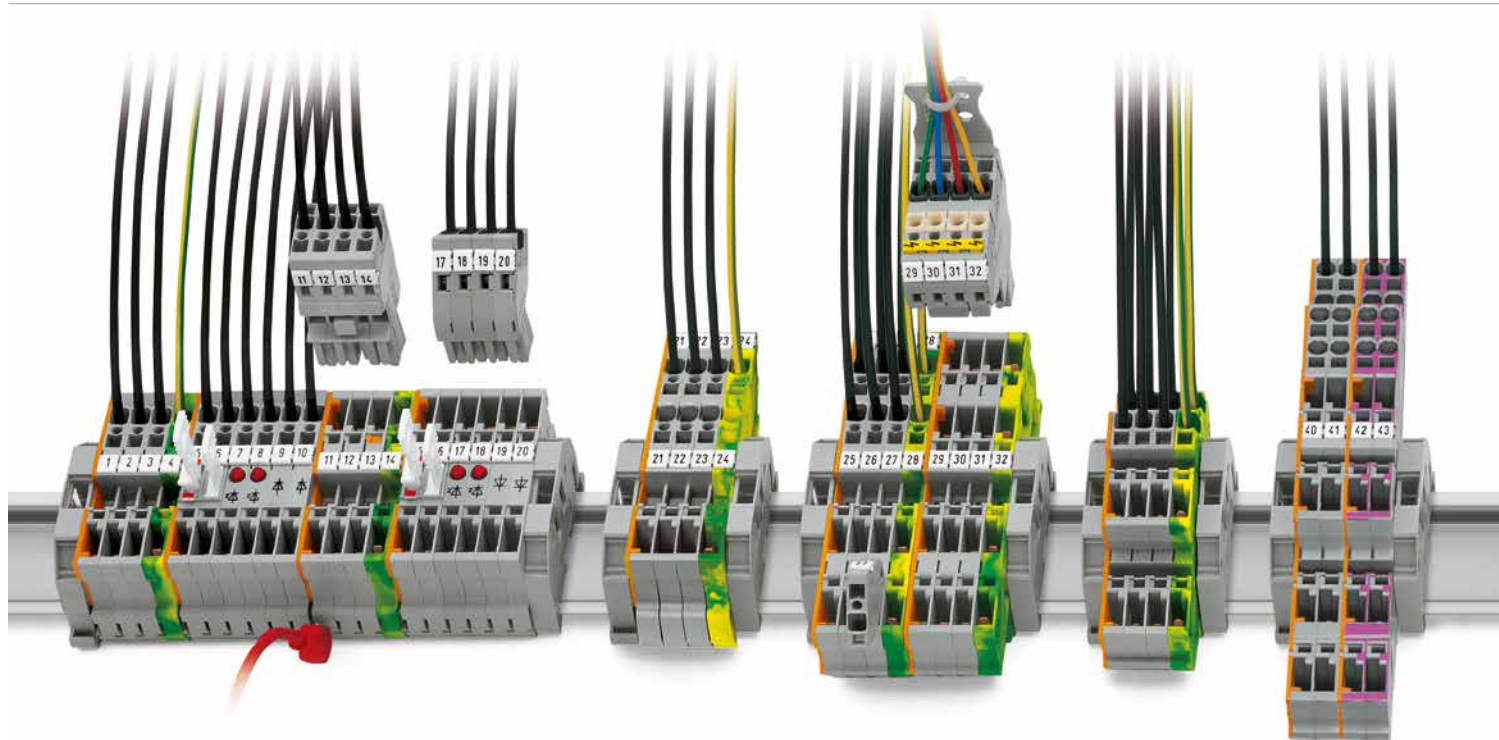
	Description	Technical Data	Terminal Block Width	Color	Item No.	Pack. Unit
	2-conductor longitudinal switching disconnect/test terminal block with touch-proof test sockets, for 4 mm Ø test plugs	0.2 ... 6 mm ² / 24 ... 10 AWG I _N 30 A, 500 V	8 mm / 0.315 in.	●	282-821*	20
	2-conductor through terminal block with touch-proof test sockets for 4 mm Ø test plugs	0.2 ... 6 mm ² / 24 ... 10 AWG I _N 30 A, 500 V	8 mm / 0.315 in.	●	282-841*	20
	2-conductor through terminal block without test sockets			●	282-841/ 049-000*	20
	End and separator plate, 1.5 mm thick			●	282-365	50
	End and separator plate, 1.5 mm thick			●	282-360	50
	2-conductor transverse switching disconnect/test terminal block with touch-proof test socket for 4 mm Ø test plug	0.2 ... 6 mm ² / 24 ... 10 AWG I _N 30 A, 500 V	8 mm / 0.315 in.	●	282-811*	20
	End and separator plate, 1.5 mm thick			●	282-366	50
	End and separator plate, 1.5 mm thick			●	282-361	
	Circuit jumper for transverse switching terminal block (282-811), insulated, I _N 30 A	2-way ⋮ 6-way		●	282-442 ⋮ 282-446	50
	Jumper for 282 Series, insulated, I _N 30 A	2-way ⋮ 10-way		●	282-432 ⋮ 282-440	50
	Lock-out device for disconnect link			●	282-370	100
	Coupling device, mechanically locks multiple links	2-way ⋮ 4-way		●	282-372 ⋮ 282-374	50
* Installation instructions for 282-811/-821, see page 54.						
	Disconnect/test terminal block, e.g., current transformer circuits, with touch-proof test sockets	0.2 ... 6 mm ² / 24 ... 10 I _N 30 A, 500 V	8 mm / 0.315 in.	●	282-870	20
	Through terminal block, e.g., current transformer circuits, with touch-proof test socket	0.2 ... 6 mm ² / 24 ... 10 I _N 30 A, 500 V	8 mm / 0.315 in.	●	282-865	20
	End and separator plate, 1.5 mm thick, with lock-out seal option for disconnect terminal blocks			●	282-387	50
	End and separator plate, 1.5 mm thick, for through terminal blocks			●	282-392	50
	Disconnect/test terminal block, e.g., voltage circuits, with touch-proof test sockets	0.2 ... 6 mm ² / 24 ... 10 I _N 30 A, 500 V	8 mm / 0.315 in.	●	282-860	20
	Through terminal block, e.g., voltage transformer circuits, with touch-proof test socket	0.2 ... 6 mm ² / 24 ... 10 I _N 30 A, 500 V	8 mm / 0.315 in.	●	282-866	20
	End and separator plate, 1.5 mm thick, for through terminal blocks			●	282-385	50
	End and separator plate, 1.5 mm thick, for through terminal blocks			●	282-390	50
	Locking cover, transparent, mechanically locks multiple links	1-pole ⋮ 8-pole		○	282-881 ⋮ 282-888	50
	Adjacent jumper for disconnect/test terminal block (282-870), insulated, I _N 41 A			●	282-424	100
	Lock-out device for disconnect link			●	282-384	100

X-COM®-SYSTEM

769 and 870 Series

Technical data – carrier terminal blocks:	0.08 ... 4 mm ²	28 ... 12 AWG
	500 V/6 kV/3	300 V, 10 A 
	250 V/4 kV/3	300 V, 20 A 
	I _N 16 A / 32 A*	
	Terminal block width: 5 mm / 0.197 in.	
	 8 ... 9 mm / 0.33 in.	
	 Approvals	





Female plug, with coding fingers	1-conductor, straight	1-conductor, angled	2-conductor, straight
○ 1-pole	769-101	769-101/022-000	769-121
○ 2-pole	769-102	769-102/022-000	769-122
:	:	:	:
○ 15-pole	769-115	769-115/022-000	769-135
● 1-pole	769-101/000-016	769-101/022-016	769-121/000-016



	Single-deck, through and function terminal blocks					Double-deck terminal blocks			
	1-cond./1-pin	2-pin	2-cond./1-pin	2-cond./2-pin	4-pin	1-cond./1-pin	2-pin/2-pin	2-cond./2-pin	4-cond./4-pin
○ Carrier terminal block	769-176*	769-156*	769-251*	769-171*	769-151*	870-101	870-151	870-131	
○ Carrier terminal block, internally commoned							4-pin	870-158	870-108 870-138
○ Carrier terminal block with shield contact	769-231*	769-221*		769-211*	769-201*		4-pin		
● Ground carrier terminal block	769-237	769-227	769-257	769-217	769-207	870-157	870-107		
○ Disconnect carrier terminal block	769-232	769-222							
○ Disconnect carrier terminal block with shield contact	769-233	769-223							
○ Diode carrier terminal block									
Anode, left side	769-238/281-410	769-228/281-410							
Anode, right side	769-238/281-411	769-228/281-411							
○ LED carrier terminal block									
Anode, right side	769-239/281-413	769-229/281-413							
Anode, left side	769-239/281-434	769-229/281-434							
○ End plate	769-307	769-305	769-320	769-301		870-118	870-168	870-148	
● End plate	769-308	769-306	769-321	769-302		870-119	870-169	870-149	
○ Separator, oversized									
○ Jumper	280-4xx	280-4xx	280-4xx	280-4xx	280-4xx	870-4xx	870-4xx	870-4xx	

 For all approvals and corresponding ratings, visit www.wago.com.

For technical explanations and abbreviations, see technical section.

Technical data – carrier terminal blocks:	0.08 ... 4 mm ²	28 ... 12 AWG
	500 V/6 kV/3	300 V, 10 A 
	250 V/4 kV/3	300 V, 20 A 
	I _N 16 A / 32 A*	
	Terminal block width: 5 mm / 0.197 in.	
	 8 ... 9 mm / 0.33 in.	
	 Approvals	

Strain relief plate, gray	Strain relief housing, gray
○ 1-pole 769-410	-
○ 2- to 3-pole 769-411	○ 2-pole 769-1602
○ 4- to 5-pole 769-412	○ 3-pole 769-1603
○ 6- to 9-pole 769-413	: :
○ 10- to 15-pole 769-414	○ 15-pole 769-1615



Terminal blocks with multiple jumper positions

3-way 1-cond./1-pin 769-214*	2-way 1-cond./1-pin	2-way 2-pin
	769-212	769-202
	769-213	769-203
769-218/281-410 769-218/281-411	769-208/281-410 769-208/281-411	
769-219/281-413 769-219/281-434	769-209/281-413 769-209/281-434	

Carrier terminal block for 280/281 Series pluggable modules (fuse, LED, ...)

1-cond./1-cond.	1-cond./1-pin	2-pin
769-191	769-181	769-161

Carrier terminal blocks for 286 Series pluggable modules with integrated end plate (relays, optocouplers, ...)

1-cond./1-pin	
4-pole	769-182/769-314
6-pole	769-183/769-314
8-pole	769-184/769-314
10-pole	769-185/769-314
1-cond./1-cond.	
4-pole	769-192/769-319
6-pole	769-193/769-319
8-pole	769-194/769-319
10-pole	769-195/769-319
2-pin	
4-pole	769-162/769-313
6-pole	769-163/769-313
8-pole	769-164/769-313
10-pole	769-165/769-313

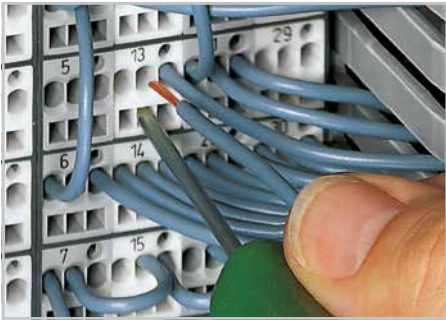
769-315	769-311	769-309	1-cond./1-cond.	1-cond./1-pin	2-pin
769-316	769-312	769-310	769-317	769-311	769-309
			769-318	769-312	769-310
280-4xx	769-314	769-313	769-319	769-314	769-313
	280-4xx	280-4xx	780-45x	780-45x	780-45x

Please find the entire product range in our Full Line Catalog. For additional information, visit www.wago.com.

Matrix Patchboards

– Description and Installation –

CAGE CLAMP® connection



Conductor termination via operating tool (2.5 x 0.4 mm blade)

Module marking



Factory-marked modules
Side 1: 1, 2, 3, 4 ...

Testing



Testing via 2.3 mm Ø test plug.

Common potential matrix patch-board



Example shows common potential matrix patchboard (white) with supply terminal block.

Marking



WFB continuous marking strip – fits into the matrix patchboards' marker slot and group marker carrier.



Marking



Individual group marking via WSB quick marking system

Additional module



Snapping on additional module with contact to mounting frame.

Additional module

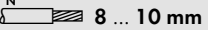




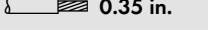


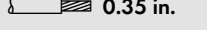
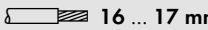



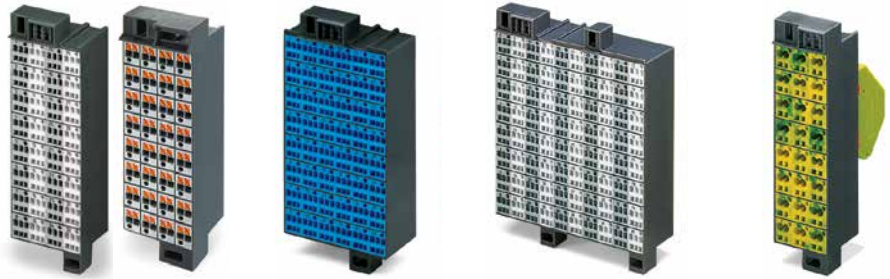
Assembling a matrix patchboard with additional module – direct connection to the mounting frame.








































For information on Push-in CAGE CLAMP® connection, see page 14.

Matrix Patchboards 726 Series

PUSH-IN CAGE CLAMP®
CAGE CLAMP®

















	500 V/6 kV/3 I_N 10 A  8 ... 10 mm 300 V, 10 A   0.35 in.	500 V/6 kV/3 I_N 10 A  8 ... 10 mm 300 V, 10 A   0.35 in.	500 V/6 kV/3 I_N 10 A  8 ... 10 mm 300 V, 10 A   0.35 in.	Side 1: I_N 76 A 2 x 0.2 ... 16 mm²  16 ... 17 mm Side 2: I_N 24 A 2 x 0.08 ... 2.5 mm²  8 ... 18 mm
--	--	--	--	---



Description	Marking	Color	Item No.	Pack.	Unit	Color	Item No.	Pack.	Unit	Color	Item No.	Pack.	Unit	Color	Item No.	Pack.	Unit
Matrix patchboard , dark gray housing, gray/white/blue modules, vertical module marking on sides 1 and 2	1 ... 32	32-pole				48-pole				80-pole							
Side 1: 3 x 0.08 ... 1.5 mm ² /28 ... 16 AWG	33 ... 64	 	726-121	20			726-141	1	20								
Side 2: 3 x 0.08 ... 1.5 mm ² /28 ... 16 AWG	1 ... 48	 	726-122	20			726-142	1	20								
	1 ... 80					 	726-421	10			726-441	1	10	 	726-721	8	
											726-741	1	8				
Matrix patchboard	1 ... 32	 	726-221	20													
Side 1: 3 x 0.08 ... 1.5 mm ² /28 ... 16 AWG	33 ... 64		726-241	1	20												
Side 2: 2 x 0.08 ... 2.5 mm ² /28 ... 14 AWG	1 ... 48	 	726-222	20			726-242	1	20								
	1 ... 80					 	726-521	10			726-541	1	10	 	726-821	8	
											726-841	1	8				
Matrix patchboard , slimline version, for 19" racks	1 ... 32	 	726-321	24													
Side 1: 2 x 0.08 ... 1.5 mm ² /28 ... 16 AWG	33 ... 64		726-341	1	24												
Side 2: 2 x 0.08 ... 1.5 mm ² /28 ... 16 AWG	1 ... 48	 	726-322	24			726-342	1	24								
	1 ... 80																
Common potential matrix patchboard , slimline version, for 19" racks, dark gray frame, gray/white/green-yellow modules, vertical module marking, with 1 or 2 supply terminal blocks for 76 A incl. end plate	1 ... 24													24-pole		726-601	10
Side 1: 2 x 0.08 ... 1.5 mm ² /28 ... 16 AWG																726-611	10
Side 2: 2 x 0.08 ... 1.5 mm ² /28 ... 16 AWG																726-621	10
																726-602	10
																726-612	10
																726-622	10
Matrix patchboard , slimline version, for 19" racks, with push-buttons and Push-in CAGE CLAMP®, without marking		18-pole				32-pole				54-pole							
Side 1: 2 x 0.2 ... 1.5 mm ² /28 ... 16 AWG			726-750	20			726-770	20			726-850	10					
Side 2: 2 x 0.2 ... 1.5 mm ² /28 ... 16 AWG																	

Accessories, 726 Series

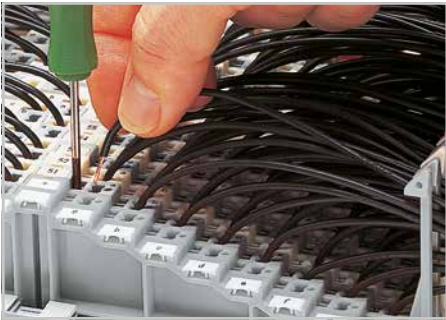
(Marking and mounting accessories, see Full Line Catalog)

 <p>can be snapped to the lower mounting element, with CAGE CLAMP® connection, with contact to mounting frame</p>	 <p>Insulation stop, 4 x 3 pcs/strip</p>	<p>0.08 ... 0.2 mm² "s" (0.14 mm² "f-st")</p> <p> 726-901 200</p> <p>0.25 mm² "s" 0.14 ... 0.25 mm² "f-st"</p> <p> 726-906 200</p> <p>0.25 ... 0.5 mm² "s+f-st"</p> <p> 726-907 200</p>	<p>Test plug, with 500 mm cable</p> <p> </p> <p> 2 mm Ø 210-136 50</p> <p> 2.3 mm Ø 210-137 50</p>
	<p></p> <p> 726-903 25</p> <p> 726-904 25</p>	<p>Step-down test plug, from 4 mm socket to 2 mm plug</p> <p>  210-297 100 (4x25)</p>	
<p>Decade marker carrier, for matrix patchboards</p> <p> 726-905 10</p>	<p>Operating tool with a partially insulated shaft, type 1, (2.5 x 0.4) mm blade</p> <p> 210-719 1</p>		

① Suitable for Ex i applications

Terminal Blocks for Matrix Patching and Common Potential Terminal Blocks – Description and Installation –

CAGE CLAMP® connection



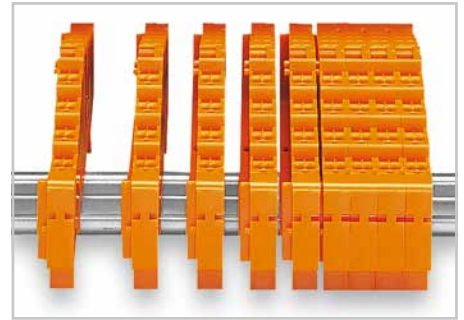
Inserting/removing conductor via operating tool (2.5 x 0.4 mm blade).

Wiring space

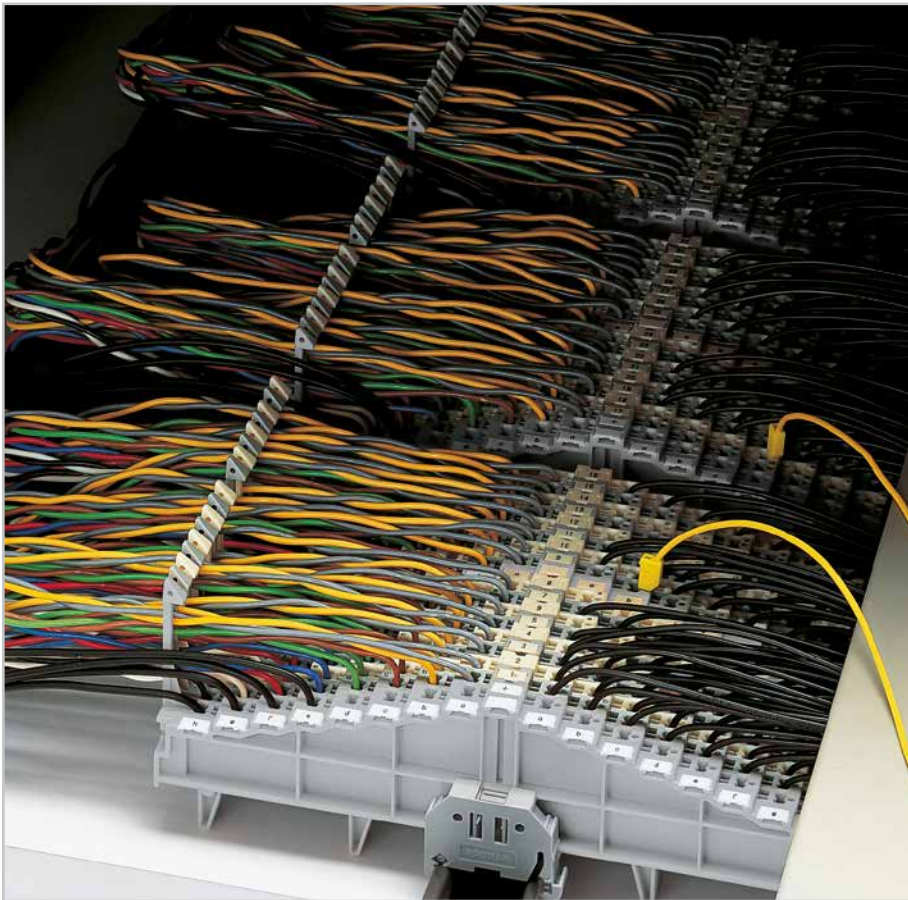


Using terminal blocks with locking clips, the wiring space between the terminal strips can be covered with a wiring duct cover.

Assembly



Snap individual 4- or 8-level terminal blocks onto the carrier rail. Slide terminal blocks together.



Assembly/Removal



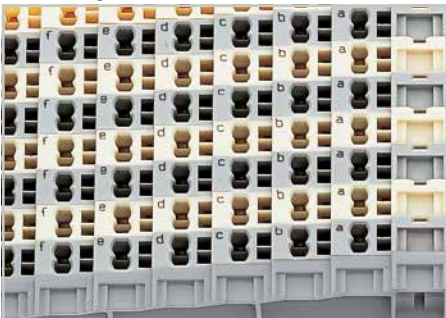
Grip end plate at both sides and
– push down (assembly)
– pull up (removal)

Removal



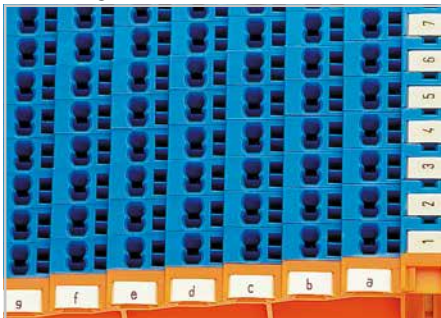
Open the assembly by laterally sliding a block via operating tool (2.5 x 0.4 mm blade). Slide terminal block and remove from the rail with a levering action.

Marking



Mark of clamping points with direct printing.

Marking



Marking coordinates via WMB Multi Marking System.











Testing



Special test contact for 2 mm or 2.3 mm Ø test plug, as well as step-down test plug with 4 mm socket

CAGE CLAMP®





































































4- and 8-Level Matrix Patching/Common Potential Terminal Blocks, 1.5 mm² 727 Series

Terminal block for matrix patching, 4 x pairs of clamping units on the same level	0.08 ... 1.5 mm ² 250 V/4 kV/3 I _N 12 A	28 ... 16 AWG 300 V, 10 A  300 V, 10 A 	0.08 ... 1.5 mm ² 250 V/4 kV/3 I _N 12 A	28 ... 16 AWG 300 V, 10 A  300 V, 10 A 
Common potential terminal block, all clamping units are connected to the same current bar	Terminal block width: 7.62 mm / 0.3 in.  8 ... 10 mm / 0.35 in.	 8 ... 10 mm / 0.35 in.	Terminal block width: 7.62 mm / 0.3 in.  8 ... 10 mm / 0.35 in.	 8 ... 10 mm / 0.35 in.
	 Approvals	 Approvals		













4-level terminal block for matrix patching

8-level common potential terminal block

Description	Marking	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit				
Matrix patching/common potential terminal block without locking clips, for DIN 35 x 7.5 rail per EN 60715		4 levels				8 levels				4 levels				8 levels			
			727-220	50		727-120	25		727-226	50		727-126	25				
			727-222	50		727-122	25		727-228	50		727-128	25				
			727-224 	50		727-124 	25										
Matrix patching/common potential terminal block without locking clips, for DIN 35 x 15 rail per EN 60715		4 levels				8 levels				4 levels				8 levels			
			727-230	50		727-130	25		727-236	50		727-136	25				
			727-232	50		727-132	25		727-238	50		727-138	25				
			727-234 	50		727-134 	25										
Matrix patching/common potential terminal block with locking clips, for DIN 35 x 7.5 rail per EN 60715		4 levels				8 levels				4 levels				8 levels			
			727-219	50		727-119	25		727-225	50		727-125	25				
			727-221	50		727-121	25		727-227	50		727-127	25				
			727-223 	50		727-123 	25										
Matrix patching/common potential terminal block with locking clips, for DIN 35 x 15 rail per EN 60715		4 levels				8 levels				4 levels				8 levels			
			727-229	50		727-129	25		727-235	50		727-135	25				
			727-231	50		727-131	25		727-237	50		727-137	25				
			727-233 	50		727-133 	25										
End plate, 7.62 mm		4 levels				8 levels				4 levels				8 levels			
					727-217	25				727-217	25				727-117	25	
			Marking: 0-1-2-3-3-2-1-0		727-205	25				727-205	25				727-105	25	
	Marking: a-b-c-d-d-c-b-a		727-206	25				727-206	25				727-106	25			
End plate, 7.62 mm		4 levels				8 levels				4 levels				8 levels			
					727-117	25				727-117	25				727-117	25	
			Marking: 0-1-2-3-4-5-6-7-7-6-5-4-3-2-1-0		727-105	25				727-105	25				727-105	25	
	Marking: a-b-c-d-e-f-g-h-h-g-f-e-d-c-b-a		727-106	25				727-106	25				727-106	25			
Item no. suffixes for terminal blocks with marking:																	
0-1-2-3-3-2-1-0		.../021-000				.../021-000				.../021-000							
a-b-c-d-d-c-b-a		.../022-000				.../022-000				.../022-000							
3-2-1-0-0-1-2-3		.../023-000				.../023-000				.../023-000							
d-c-b-a-a-b-c-d		.../024-000				.../024-000				.../024-000							
0-1-2-3-4-5-6-7-7-6-5-4-3-2-1-0		.../021-000				.../021-000				.../021-000							
a-b-c-d-e-f-g-h-h-g-f-e-d-c-b-a		.../022-000				.../022-000				.../022-000							
7-6-5-4-3-2-1-0-0-1-2-3-4-5-6-7		.../023-000				.../023-000				.../023-000							
h-g-f-e-d-c-b-a-a-b-c-d-e-f-g-h		.../024-000				.../024-000				.../024-000							


Accessories, 727 Series

(Marking and mounting accessories, see Full Line Catalog)

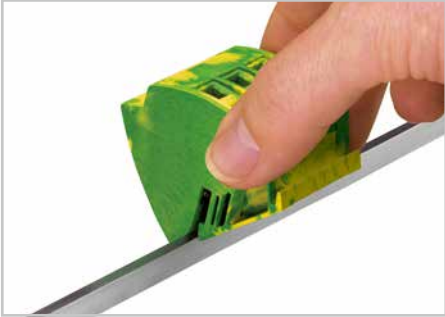
Insulation stop , 8 pcs/strip  0.08 ... 0.2 mm ² "s" (0.14 mm ² "f-st")  727-197 200 0.25 mm ² "s" 0.14 ... 0.25 mm ² "f-st"  727-198 200 0.25 ... 0.5 mm ² "s+f-st"  727-199 200	Operating tool with a partially insulated shaft , type 1, (2.5 x 0.4) mm blade  210-719 1
	Test plug , with 500 mm cable   2 mm Ø 210-136 50  2.3 mm Ø 210-137 50
	Wire commoning chain , insulated, 31 connections,  I _N 6 A, max. 50 V, 0.5 mm ²  709-107 1

 For all approvals and corresponding ratings, visit www.wago.com.

For technical explanations and abbreviations, see technical section.

 Suitable for Ex i applications

Busbar Terminal Blocks – Description and Installation –



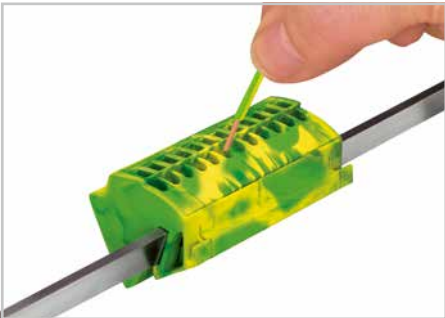
Snapping a ground busbar terminal block onto the N-busbar



Unlock right and left positions to remove the ground busbar terminal block. Then pull up the block from the busbar.

Using the 812 Series Busbar Terminal Blocks in switchgear cabinets and distribution boards permits simple and safe potential distribution on standard 10 x 3 mm busbars. Tool-free snapping of self-locking busbar terminal blocks onto the busbar enables quick and easy assembly, as well as subsequent extension. The busbar terminal blocks are available in two different versions for conductors ranging from 1.5–16 mm² (16–6 AWG). Current carrying capacity: With a maximum total current of 96 A, the clamping units of the busbar terminal block can be loaded with the rated current of the conductor cross-sections approved. This only applies when 10 x 3 mm busbars are used.

Conductor termination (4 mm²)



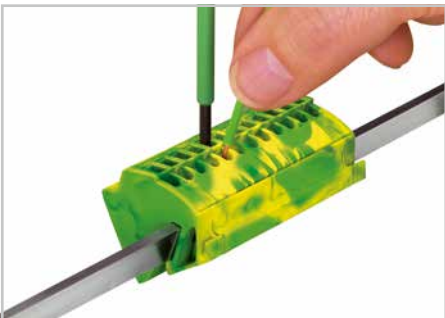
With Push-in CAGE CLAMP®, solid conductors can be terminated by simply pushing them into the 12 x 4 mm² busbar terminal block, significantly reducing wiring time.

Conductor termination (16 mm²)



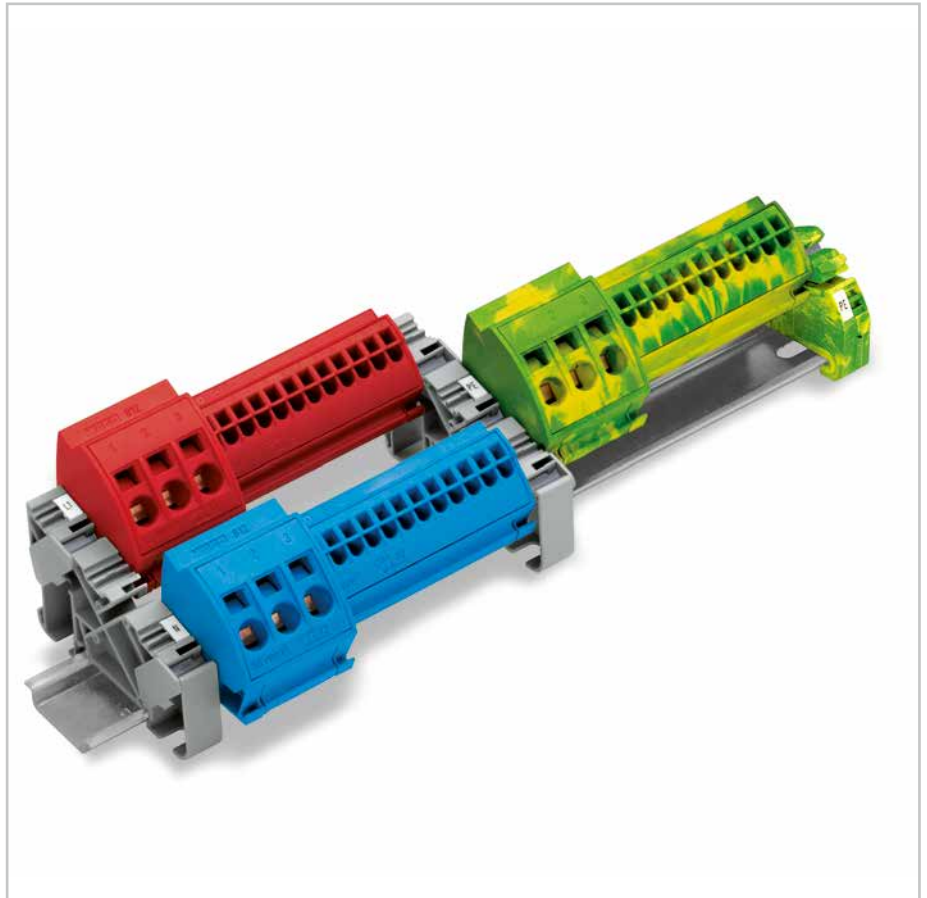
Open the clamping unit with an operating tool when terminating solid, stranded and fine-stranded conductors.

Conductor removal (4 mm² and 16 mm²)

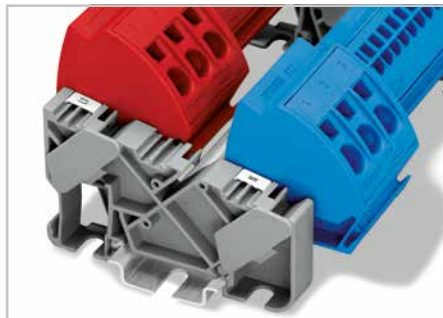


Open the clamping unit using an operating tool.

Mixed 4 mm² and 16 mm² busbar terminal blocks

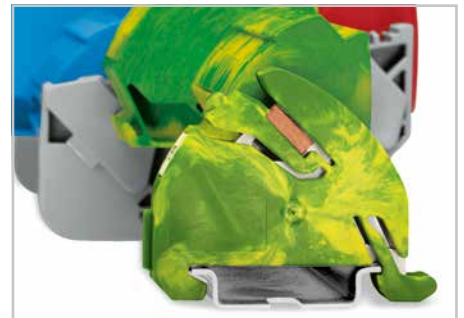


Busbar carrier



Carrier with 3 receptacles for 10 x 3 mm busbars with locking device for easy mounting of the busbars. The carriers can be snapped onto the DIN-35 rail or screwed on a panel.

Ground busbar carrier









Carrier including a receptacle with locking device for (10 x 3) mm busbar. Contact between the busbar and rail is made automatically by simply snapping the carrier onto the carrier rail. One end of the busbar is mounted onto the ground busbar carrier, the other end is inserted into the middle position of the insulated busbar carrier.

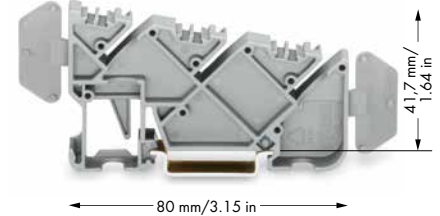
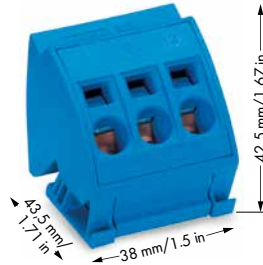
Busbar Terminal Blocks

4 mm² and 16 mm²

812 Series

PUSH-IN CAGE CLAMP®
CAGE CLAMP®

0.5 ... 4 mm² 1000 V/6 kV/3 I _N 96 A Terminal block width: 75 mm / 2.953 in.  11 mm / 0.43 in. 1 Approvals	20 ... 12 AWG 600 V, 20 A  600 V, 95 A 	1.5 ... 16 mm² 1000 V/6 kV/3 I _N 96 A Terminal block width: 38 mm / 1.496 in.  12 mm / 0.47 in. 1 Approvals	14 ... 6 AWG 600 V, 20 A  600 V, 95 A 	Insulated busbar carrier
--	--	---	---	---------------------------------



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Busbar terminal block 4 mm² with Push-in CAGE CLAMP®			Busbar terminal block 16 mm² with CAGE CLAMP®			Insulated busbar carrier, 12 mm wide		
● blue	812-104	10	● blue	812-114	12	○ gray	812-140	25
○ light gray	812-101	10	○ light gray	812-111	12			
● dark gray	812-102	10	● dark gray	812-112	12			
● red	812-103	10	● red	812-113	12			

Item-Specific Accessories
Straight busbar, Cu with tin plating,

 10 x 3 mm,
 1000 mm long
 I_N 140 A **210-133** 1

Item-Specific Accessories
Straight busbar, Cu with tin plating,

 10 x 3 mm,
 1000 mm long
 I_N 140 A **210-133** 1

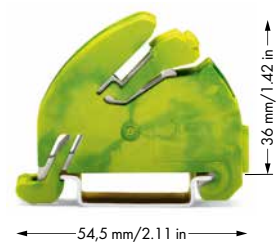
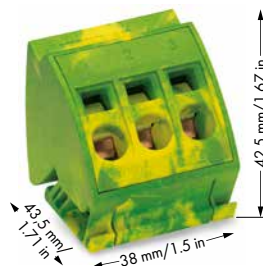
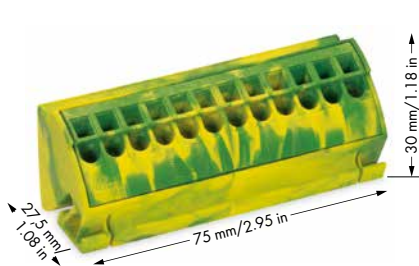
Item-Specific Accessories
WMB Multi marking system, plain,

 10 strips with 10 markers per card,
 stretchable from 5 ... 5.2 mm
793-5501 5

WMB Inline, plain,

 stretchable from 5 ... 5.2 mm,
 1500 WMB markers (5 mm) per roll
2009-115 1

Finger guard,

 touch-proof cover protects unused
 conductor entries
 ● **284-400** 100 (4x25)


Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Ground busbar terminal block 4 mm² with Push-in CAGE CLAMP®			Ground busbar terminal block 16 mm² with CAGE CLAMP®			Ground busbar carrier with DIN-35 rail contact, 11 mm wide		
● green-yellow	812-100	10	● green-yellow	812-110	12	● green-yellow	812-141	25

Item-Specific Accessories
Straight busbar, Cu with tin plating,

 10 x 3 mm,
 1000 mm long
 I_N 140 A **210-133** 1

Item-Specific Accessories
Straight busbar, Cu with tin plating,

 10 x 3 mm,
 1000 mm long
 I_N 140 A **210-133** 1

Accessories
Operating tool with a partially insulated shaft,

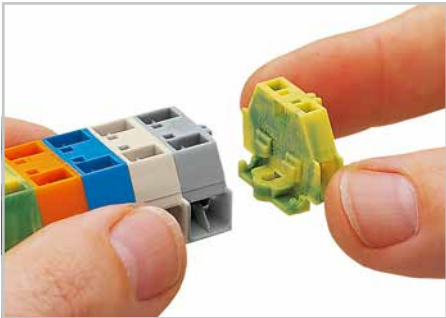
 type 2, (3.5 x 0.5) mm blade
210-720 1

Finger guard,

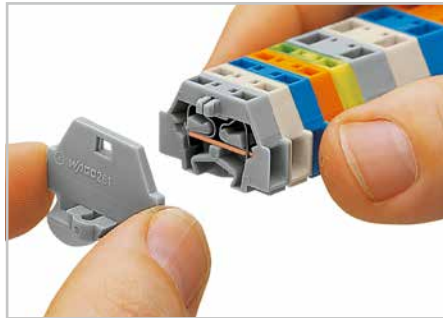
 touch-proof cover protects unused
 conductor entries
 ● **284-400** 100 (4x25)

Modular Terminal Blocks and Terminal Strips, Side-Entry – Description and Installation –

Assembly

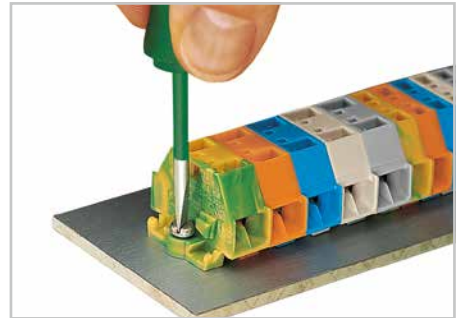


Assembling modular terminal blocks into terminal strips.



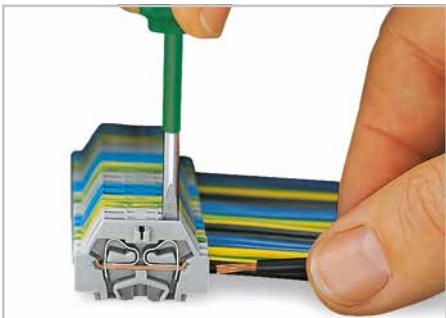
Mounting an end plate.

Mounting

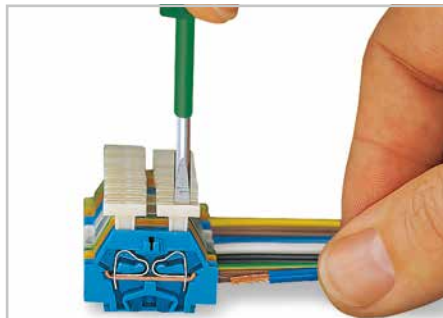


Mounting and securing a terminal strip directly to the plate via screw-type flanges.

CAGE CLAMP® connection



Inserting a conductor via operating tool.



Inserting a conductor via push-button.

Mounting

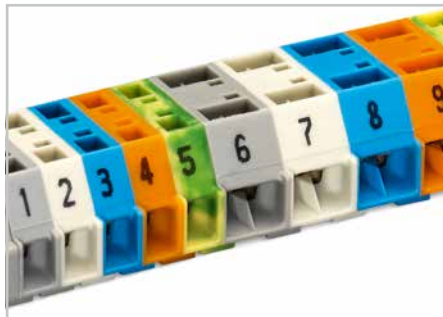


Securing a mounting foot (209-123) to the terminal strip with mounting flanges (distance between mounting feet: approx. 35 ... 40 mm).

Marking

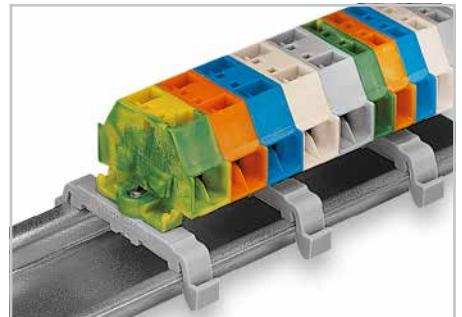


Marking with self-adhesive marking strips.



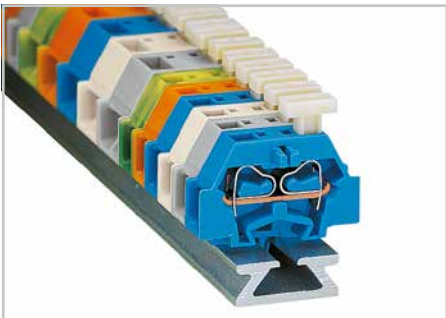
Marking by direct printing (upon request).

Mounting

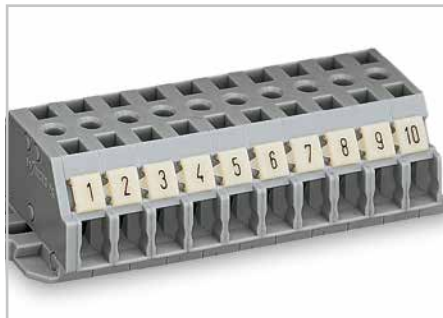


Terminal strip with mounting flanges, on DIN-35 rail

Types

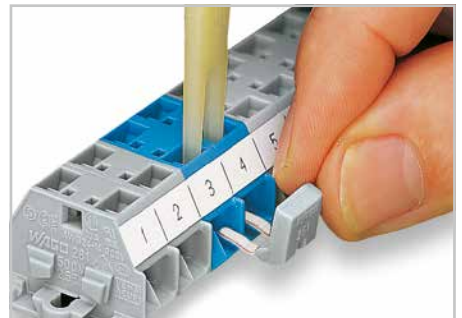


Terminal strip with push-buttons on one side.



Terminal strip with marker slot for Miniature WSB Quick Marking System (see Full Line Catalog).

Commoning



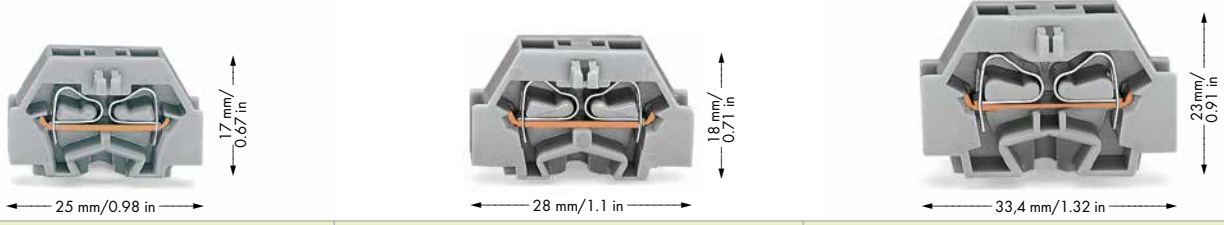
Commoning with comb-style jumper bar.

For information on Push-in CAGE CLAMP® connection, see page 14.

Modular Terminal Blocks and Terminal Strips

260 ... 262 Series

<p>0.08 ... 1.5 mm² 400 V/6 kV/3 I_N 18 A 2-cond. terminal block width: 5 mm/0.197 in. 4-cond. terminal block width: 8 mm/0.315 in. 8 ... 9 mm / 0.33 in. ① Approvals</p>	<p>28 ... 16 AWG 300 V, 10 A 300 V, 15 A </p>	<p>0.08 ... 2.5 mm² 500 V/6 kV/3 I_N 24 A 2-cond. terminal block width: 6 mm/0.236 in. 4-cond. terminal block width: 10 mm/0.394 in. 8 ... 9 mm / 0.33 in. ① Approvals</p>	<p>28 ... 14 AWG 300/600 V, 15 A 300/600 V, 20 A </p>	<p>0.08 ... 4 mm² 630 V/8 kV/3 I_N 24 A ② (32 A ③) 2-cond. terminal block width: 7 mm/0.276 in. 4-cond. terminal block width: 12 mm/0.472 in. 9 ... 10 mm / 0.37 in. ① Approvals</p>	<p>28 ... 12 AWG 300/600 V, 20 A 300/600 V, 20 A </p>
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit			
gray	260-301	260-331	300 (6x50)	gray	261-301	261-331	200 (4x50)	gray	262-301	262-331	100 (2x50)
light gray	260-303	260-333	300 (6x50)	light gray	261-303	261-333	200 (4x50)	light gray	262-130	262-230	100 (2x50)
blue	260-304	260-334	300 (6x50)	blue	261-304 ④	261-334 ④	200 (4x50)	blue	262-304 ④	262-334 ④	100 (2x50)
orange	260-306	260-336	300 (6x50)	orange	261-306	261-336	200 (4x50)	orange	262-306	262-336	100 (2x50)
green-yellow	260-307	260-337	300 (6x50)	green-yellow	261-307	261-337	200 (4x50)	green-yellow	262-307	262-337	100 (2x50)

Versions with push-buttons, see bottom right



Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit			
	2-Cond. Block	4-Cond. Block		2-Cond. Block	4-Cond. Block		2-Cond. Block ②	4-Cond. Block ③			
Terminal strip with mounting flanges, gray			Terminal strip with mounting flanges, gray			Terminal strip with mounting flanges, gray					
2	260-102	260-202	100	2	261-102	261-202	100	2	262-102	262-202	100
3	260-103	260-203	100	3	261-103	261-203	100	3	262-103	262-203	100
:	:	:		:	:		:	:		:	
12	260-112	260-212	25	12	261-112	261-212	25	12	262-112	262-212	25

Accessories, 260/261/262 Series

Appropriate marking system, see page 244

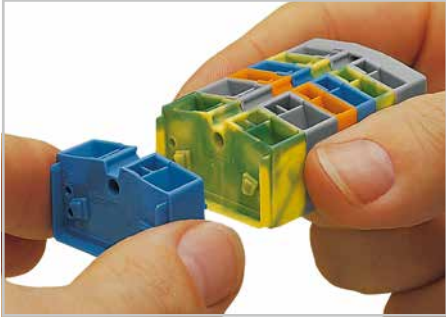
<p>End plate with mounting flange, gray for 260 Series 260-361 100 (2x50) for 261 Series 261-361 100 (2x50) for 262 Series 262-361 50</p>	<p>Mounting foot with screw, for DIN-35 rail, 6 mm wide, can be screwed on terminal blocks with mounting flange 209-123 25</p>	<p>Item no. suffixes for terminal blocks and terminal strips with push-buttons (for 261 Series only) Push-buttons on one side: 2-Cond. Block 261-.../331-000 4-Cond. Block 261-.../332-000</p>																																					
<p>Comb-style jumper bar, insulated, 2-way </p>	<p>Test plug module 100 (4x25)</p>	<p>Push-buttons on both sides: 2-Cond. Block 261-.../341-000 4-Cond. Block 261-.../342-000</p>																																					
<table border="1"> <thead> <tr> <th>Series</th> <th>I_N</th> <th>Reduc. Cross Sect.</th> <th>Pack. Unit</th> </tr> </thead> <tbody> <tr> <td>260-402</td> <td>10 A</td> <td>1 mm²/18 AWG</td> <td>25 pcs</td> </tr> <tr> <td>261-402</td> <td>16 A</td> <td>1.5 mm²/16 AWG</td> <td>25 pcs</td> </tr> <tr> <td>262-402</td> <td>16 A</td> <td>2.5 mm²/14 AWG</td> <td>25 pcs</td> </tr> </tbody> </table>	Series	I _N	Reduc. Cross Sect.	Pack. Unit	260-402	10 A	1 mm ² /18 AWG	25 pcs	261-402	16 A	1.5 mm ² /16 AWG	25 pcs	262-402	16 A	2.5 mm ² /14 AWG	25 pcs	<p>Locking devices</p> <table border="1"> <thead> <tr> <th>Series</th> <th>with</th> <th>without</th> </tr> </thead> <tbody> <tr> <td>260 / 5 mm</td> <td>260-404</td> <td>249-135</td> </tr> <tr> <td>8 mm</td> <td>260-405</td> <td>249-138</td> </tr> <tr> <td>261 / 6 mm</td> <td>261-404</td> <td>249-136</td> </tr> <tr> <td>10 mm</td> <td>261-405</td> <td>249-139</td> </tr> <tr> <td>262 / 7 mm</td> <td>261-405</td> <td>249-137</td> </tr> <tr> <td>12 mm</td> <td>261-405</td> <td>249-140</td> </tr> </tbody> </table>	Series	with	without	260 / 5 mm	260-404	249-135	8 mm	260-405	249-138	261 / 6 mm	261-404	249-136	10 mm	261-405	249-139	262 / 7 mm	261-405	249-137	12 mm	261-405	249-140	<p>Operating tool with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade 210-720 1</p>
Series	I _N	Reduc. Cross Sect.	Pack. Unit																																				
260-402	10 A	1 mm ² /18 AWG	25 pcs																																				
261-402	16 A	1.5 mm ² /16 AWG	25 pcs																																				
262-402	16 A	2.5 mm ² /14 AWG	25 pcs																																				
Series	with	without																																					
260 / 5 mm	260-404	249-135																																					
8 mm	260-405	249-138																																					
261 / 6 mm	261-404	249-136																																					
10 mm	261-405	249-139																																					
262 / 7 mm	261-405	249-137																																					
12 mm	261-405	249-140																																					
<p>Operating tool, insulated, for comb-style jumper bar 2-way 209-132 1</p>	<p>④ Suitable for Ex i applications Suitable for Ex e II applications</p>																																						

① For all approvals and corresponding ratings, visit www.wago.com.

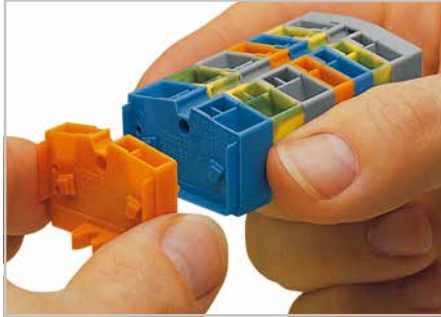
For technical explanations and abbreviations, see technical section.

Modular Terminal Blocks and Terminal Strips, Front-Entry – Description and Installation –

Assembly



Assembling modular terminal blocks into terminal strips.



Mounting an "end terminal block" with mounting flange.

Mounting



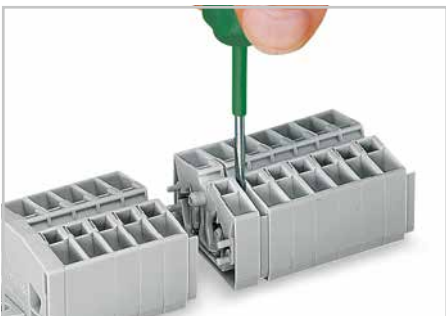
Mounting and securing a terminal strip directly to the plate via screw-type flanges.

CAGE CLAMP® connection

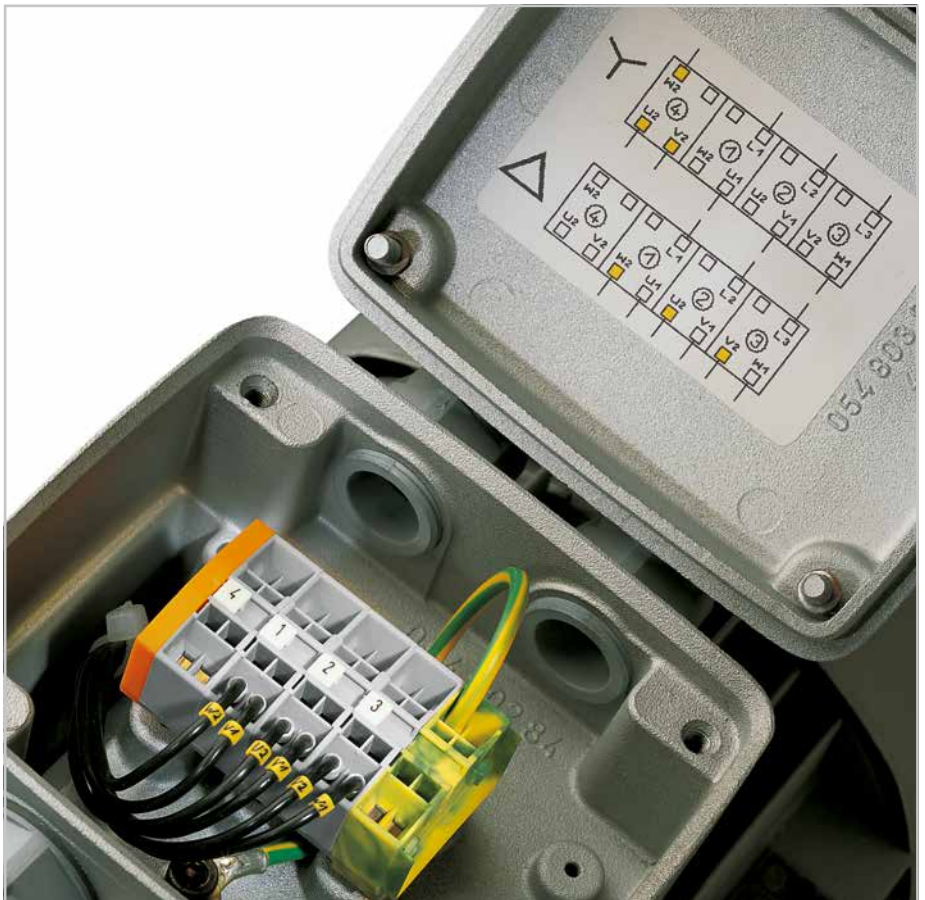


Inserting a conductor via operating tool.

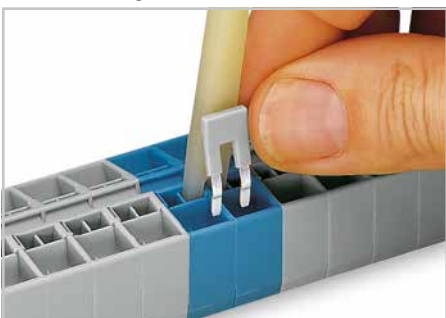
Removal



Removing a terminal block.

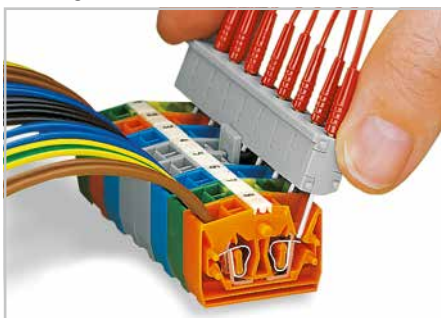


Commoning



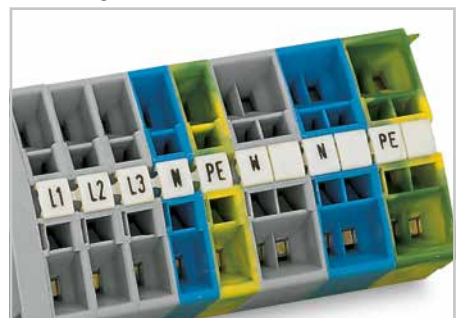
Commoning with a comb-style jumper bar.

Testing



Testing with test plug module assembly – touch contact.

Marking

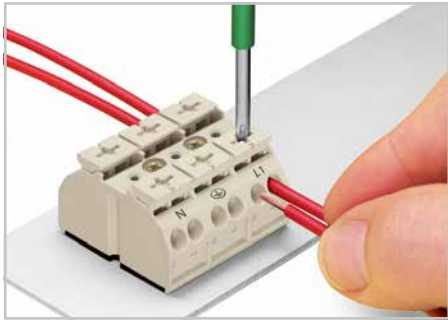


Marking using Miniature WSB Quick markers.

For information on Push-in CAGE CLAMP® connection, see page 14.

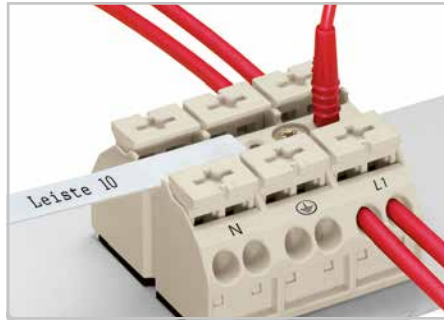
4-Conductor, Chassis-Mount Terminal Strips – Description and Installation –

Conductor termination



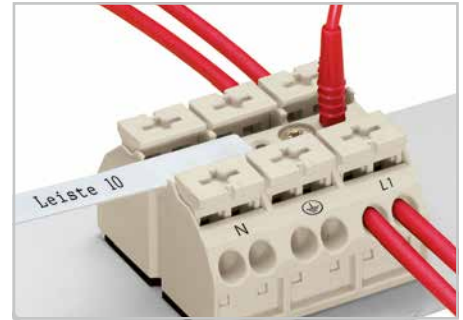
Four conductors per pole for solid and fine-stranded conductors

Marking



Marking by direct, one-side printing and/or marking strips.

Testing



Testing with 2 mm Ø test plug.

Ground (PE) contact

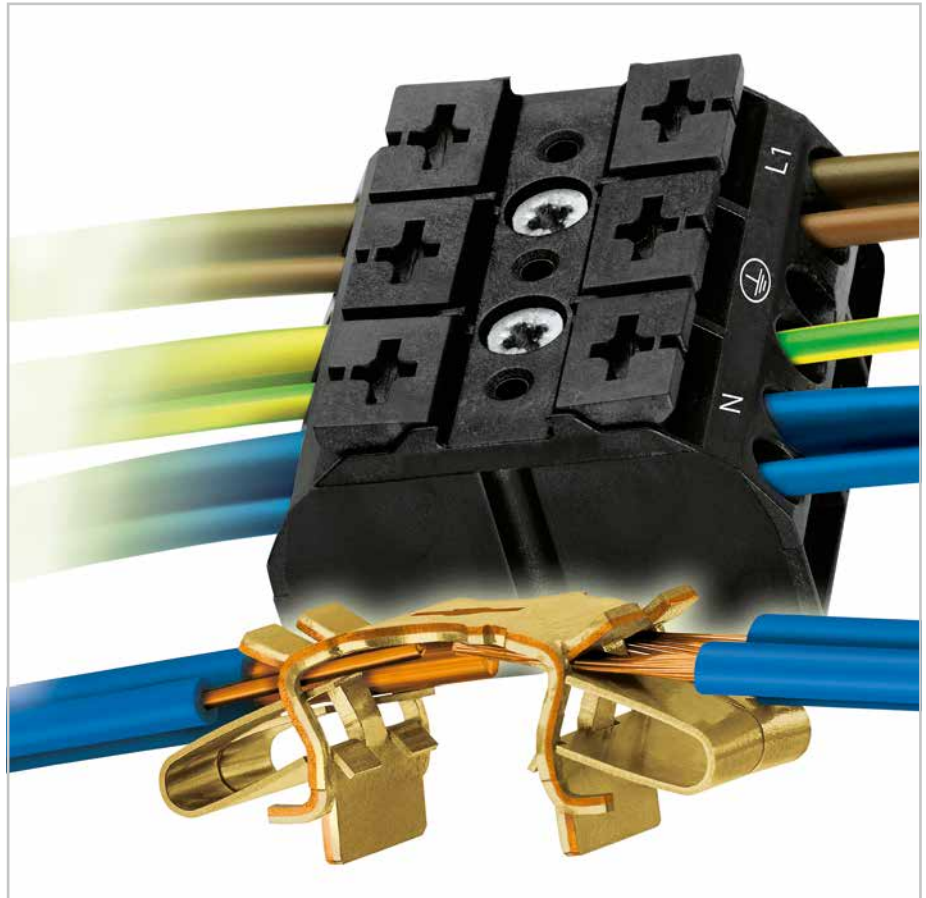


Makes an automatic contact to the mounting plate. The varnish coating is instantly penetrated.

Commoning



Commoning with comb-style jumper bar.



Cost-effective features:

The 862 Series Chassis-Mount Terminal Strips were developed specifically to **minimize wiring costs**, while accommodating requirements for flexible mounting, multiple connection points and easy handling:

- The 862 Series equipped with Push-in CAGE CLAMP® connects up to four conductors sized 20 ... 12 AWG (0.5 ... 4 mm²). Due to multiple connection points per pole, different conductor sizes can be used within the same terminal block position.
- For factory wiring, Push-in CAGE CLAMP® Connection Technology allows solid conductors, fine-stranded conductors with ferrules or ultrasonically bonded conductors from 20 ... 12 AWG (0.5 ... 4mm²) to be terminated by simply pushing them into unit (length of bonded conductor end: min. 10 mm)
- Convenient automatic grounding contact available as an option
- Snap-in mounting feet for fast assembly
- Push-buttons for easy installation with an operating tool or by hand
- Built-in test points simplify testing with 2 mm Ø test plug
- Flexible marking options with standard marking (pre-marked), marking strip or custom marked for large orders

For information on Push-in CAGE CLAMP® connection, see page 14.

4-Conductor, Chassis-Mount Terminal Strips

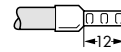
2-, 3-, 4- and 5-Pole, 4 mm²

862 Series

PUSH-IN CAGE CLAMP®

	0.5 ... 4 mm ² ① 500 V/6 kV/3 I _N 32 A	20 ... 12 AWG 300 V, 20 A ② 300 V, 20 A ③	0.5 ... 4 mm ² ① 500 V/6 kV/3 I _N 32 A	20 ... 12 AWG 300 V, 20 A ② 300 V, 20 A ③
	10 ... 11 mm / 0.41 in.		10 ... 11 mm / 0.41 in.	
	② Approvals		② Approvals	

① Conductor range: 0.25 ... 4 mm² "s+st"
Push-in termination: 0.75 ... 4 mm² "s" and
0.75 ... 2.5 mm² "insulated ferrule, 12 mm"



Available in white and black housings

2- and 3-pole

4- and 5-pole

	without Ground (PE) contact	with Ground (PE) contact	Marking	Item No. black	Item No. white	Pack. Unit	Marking	Item No. black	Item No. white	Pack. Unit
For fastening with a screw and nut (M3) or a self-tapping screw (2.9 mm Ø) from top,										
	without ground contact		without	● 862-552	○ 862-652	500	without	● 862-504	○ 862-604	200
			L1-N	● 862-1552	○ 862-1652	500	⊕-N-L1-L2	● 862-1504	○ 862-1604	200
			N-L1	● 862-2552	○ 862-2652	500	N-⊕-L1-L2	● 862-2504	○ 862-2604	200
	with ground contact						N-⊕-L1-L2	● 862-8504	○ 862-8604	200
			⊕-N-L1-L2	● 862-9504	○ 862-9604	200				
For fastening via self-tapping screw (2.9 mm Ø) from below,										
	without ground contact		without	● 862-562	○ 862-662	500	without	● 862-534	○ 862-634	200
			L1-N	● 862-1562	○ 862-1662	500	⊕-N-L1-L2	● 862-1534	○ 862-1634	200
			N-L1	● 862-2562	○ 862-2662	500	N-⊕-L1-L2	● 862-2534	○ 862-2634	200
	with ground contact						N-⊕-L1-L2	● 862-8534	○ 862-8634	200
			⊕-N-L1-L2	● 862-9534	○ 862-9634	200				
1 snap-in foot per pole,										
	without ground contact		without	● 862-532	○ 862-632	500	without	● 862-594	○ 862-694	200
			L1-N	● 862-1532	○ 862-1632	500	⊕-N-L1-L2	● 862-1594	○ 862-1694	200
			N-L1	● 862-2532	○ 862-2632	500	N-⊕-L1-L2	● 862-2594	○ 862-2694	200
	with ground contact						N-⊕-L1-L2	● 862-8594	○ 862-8694	200
			⊕-N-L1-L2	● 862-9594	○ 862-9694	200				
For fastening screw and nut (3 mm Ø) or self-tapping screw (2.9 mm Ø) from top,										
	without ground contact		without	● 862-503	○ 862-603	250	without	● 862-505	○ 862-605	200
			⊕-N-L1	● 862-1503	○ 862-1603	250	⊕-N-L1-L2-L3	● 862-1505	○ 862-1605	200
			N-⊕-L1	● 862-2503	○ 862-2603	250	N-⊕-L1-L2-L3	● 862-2505	○ 862-2605	200
	with ground contact						N-⊕-L1-L2-L3	● 862-8505	○ 862-8605	200
			⊕-N-L1	● 862-9503	○ 862-9603	250	⊕-N-L1-L2-L3	● 862-9505	○ 862-9605	200
1 snap-in foot per pole,										
	without ground contact		without	● 862-533	○ 862-633	250	without	● 862-525	○ 862-625	200
			⊕-N-L1	● 862-1533	○ 862-1633	250	⊕-N-L1-L2-L3	● 862-1525	○ 862-1625	200
			N-⊕-L1	● 862-2533	○ 862-2633	250	N-⊕-L1-L2-L3	● 862-2525	○ 862-2625	200
	with ground contact						N-⊕-L1-L2-L3	● 862-8525	○ 862-8625	200
			⊕-N-L1	● 862-9533	○ 862-9633	250	⊕-N-L1-L2-L3	● 862-9525	○ 862-9625	200
Snap-in feet at pos. 1+3										
	without ground contact		without	● 862-593	○ 862-693	250	without	● 862-515	○ 862-615	200
			⊕-N-L1	● 862-1593	○ 862-1693	250	⊕-N-L1-L2-L3	● 862-1515	○ 862-1615	200
			N-⊕-L1	● 862-2593	○ 862-2693	250	N-⊕-L1-L2-L3	● 862-2515	○ 862-2615	200
	with ground contact						N-⊕-L1-L2-L3	● 862-8515	○ 862-8615	200
			⊕-N-L1	● 862-9593	○ 862-9693	250	⊕-N-L1-L2-L3	● 862-9515	○ 862-9615	200

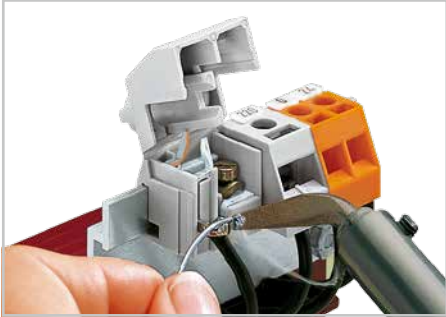
Accessories, 862 Series

Comb-style jumper bar , simply push into the conductor entry I _N 32 A 862-482 5	Test plug , with 500 mm cable ● 2 mm Ø 210-136 50 ● 2.3 mm Ø 210-137 50	Marking strip , plain, 7.5 mm wide, 50 m roll ○ 709-178 1
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② Approvals are available online at: www.wago.com.

Transformer Terminal Blocks with Screw Clamp Connection, 200 / 201 / 202 Series – Description and Installation –

Solder connection



Soldering winding ends.

Snapping cover



Snapping cover onto 202 Series terminal block.

Fuse



Touch-proof insertion/removal of fuse carrier

Conductor termination



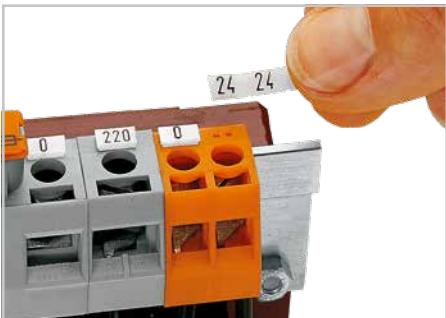
Large conductor entries and clear identification of the connection points

Finger guard



All WAGO transformer terminal blocks are touch-proof per VBG 4.

Beschriften



Terminal identification with marker tags

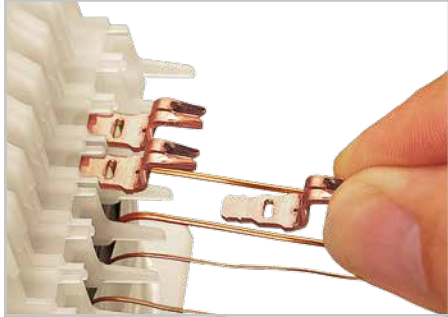


- Simple snap-on mounting on flat rails
- Easy conductor termination via self-lifting clamping ring
- Large cross-section range up to 10 mm² (57 A)

Transformer Terminal Blocks with CAGE CLAMP® Connection, 711 Series CAGE CLAMP®

– Description and Handling –

Installation*



Pre-assembly of coil contacts:
Inserting a contact into the coil bobbin.

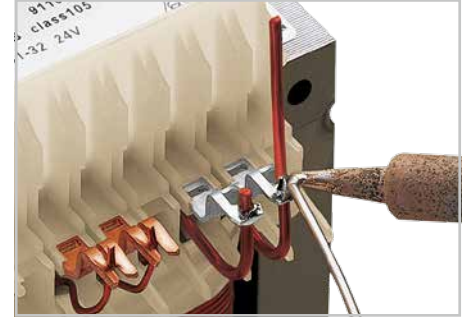
Insulation Displacement Connection (IDC)



Final assembly of coil contacts:

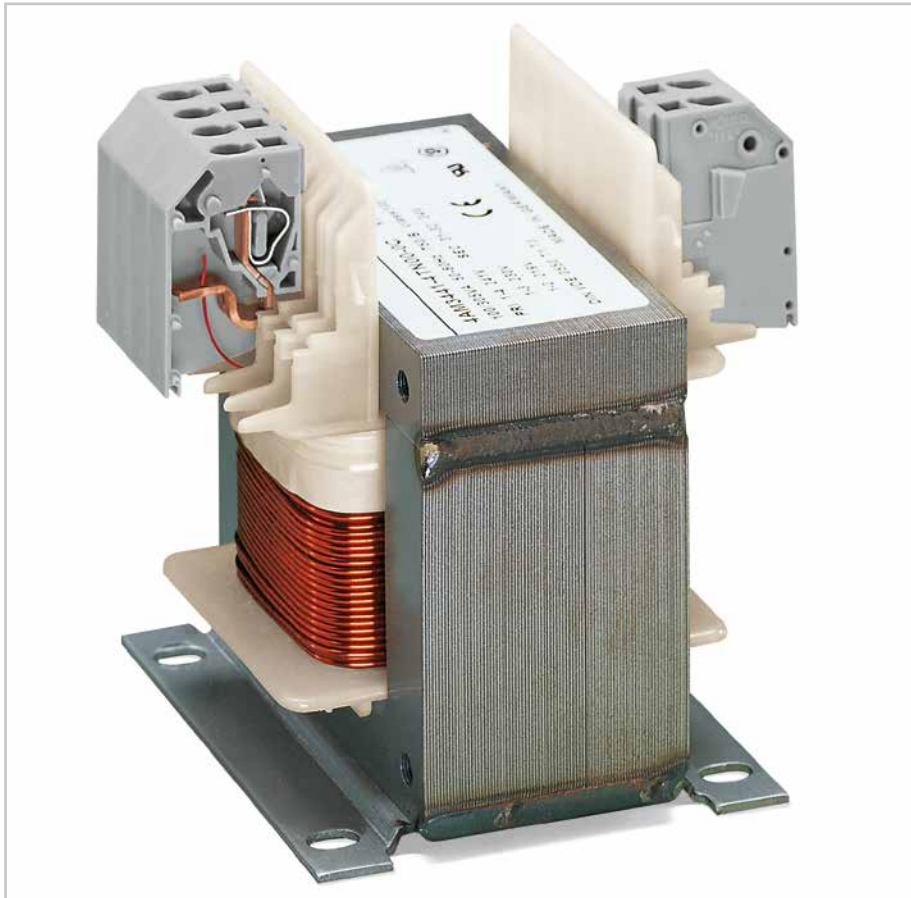
- Pressing in contacts via tool ①
- Final position ②

Solder connection



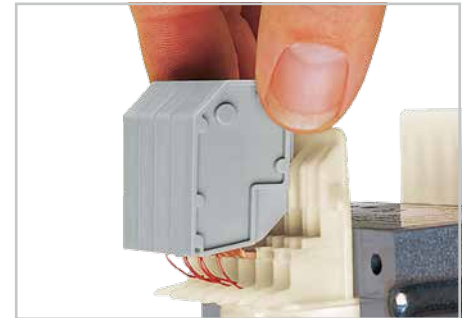
Combining IDC and solder connection - coil contacts with solder connection for larger cross-sections or connection of several coil wires (center tap)

*Detailed installation notes upon request



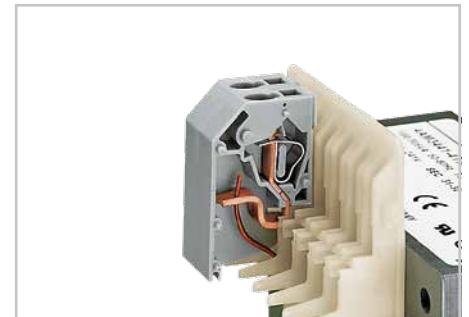
- Fast wiring through direct contact with the varnished coil wires
- Up to 90 % faster - no soldering required for small conductor sizes
- Modular block assembly means that only one snap-on process is required for the terminal blocks

Mounting



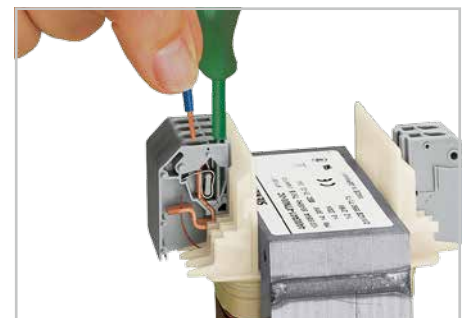
After connecting the coil wires (IDC: only one wire per contact) - looping possible), snap terminal blocks and end plate together before mounting the terminal block assembly onto the coil bobbin.

Final position



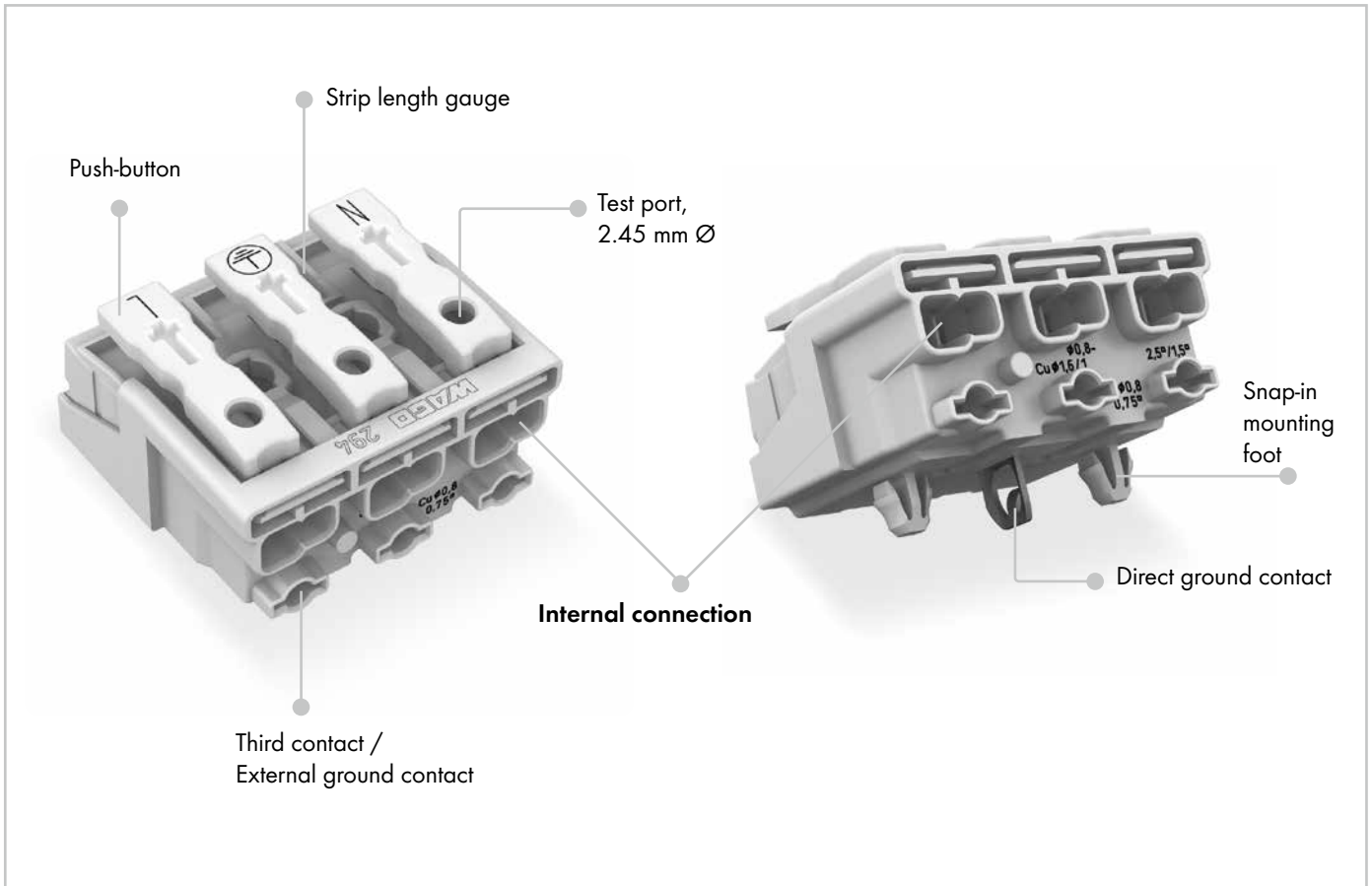
Terminal block in final position (primary side)

CAGE CLAMP® connection 0.08 ... 4 mm²

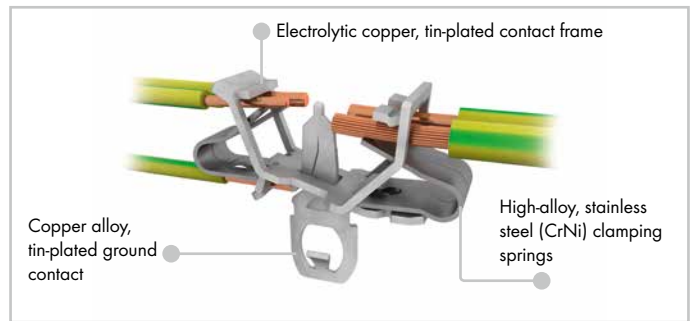


Conductor termination (secondary side)

Field-Wiring Terminal Blocks for Lighting and Equipment - Description and Handling -



Application example



Contact technology



Integrated strip length gauge



Conductor removal: Slide disconnection tool beneath the conductor and pull conductor out.

For information on Push-in CAGE CLAMP® connection, see page 14.

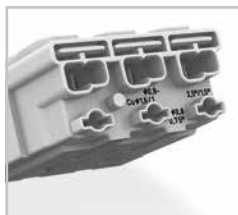
For information on PUSH WIRE® connection, see page 15.

Lighting Terminal Blocks

294 Series

PUSH WIRE®

PUSH-IN CAGE CLAMP®



Pole No.	Marking	Item No.		Item No.		Item No.		Item No.		Item No.	
		Without Snap-In	With Mounting Feet	Without Snap-In	With Mounting Feet	Without Snap-In	With Mounting Feet	Without Snap-In	With Mounting Feet	Without Snap-In	With Mounting Feet
2	without	294-4002	294-5002	-	-	-	-	-	-	-	-
	N L	294-4012	294-5012	-	-	-	-	-	-	-	-
	N' L'	294-4022	294-5022	-	-	-	-	-	-	-	-
	DA- DA+	294-4032	294-5032	-	-	-	-	-	-	-	-
	- +	294-4072	294-5072	-	-	-	-	-	-	-	-
	1 N	294-4052	294-5052	-	-	-	-	-	-	-	-
	2 1	294-4042	294-5042	-	-	-	-	-	-	-	-

3	without	294-4003	294-5003	-	-	-	-	-	-	-	-
	N ⊕ L	294-4013	294-5013	-	294-5113	294-4413	294-5413	294-4213	294-5213	294-4313	294-5313
	N' ⊕ L'	294-4023	294-5023	-	294-5123	294-4423	294-5423	294-4223	294-5223	294-4323	294-5323
	1 ⊕ N	294-4053	294-5053	-	294-5153	294-4453	294-5453	294-4253	294-5253	294-4353	-
	3 2 1	294-4043	294-5043	-	-	-	-	-	-	-	-

4	without	294-4004	294-5004	-	-	-	-	-	-	-	-
	1/L' 2/L ⊕ N	294-4024	294-5024	-	294-5124	294-4424	294-5424	294-4224	294-5224	294-4324	294-5324
	1 2 ⊕ N	294-4014	294-5014	-	294-5114	294-4414	294-5414	294-4214	294-5214	294-4314	294-5314
	4 3 2 1	294-4044	294-5044	-	-	-	-	-	-	-	-

5	without	294-4005	294-5005	-	-	-	-	-	-	-	-
	L3 L2 L1 ⊕ N	294-4015	294-5015	-	-	294-4415	294-5415	294-4215	294-5215	294-4315	294-5315
	L' N' L ⊕ N	294-4025	294-5025	-	-	294-4425	294-5425	294-4225	294-5225	294-4325	294-5325
	DA+ DA- L ⊕ N	294-4035	294-5035	-	-	294-4435	294-5435	294-4235	294-5235	294-4335	294-5335
	DA- N ⊕ L DA+	294-4075	294-5075	-	294-5175	294-4475	294-5475	294-4275	294-5275	294-4375	294-5375
	3 N ⊕ 1 2	294-4055	294-5055	-	294-5155	294-4455	294-5455	294-4255	294-5255	294-4355	294-5355
5 4 3 2 1	294-4045	294-5045	-	-	-	-	-	-	-	-	

6	without	294-4006	-	-	-	-	-	-	-	-	-
---	---------	----------	---	---	---	---	---	---	---	---	---

7	without	294-4007	-	-	-	-	-	-	-	-	-
---	---------	----------	---	---	---	---	---	---	---	---	---

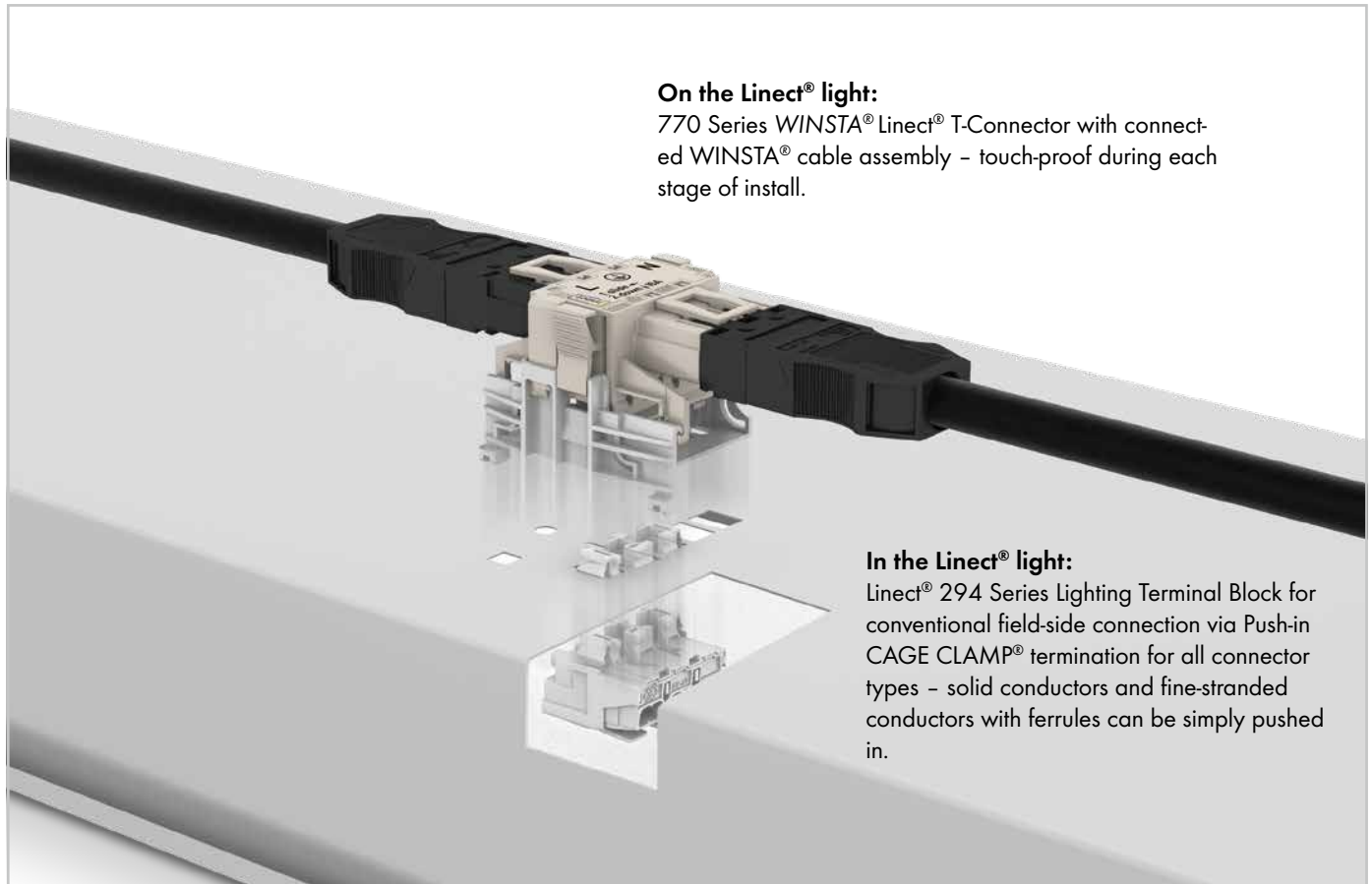
Accessories



Disconnection tool,
for removing conductors from PUSH WIRE® connections
206-294 1

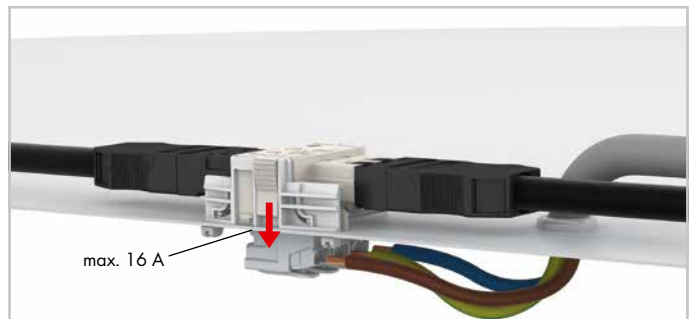
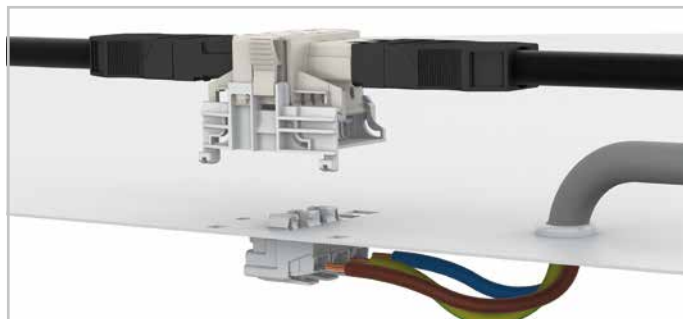


Lighting Terminal Blocks - Description and Handling -



On the Linect® light:
770 Series WINSTA® Linect® T-Connector with connected WINSTA® cable assembly – touch-proof during each stage of install.

In the Linect® light:
Linect® 294 Series Lighting Terminal Block for conventional field-side connection via Push-in CAGE CLAMP® termination for all connector types – solid conductors and fine-stranded conductors with ferrules can be simply pushed in.



The WAGO 294 Series Lighting Terminal Blocks allow worldwide connection of luminaires via WINSTA® Pluggable Connectors or conventional wiring.

WAGO Linect® Lighting Terminal Blocks are ideal for connecting additional consumers that were not originally planned (e.g., spots). The maximum current between WINSTA® Linect® T-Connector and Lighting Terminal Block is 16 A.



Position the T-connector within the two square recesses.



Move the T-connector toward the square cutouts until it is locked in position.



Push connector down until fully engaged.

For information on Push-in CAGE CLAMP® connection, see page 14.

For information on PUSH WIRE® connection, see page 15.

Lighting Terminal Blocks Linect® 294 Series

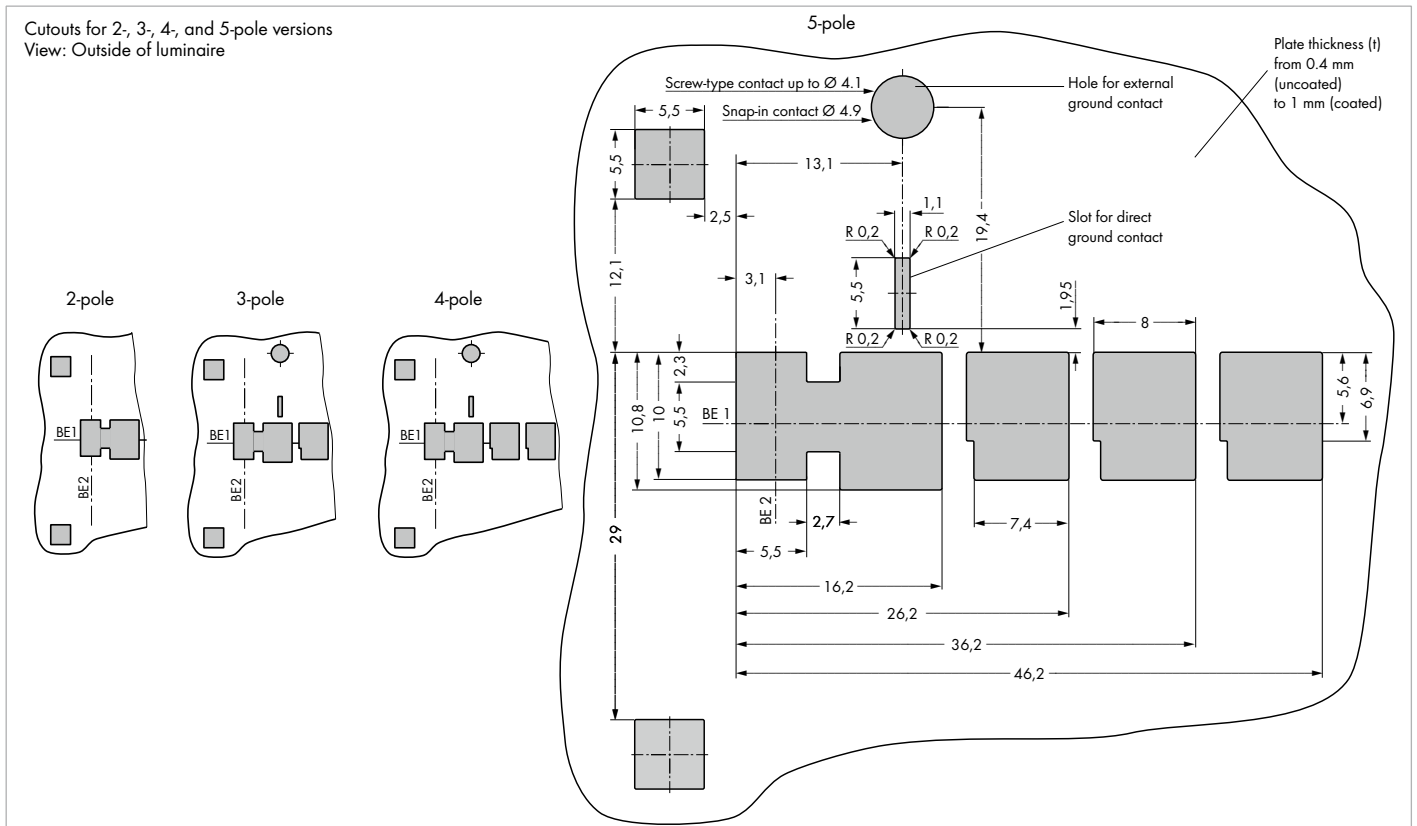
PUSH WIRE®

PUSH-IN CAGE CLAMP®



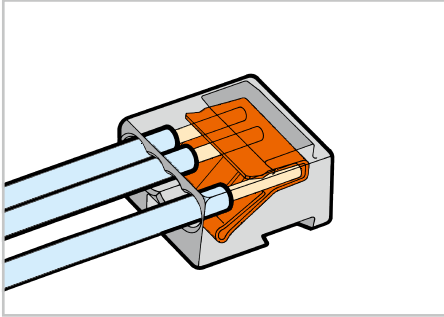
2

Pole No.	Marking	Item No.	Item No.	Item No.	Item No.	Item No.
2	N' L'	294-8022	- - -	- - -	- - -	- - -
3	N ⊕ L (mains)	294-8013	294-8113	294-8413	294-8213	294-8313
4	1/L' 2/L ⊕ N	294-8024	294-8124	294-8424	294-8224	294-8324
5	DA+ DA- L ⊕ N	294-8035	294-8135	294-8435	294-8235	294-8335
	L' N' L ⊕ N	294-8025	294-8125	294-8425	294-8225	294-8325
	L3 L2 L1 ⊕ N	294-8015	294-8115	294-8415	294-8215	294-8315

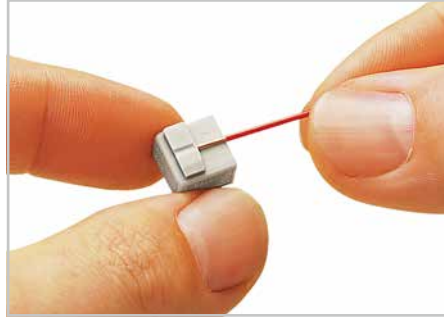


Approvals are available online at: www.wago.com.

MICRO PUSH WIRE® Connectors for Junction Boxes – Description and Handling –



Strip length



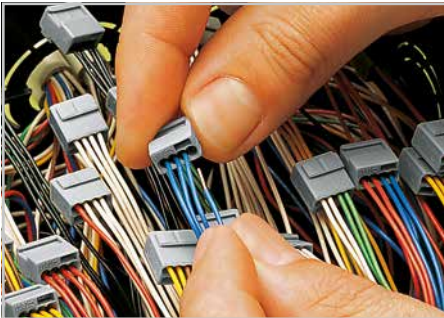
Strip solid conductors to 5 ... 6 mm.

Connector strips



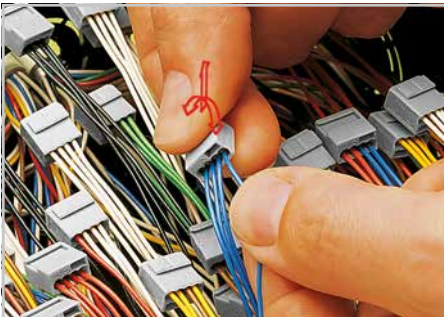
Assembling modular connectors into connector strips.

PUSH WIRE® connection

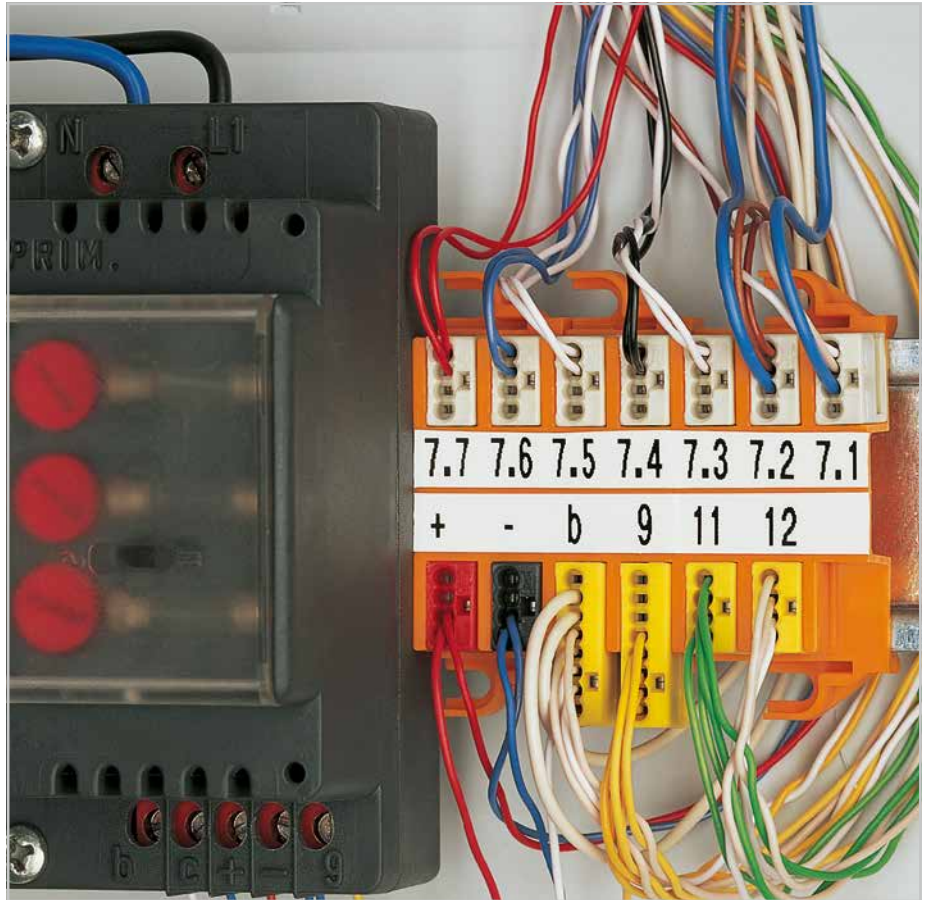


Termination: Insert stripped conductor until it hits backstop.

PUSH WIRE® connection



Removal: Hold conductor to be removed and twist alternately left and right while pulling the connector.



Testing

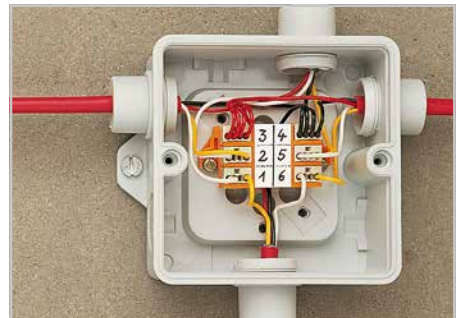


Testing

Applications



Switch (specialty connectors with solder pin termination)

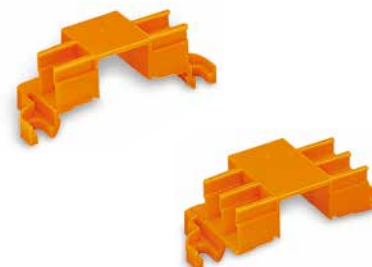


Terminal box for burglar alarm

MICRO PUSH WIRE® Connectors for Junction Boxes, Mounting Carriers

243 Series

0.6 ... 0.8 mm Ø "s"*** 100 V/1.5 kV/2 I _N 6 A	22 ... 20 AWG "s"*** 150 V, 7 A 150 V, 7 A	0.6 ... 0.8 mm Ø "s"*** 100 V/1.5 kV/2 I _N 6 A	22 ... 20 AWG "s"*** 150 V, 7 A 150 V, 7 A	Mounting carriers for MICRO PUSH WIRE® connectors for junction boxes
5 ... 6 mm / 0.22 in.	5 ... 6 mm / 0.22 in.	5 ... 6 mm / 0.22 in.	5 ... 6 mm / 0.22 in.	
Approvals	Approvals	Approvals	Approvals	



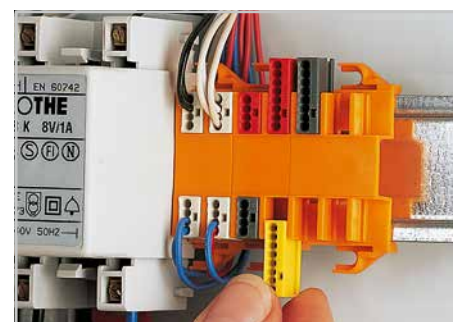
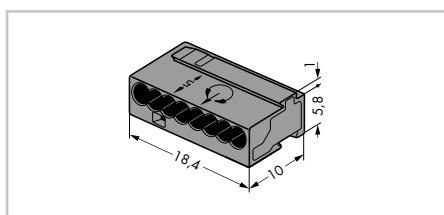
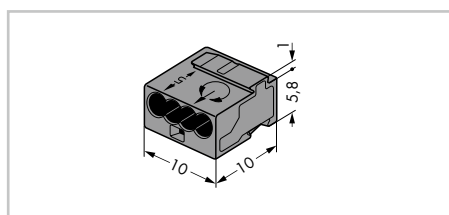
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Description	Item No.	Pack. Unit
MICRO PUSH WIRE® connector for junction boxes, 4-cond. connectors			MICRO PUSH WIRE® connector for junction boxes, 8-cond. connectors			Mounting carrier,		
● dark gray	243-204	1000 (10x100)	● dark gray	243-208	500 (10x50)	● for 4 connectors	243-112	50 (5x10)
● red	243-804	1000 (10x100)	● red	243-808	500 (10x50)	● for 6 connectors	243-113	50 (5x10)
○ light gray	243-304	1000 (10x100)	○ light gray	243-308	500 (10x50)	Marking strip,		
● yellow	243-504	1000 (10x100)	● yellow	243-508	500 (10x50)	7 mm high, 6 strips per card		
						○ plain	243-110	1

0.4 ... 0.5 mm Ø "s"*** 100 V/1.5 kV/2 I _N 6 A	26 ... 24 AWG "s"***
5 ... 6 mm / 0.22 in.	
Approvals	

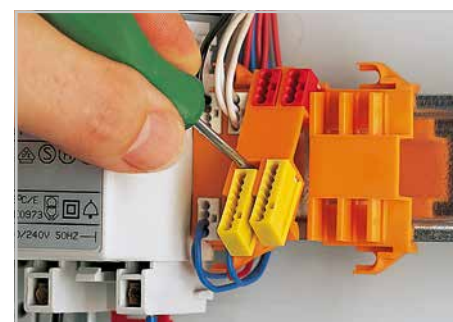


Color	Item No.	Pack. Unit
MICRO PUSH WIRE® connector for junction boxes, 4-cond. connectors		
○ transparent	243-144	1000 (10x100)

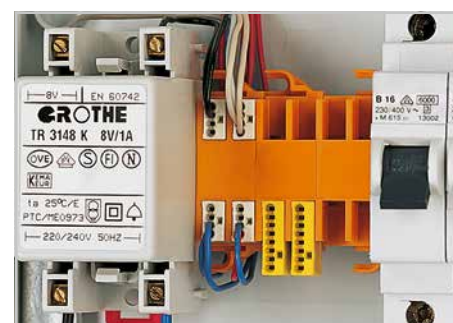
Dimensions



Inserting a connector into the mounting carrier.



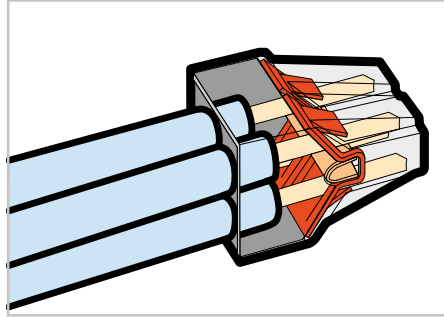
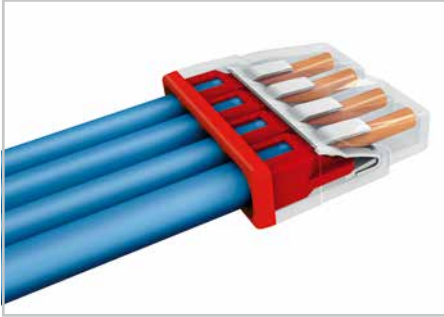
Removing a mounting carrier from the DIN-rail.



DIN-35 rail-mount application (residential door bell)

Approvals are available online at: www.wago.com. For technical explanations and abbreviations, see technical section.
*When using conductors of exclusively the same diameter, 0.5 mm (24 AWG) or 1.0 mm (18 AWG) diameters are also possible.

PUSH WIRE® Connectors for Junction Boxes – Description and Handling –



Strip length



Strip solid conductor to the appropriate length (see marking).

Testing

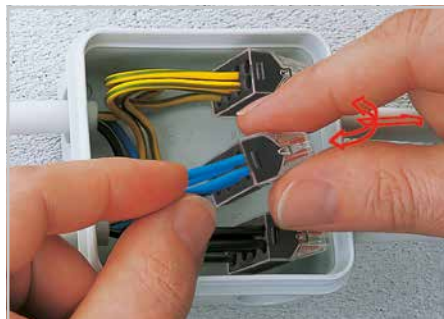


Testing

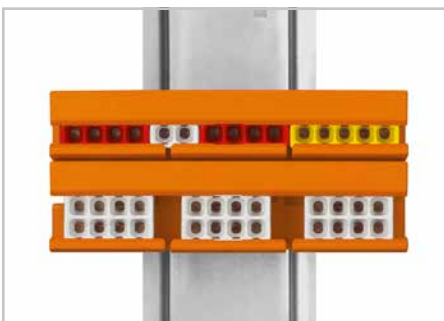
PUSH WIRE® connection



Insert stripped solid conductor until it hits backstop.



Removal: Hold conductor to be removed and twist alternately left and right while pulling the connector.



The mounting carrier is suitable for both connector profiles.



Secured in position – on a DIN-35 rail (773 Series Mounting Carrier)

COMPACT PUSH WIRE® Connectors for Junction Boxes 2273 Series

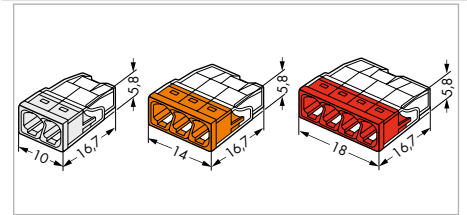
0.5 ... 2.5 mm² "s" 18 ... 14 AWG "s"
450 V/4 kV/2***
I_N 24 A

11 mm / 0.43 in.

1 Approvals



Color	Item No.	Pack. Unit
COMPACT PUSH WIRE® connector for junction boxes, transparent housing		
○ 2 conductors	2273-202	1000 (10x100)
● 3 conductors	2273-203	1000 (10x100)
● 4 conductors	2273-204	1000 (10x100)



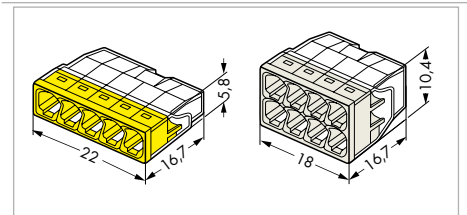
0.5 ... 2.5 mm² "s" 18 ... 14 AWG "s"
450 V/4 kV/2***
I_N 24 A

11 mm / 0.43 in.

1 Approvals



Color	Item No.	Pack. Unit
COMPACT PUSH WIRE® connector for junction boxes, transparent housing		
● 5 conductors	2273-205	1000 (10x100)
○ 8 conductors	2273-208	500 (10x50)



For information on PUSH WIRE® connection, see page 15.

1 Approvals are available online at: www.wago.com.

***In grounded power lines

For technical explanations and abbreviations, see technical section.

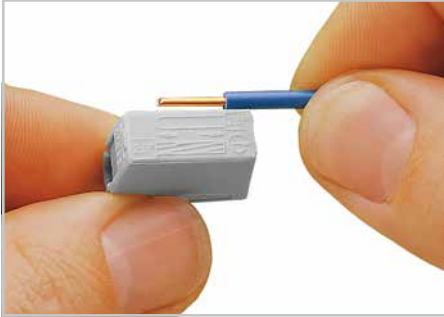
Lighting and "Service" Connectors

224 / 873 Series

PUSH WIRE®

CAGE CLAMP®

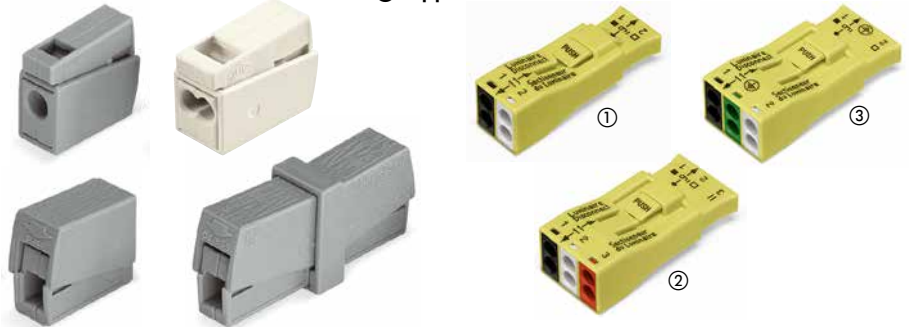
Strip length



Strip conductor to 9 ... 11 mm.

Installation side		2-conductor plug		1-conductor socket	
1 ... 2.5 mm ² "s"	14 ... 12 AWG	18 ... 12 AWG "s"	18 AWG "s"		
2 x 1.0 ... 2.5 mm ² "s"	16 ... 14 AWG	16 ... 12 AWG "st"	600 V, 6 A ^(UL)		
Lighting side		11 ... 13 mm / 0.47 in. 9 ... 11 mm / 0.39 in.			
0.5 ... 2.5 mm ² "s+st"	20 ... 16 AWG				
400 V/4 kV/2*, I _N 24 A	300 V, 20 A ^(UL)				

Approvals



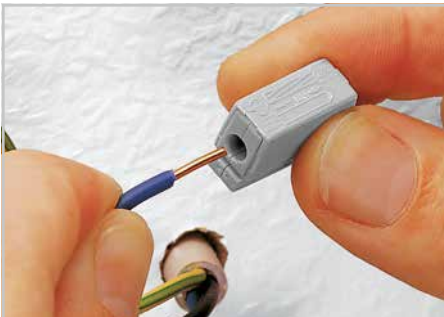
Testing



Voltage testing via separate test ports.

Color	Item No.	Pack. Unit	Type/Pole No.	Item No.	Pack. Unit
Lighting connector, standard version for continuous operating temperature of 105 °C			Luminaire disconnect connector (U.S. Version), type ①		
● gray	224-101	1000	2	873-902	40
Version for increased continuous operating temperature of 120 °C			type ②		
● black	224-104	100	3	873-903	20
2-conductor lighting connector, standard version for continuous operating temperature of 105 °C			Luminaire disconnect connector (U.S. Version), type ③, preceding ground contact in center position		
○ white	224-112	1000	3	873-953	500
Version for increased continuous operating temperature of 120 °C					
● black	224-114	100			
"Service" connector					
● gray	224-201	50			

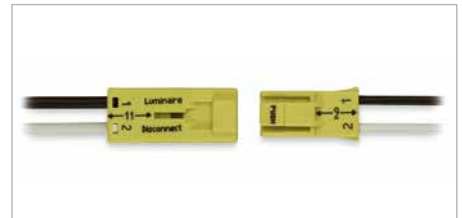
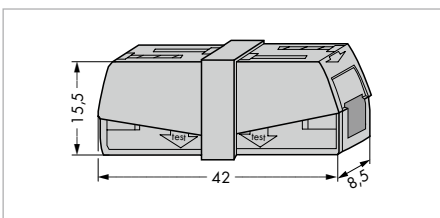
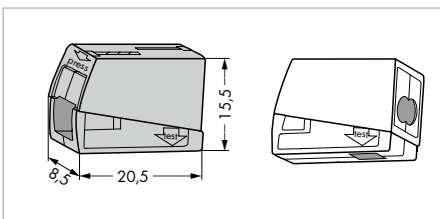
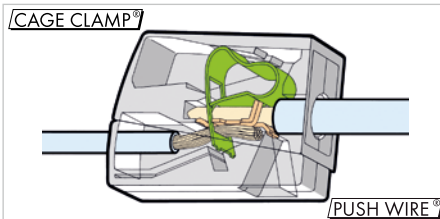
Conductor termination



Installation side:
Insert stripped solid conductor into circular entry and push until it hits the backstop.



Lighting side:
Press button fully, insert stripped conductor into square entry and release.



<p>18-12 AWG CU, SOL, UL/CSA 0.75-4 mm²</p>	<p>18 AWG CU, SOL, UL/CSA 0.75 mm²</p>
<p>16-12 AWG (S19 or) CU, UL 14-12 AWG (S19 or) CU, CSA 1.5-4 mm² One-time use only. Do not reuse. N'utiliser qu'une seule fois.</p>	<p>14-12 AWG (S19 or) CU, CSA 1.5-4 mm² One-time use only. Do not reuse. N'utiliser qu'une seule fois.</p>
<p>0.45 inch / 11 - 13 mm</p>	<p>0.35 inch / 9 - 11 mm</p>
<p>Correct method of solid wire removal Hold wire to be removed in one hand, the connector in the other - twist slightly while pulling the connector. Démonstration correcte du conducteur rigide Tenir d'une main le conducteur à déconnecter et de l'autre main le connecteur - Opérer une légère torsion du conducteur tout en tirant sur le connecteur.</p>	

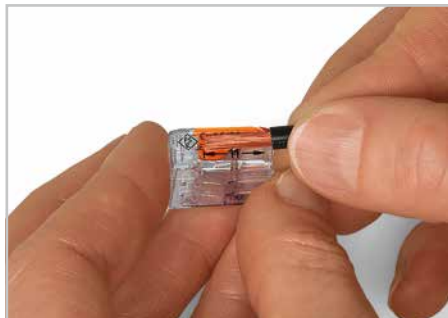
Approvals are available online at: www.wago.com.

Lever-Actuated Splicing Connectors for All Conductor Types

CAGE CLAMP®

221 / 222 Series

Strip length



Strip conductor to 11 mm (221 Series).
Strip conductor to 9 ... 10 mm (222 Series).



Lighting distribution in ceiling canopy

Conductor termination



Conductor termination: Open the clamping unit using the lever and insert conductor. Then, lower the lever to close the clamp.

0.2 ... 4 mm² "s+st"
0.14 ... 4 mm² "f-st"
450 V/4 kV/2*
I_N 32 A

24 ... 12 AWG

11 mm / 0.43 in.
Approvals

0.08 ... 2.5 mm² "s+f-st"
0.08 ... 4 mm² "f-st"
400 V/4 kV/2*
I_N 32 A

28 ... 14 AWG "s+f-st"
28 ... 12 AWG "f-st"
600 V, 20 A ®

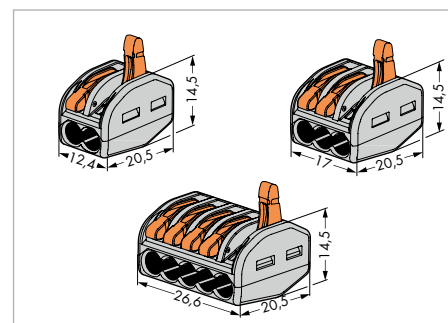
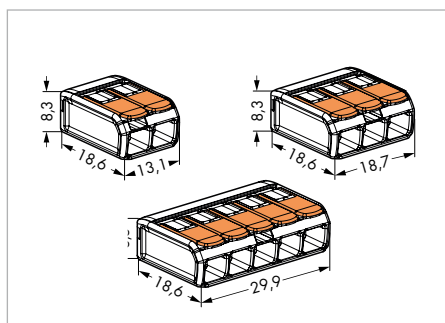
9 ... 10 mm / 0.37 in.
Approvals



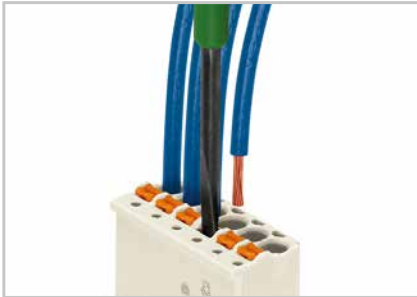
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
COMPACT splicing connector for all conductor types, with levers, max. continuous operating temperature: 105 °C			CLASSIC splicing connector for all conductor types, with levers, max. continuous operating temperature: 85 °C		
2-conductor connector <input type="radio"/> transparent			2-conductor connector <input type="radio"/> gray		
	221-412	1000(10x100)		222-412	500(10x50)
3-conductor connector <input type="radio"/> transparent			3-conductor connector <input type="radio"/> gray		
	221-413	500(10x50)		222-413	500(10x50)
5-conductor connector <input type="radio"/> transparent			5-conductor connector <input type="radio"/> gray		
	221-415	400(10x40)		222-415	400(10x40)
Mounting carrier, for 2-, 3- and 5-conductor splicing connectors <input type="radio"/>			Mounting carrier, for 2-, 3- and 5-conductor splicing connectors <input type="radio"/>		
	221-500	50(5x10)		222-500	50(5x10)
Strain relief plate, for mounting carrier <input type="radio"/>			Strain relief plate, for mounting carrier <input type="radio"/>		
	222-505	50(5x10)		222-505	50(5x10)
Angled DIN-rail adapter, for DIN-35 rail mounting <input type="radio"/>			Angled DIN-rail adapter, for DIN-35 rail mounting <input type="radio"/>		
	222-510	50(5x10)		222-510	50(5x10)
Self-adhesive marking strips, plain 48 strips per card <input type="radio"/>			Self-adhesive marking strips, plain 48 strips per card <input type="radio"/>		
	210-334	1		210-334	1



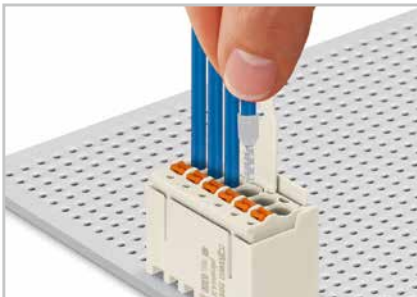
Vertical mounting with strain relief plate on DIN-35 rail; labeling clamping units via marking strips for 221/222 Series.



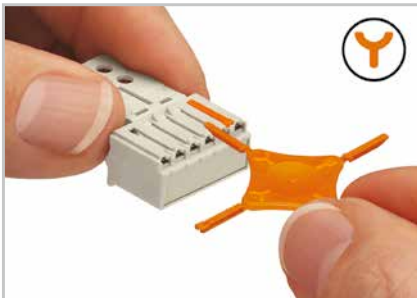
picoMAX® Pluggable Connectors - Description and Installation -



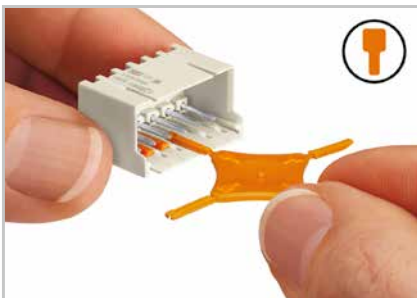
Inserting a fine-stranded conductor into an unmated female connector via push-button.



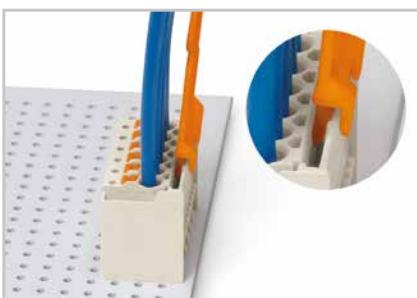
Inserting solid and ferruled conductors via push-in termination.



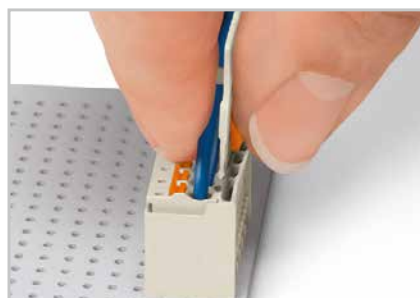
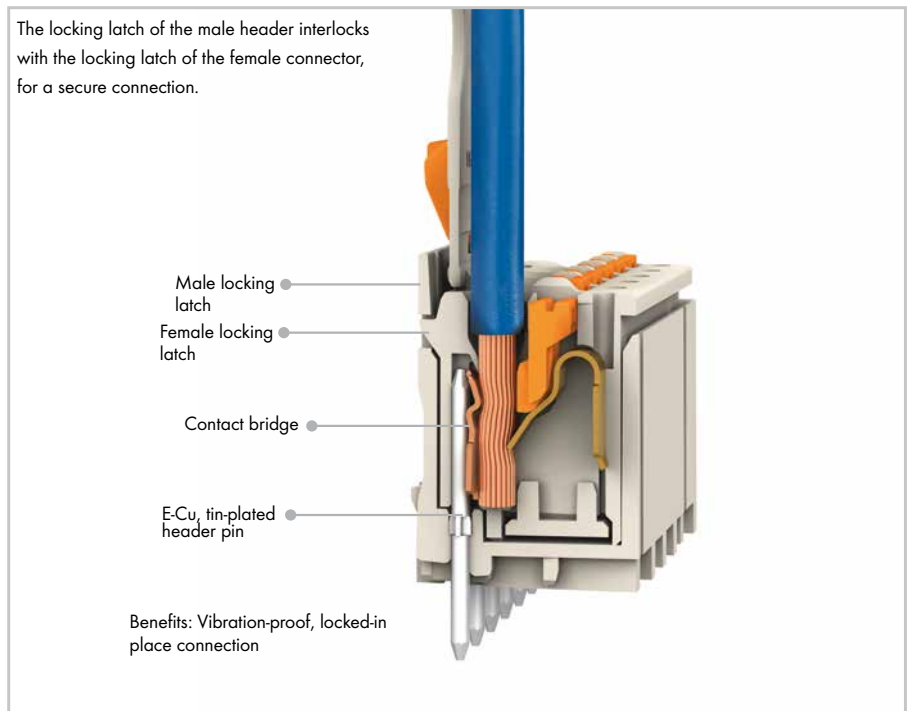
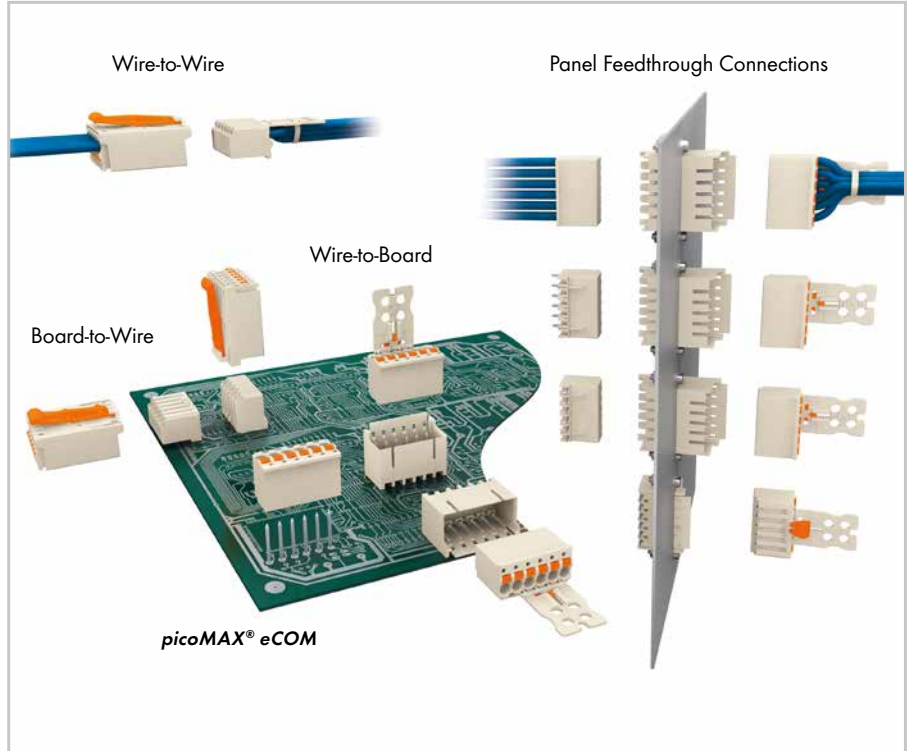
Coding a female connector (via 209x-1610 Coding Key Carrier and two keys for female connector, see symbol).



Coding a male header (via 209x-1610 Coding Key Carrier and two keys for male header, see symbol).



Disconnecting a female connector via unlocking tool. Plug unlocking tool into the male header's locking latch.



Push down sliding connector release (gripping plate) to open the locking latch.



Easy-to-identify PCB inputs and outputs

picoMAX® Pluggable Connectors

PUSH-IN CAGE CLAMP®

Combination Overview for Male and Female Connectors/Headers

Pin Spacing: 3.5 mm (0.138 in.); 5.0 mm (0.197 in.); 7.5 mm (0.295 in.)

Male Connectors/Headers

Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
with straight solder pins, 2 ... 12 poles		with angled solder pins, 2 ... 12 poles		for conductor connection, 2 ... 5 poles		for panel feedthrough connections, 2 ... 8 poles	
				0.2 ... 2.5 mm² / 24 ... 12 AWG		Outside	Inside (unlocked)
2091-1402	200	2091-1422	200	2091-1522/002-000	200	2091-1632/024-000	100
2091-1412	100	2091-1432	100	2091-1528/002-000	50	2091-1638/002-000	50

Female Connectors/Headers	Description	Male Connector/Header 1		Male Connector/Header 2		Male Connector/Header 3		Male Connector/Header 4	
		Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside
for conductor connection, gripping plate and sliding connector release, 2 ... 12 poles		✓	✓	✓	✓	✓	✓	✓	✓
	0.2 ... 1.5 mm² / 24 ... 14 AWG								
2091-1102/002-000	100								
2091-1112/002-000	50								
for conductor connection, with gripping plate, 2 ... 12 poles		✓	✓	✓	✓	✓	✓	✓	✓
	0.2 ... 1.5 mm² / 24 ... 14 AWG								
2091-1102	200								
2091-1112	100								
for conductor connection, 2 ... 12 poles		✓	✓	✓	✓	✓	✓	✓	✓
	0.2 ... 1.5 mm² / 24 ... 14 AWG								
2091-1122	200								
2091-1132	100								
with straight solder pins, 2 ... 8 poles		✗	✗	✓	✓	✗	✓	✗	✓
	2091-1302	200							
2091-1308	100								
with angled solder pins, 2 ... 8 poles		✗	✗	✓	✓	✗	✓	✗	✓
	2091-1322	200							
2091-1328	100								

All data refers to 3.5 mm pin spacing.

Item numbers for:

3.5 mm pin spacing

2091-1xxx (160 V/10 A)

5 mm pin spacing

2092-1xxx (320 V/16 A)

7.5 mm pin spacing

2092-3xxx (630 V/16 A)



Disconnection: Open locking latches via unlocking tool (2092-1630).



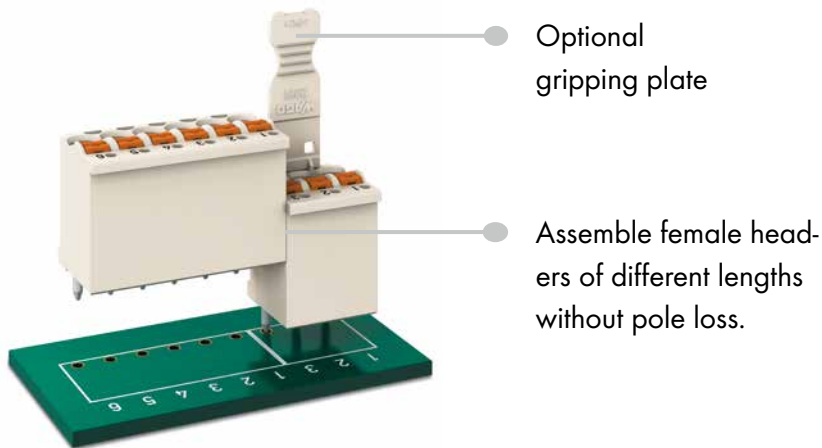
This combination of male and female connectors/headers is allowed.



This combination of male and female connectors/headers is not allowed.

picoMAX® eCOM Pluggable Connectors PCB Terminal Blocks that Double as Pluggable Connectors

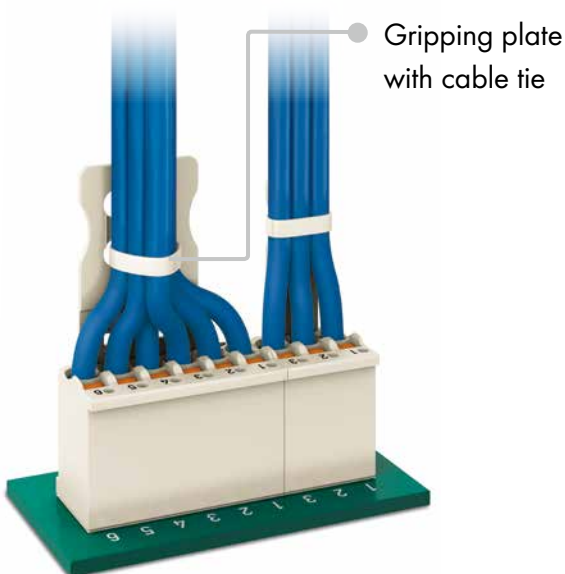
1. Place and solder the pluggable female headers as marked on the PCB.



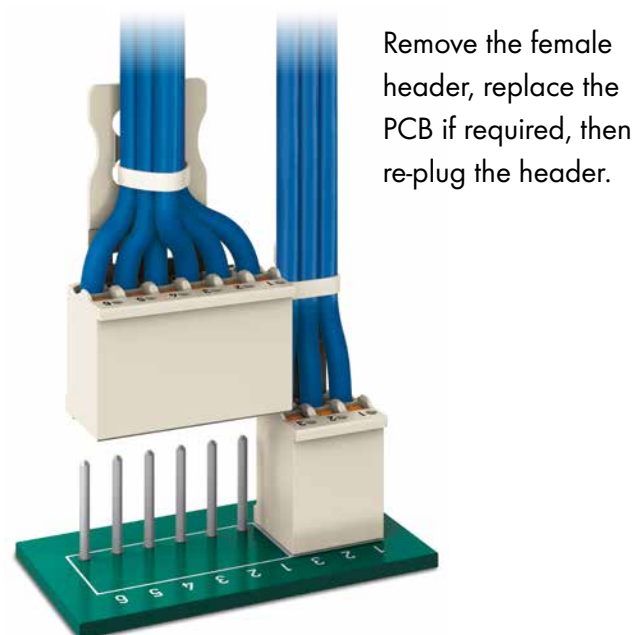
WAGO's *picoMAX*® eCOM Pluggable Female Headers are delivered with solder pins so they can be directly soldered to a PCB and then wired just as terminal blocks are.

Push-in CAGE CLAMP® allows solid, stranded and fine-stranded conductors to be terminated via push-buttons. Solid and feruled conductors are terminated by simply pushing them into unit. For simplified maintenance, the pluggable female headers can be removed without altering the wiring and then plugged onto the replacement PCB.

2. Wired female headers



3. During maintenance










picoMAX® eCOM Pluggable Connectors

System Overview for Standard Female Headers

PUSH-IN CAGE CLAMP®

Pin Spacing: 3.5 mm (0.138 in.); 5.0 mm (0.197 in.); 7.5 mm (0.295 in.)

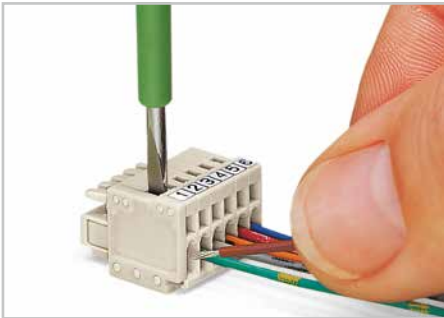
Female Connectors/Headers	Pin Spacing / Pole No.						Accessories	
	3.5 mm / 2 ... 12 poles		5 mm / 2 ... 12 poles		7.5 mm / 2 ... 5 poles		Item No.	Pack. Unit
	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit		
With straight solder pins, without gripping plate								Operating tool with a partially insulated shaft, type 1, (2.5 x 0.4) mm blade
	0.2 ... 1.5 mm ² / 24 ... 14 AWG		0.2 ... 2.5 mm ² / 24 ... 14 AWG		0.2 ... 2.5 mm ² / 24 ... 14 AWG			
	2091-1172 200 2091-1182 100		2092-1172 200 2092-1182 100		2092-3172 100 2092-3175 100			
With straight solder pins, with gripping plate								Unlocking tool for female connectors without gripping plate or sliding connector release
	0.2 ... 1.5 mm ² / 24 ... 14 AWG		0.2 ... 2.5 mm ² / 24 ... 14 AWG		0.2 ... 2.5 mm ² / 24 ... 14 AWG			
	2091-1152 100 2091-1162 50		2092-1152 100 2092-1162 50		2092-3152 100 2092-3155 100			
With angled solder pins, without gripping plate								Test pin , 1 mm Ø, with solder connection for test cable
	0.2 ... 1.5 mm ² / 24 ... 14 AWG		0.2 ... 2.5 mm ² / 24 ... 14 AWG		0.2 ... 2.5 mm ² / 24 ... 14 AWG			
	2091-1372 200 2091-1382 100		2092-1372 200 2092-1382 100		2092-3372 100 2092-3375 100			
With angled solder pins, with gripping plate								
	0.2 ... 1.5 mm ² / 24 ... 14 AWG		0.2 ... 2.5 mm ² / 24 ... 14 AWG		0.2 ... 2.5 mm ² / 24 ... 14 AWG			
	2091-1352 100 2091-1362 50		2092-1352 100 2092-1362 50		2092-3352 100 2092-3355 100			
Gripping plates for field assembly								
	2091-1600 100 2091-1603 100		2092-1600 100 2092-1603 100		2092-3600 100 2092-3603 100			
Gripping plates with sliding connector release for field assembly								
	2091-1600/002-000 100 2091-1603/002-000 100		2092-1600/002-000 100 2092-1603/002-000 100		2092-3600/002-000 100 2092-3603/002-000 100			

3

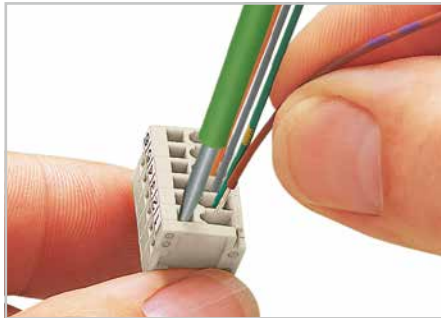
MCS – MULTI CONNECTION SYSTEM MICRO, MINI and MIDI

– Description and Installation, e.g., for CAGE CLAMP® Connection* –

CAGE CLAMP® connection

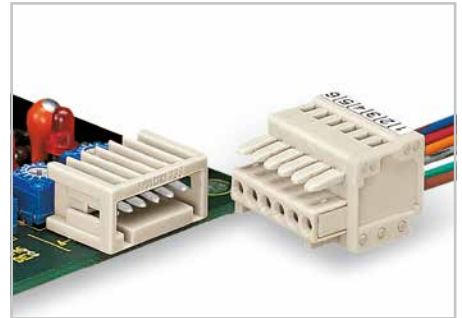


Inserting conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



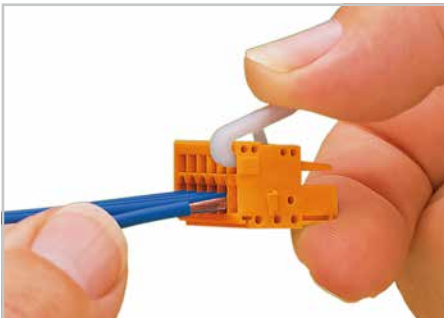
Inserting conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.

Mismatching protection

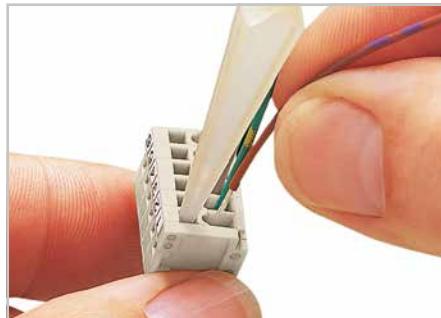


Male header and female connector – 100 % protected against mismatching
Only mating halves with the same pole number can be connected.

CAGE CLAMP® connection



Inserting conductor via operating lever (734-230).



Inserting conductor via operating tool (233-332) – CAGE CLAMP® actuation parallel to conductor entry.

Testing

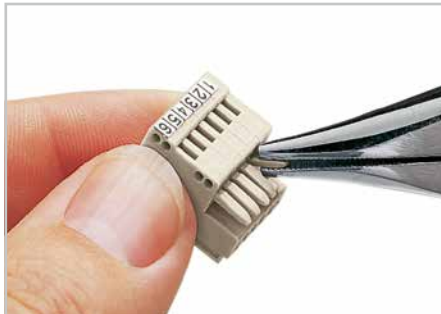


Testing with 1 mm Ø test pin (735-500) – touch contact.

Coding



Coding a male header – fitting coding key(s).



Coding a female connector – removing coding finger(s).

Marking



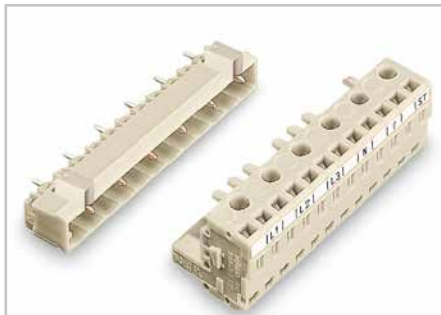
Factory marking or custom marking via self-adhesive strips.

Insulation stop



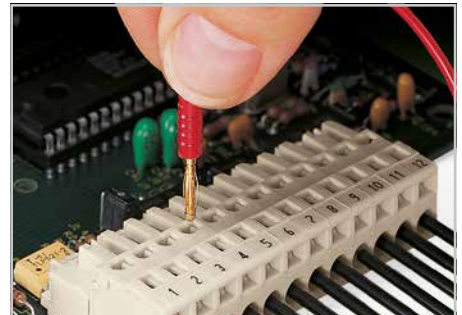
Prevents the insulation of smaller conductors from being inserted into the clamping unit.

Pin spacing: 10 mm



For 10 mm pin spacing, please contact factory.

Testing



Testing with 2 mm or 2.3 mm Ø test plug.

* For other connection types, see full line catalog or visit www.wago.com.

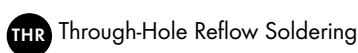
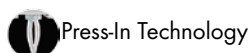
MCS - MULTI CONNECTION SYSTEM

- Product Overview by Pin Spacing -

733 Series									
2.5 mm MICRO, 100 % Mismatching Protection, 160 V, 6 A									
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Male headers with straight solder pins, 2 ... 12 poles		Male headers with straight solder pins, 2 ... 12 poles		Male headers with press-in pins, 2 ... 12 poles		Female connectors, 2 ... 12 poles		Male connectors, 2 ... 12 poles	
○		●		○		○		○	
733-332	200	733-332/105-604	200	733-332/100-000	200	733-102	200	733-202	200
733-342	100	733-342/105-604	100	733-342/100-000	100	733-112	50	733-212	50
Male headers with angled solder pins, 2 ... 12 poles		Male headers with angled solder pins, 2 ... 12 poles				Female connectors with locking levers, 2 ... 12 poles			
○		●				○			
733-362	200	733-362/105-604	200			733-102/037-000	100		
733-372	100	733-372/105-604	100			733-112/037-000	50		

713 Series									
3.5 mm MINI HD, 100 % Mismatching Protection, 160 V, 10 A									
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Male headers with straight solder pins, 6 ... 36 poles		Male headers with angled solder pins, 6 ... 36 poles		Male headers with straight solder pins, 6 ... 36 poles		Male headers with angled solder pins, 6 ... 36 poles		Female connectors, 6 ... 36 poles	
●		●		●		●		●	
713-1403	100	713-1423	100	713-1403/105-000	100	713-1423/105-000	100	713-1103	100
713-1418	20	713-1438	20	713-1418/105-000	20	713-1438/105-000	20	713-1118	20
Male headers with straight solder pins and levers, 6 ... 36 poles		Male headers with angled solder pins and levers, 6 ... 36 poles		Male headers with straight solder pins and levers, 6 ... 36 poles		Male headers with angled solder pins and levers, 6 ... 36 poles		Female connectors with levers, 6 ... 36 poles	
●		●		●		●		●	
713-1403/037-000	50	713-1423/037-000	50	713-1403/116-000	50	713-1423/116-000	50	713-1103/037-000	50
713-1418/037-000	10	713-1438/037-000	10	713-1418/116-000	10	713-1438/116-000	10	713-1118/037-000	51
Male headers with straight solder pins and threaded flanges, 6 ... 36 poles		Male headers with angled solder pins and threaded flanges, 6 ... 36 poles		Male headers with straight solder pins and threaded flanges, 6 ... 36 poles		Male headers with angled solder pins and threaded flanges, 6 ... 36 poles		Female connectors with threaded flanges, 6 ... 36 poles	
●		●		●		●		●	
713-1403/107-000	50	713-1423/107-000	50	713-1403/117-000	50	713-1423/117-000	50	713-1103/107-000	50
713-1418/107-000	10	713-1438/107-000	10	713-1418/117-000	10	713-1438/117-000	10	713-1118/107-000	10

714 Series									
3.5 mm MINI SL, 160 V, 8 A									
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit				
Male headers with straight solder pins, 2 ... 16 poles		Male headers with angled solder pins, 2 ... 16 poles		Female connectors, 2 ... 16 poles					
●		●		●					
714-132	200	714-162	200	714-102	200				
714-146	100	714-176	100	714-116	50				
				0.2 ... 1.5 mm ² / 24 ... 16 AWG					





MCS – MULTI CONNECTION SYSTEM

– Product Overview by Pin Spacing –

734 / 2734 Series									
		3.5 mm		MINI, 100 % Mismatching Protection					
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Male headers with straight solder pins, 2 ... 24 poles		Female headers with straight solder pins, 2 ... 24 poles		Female connectors, 2 ... 24 poles		Male connectors, 2 ... 24 poles		Combi strips, 2 ... 12 poles	
○		○		○		○		○	
0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG	
734-132	200	734-462	200	734-102	200	734-302	200	734-362	100
734-154	50	734-484	25	734-124	25	734-324	25	734-372	25
Male headers with angled solder pins, 2 ... 24 poles		Female headers with angled solder pins, 2 ... 24 poles		Female connectors with locking levers, 2 ... 24 poles		Male connectors with mounting flanges, 2 ... 24 poles		Combi strips with locking levers, 2 ... 12 poles	
○		○		○		○		○	
0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG	
734-162	200	734-532	200	734-102/037-000	100	734-302/019-000	100	734-362/037-000	100
734-184	50	734-554	25	734-124/037-000	10	734-324/019-000	10	734-372/037-000	25
Male headers with straight solder pins, 2 ... 16 poles		Female headers with straight solder pins and locking levers, 2 ... 24 poles		Female connectors with snap-in mounting feet, 2 ... 24 poles		Male connectors with snap-in mounting feet, 2 ... 24 poles		Combi strips with snap-in mounting feet, 2 ... 12 poles	
THR		○		○		○		○	
0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG	
734-132/105-604	200	734-462/037-000	100	734-102/008-000	200	734-302/018-000	200	734-362/008-000	100
734-146/105-604	50	734-484/037-000	10	734-124/008-000	25	734-324/018-000	25	734-372/008-000	25
Male headers with angled solder pins, 2 ... 16 poles		Female headers with angled solder pins and locking levers, 2 ... 24 poles							
THR		○							
734-162/105-604	200	734-532/037-000	100						
734-176/105-604	50	734-554/037-000	10						
Male headers with straight press-in pins, 2 ... 12 poles								Female connectors with push-buttons, 2 ... 24 poles	
○								○	
0.2 ... 1.5 mm ² / 24 ... 14 AWG								0.2 ... 1.5 mm ² / 24 ... 14 AWG	
734-132/100-000	200							2734-102	200
734-142/100-000	100							2734-124	25
Double-deck male headers with angled solder pins, 4 ... 24 poles								Female connectors with push-buttons and locking levers, 2 ... 24 poles	
○								○	
0.2 ... 1.5 mm ² / 24 ... 14 AWG								0.2 ... 1.5 mm ² / 24 ... 14 AWG	
734-402	100							2734-102/037-000	100
734-412	50							2734-124/037-000	10
Double-deck male headers with angled solder pins and support, 4 ... 24 poles								Female connectors with push-buttons and mounting flanges, 2 ... 24 poles	
○								○	
0.2 ... 1.5 mm ² / 24 ... 14 AWG								0.2 ... 1.5 mm ² / 24 ... 14 AWG	
734-402/001-000	100							2734-102/031-000	100
734-412/001-000	50							2734-124/031-000	10
Male headers with straight solder pins and threaded flanges, 2 ... 24 poles		Male headers with angled solder pins and threaded flanges, 2 ... 24 poles		Female connectors with screw flanges, 2 ... 24 poles		Male connectors with threaded flanges, 2 ... 24 poles		Female connectors with push-buttons and screw flanges, 2 ... 24 poles	
○		○		○		○		○	
0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.2 ... 1.5 mm ² / 24 ... 14 AWG	
734-132/108-000	200	734-162/108-000	200	734-102/107-000	100	734-302/109-000	100	2734-102/107-000	100
734-154/108-000	50	734-184/108-000	50	734-124/107-000	10	734-324/109-000	10	2734-124/107-000	10

MCS - MULTI CONNECTION SYSTEM

- Product Overview by Pin Spacing -

734 / 2734 Series									
Item No.	Pack. Unit	Item No.	3.81 mm Pack. Unit	Item No.	MINI, 100 % Mismatching Protection Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Male headers with straight solder pins, 2 ... 20 poles		Female headers with straight solder pins, 2 ... 20 poles		Female connectors, 2 ... 20 poles		Male connectors, 2 ... 20 poles		Female connectors with push-buttons, 2 ... 20 poles	
734-232	200	734-502	200	734-202	200	734-332	200	2734-202	200
734-250	50	734-520	25	734-220	25	734-350	25	2734-220	25
Male headers with angled solder pins, 2 ... 20 poles		Female headers with angled solder pins, 2 ... 20 poles		Female connectors with locking levers, 2 ... 20 poles		Male connectors with mounting flanges, 2 ... 20 poles		Female connectors with push-buttons and locking levers, 2 ... 20 poles	
734-262	200	734-562	200	734-202/037-000	100	734-332/019-000	100	2734-202/037-000	100
734-280	50	734-580	25	734-220/037-000	10	734-350/019-000	10	2734-220/037-000	10
Male headers with straight solder pins, 2 ... 16 poles		Female headers with straight solder pins and locking levers, 2 ... 20 poles		Female connectors with snap-in mounting feet, 2 ... 20 poles		Male connectors with snap-in mounting feet, 2 ... 20 poles		Female connectors with push-buttons and mounting flanges, 2 ... 20 poles	
734-232/105-604	200	734-502/037-000	100	734-202/008-000	200	734-332/018-000	200	2734-202/031-000	100
734-242/105-604	100	734-520/037-000	10	734-220/008-000	25	734-350/018-000	25	2734-220/031-000	10
Male headers with angled solder pins, 2 ... 16 poles		Female headers with angled solder pins and locking levers, 2 ... 20 poles							
734-262/105-604	200	734-562/037-000	100						
734-272/105-604	100	734-580/037-000	10						
Male headers with straight press-in pins, 2 ... 12 poles									
734-232/100-000	200								
734-242/100-000	100								
Double-deck male headers with angled solder pins, 4 ... 24 poles									
734-432	100								
734-442	50								
Double-deck male headers with angled solder pins and support, 4 ... 24 poles									
734-432/001-000	100								
734-442/001-000	50								































MCS – MULTI CONNECTION SYSTEM

– Product Overview by Pin Spacing –

721 / 722 / 2721 Series									
5 mm MIDI, 100 % Mismatching Protection, 320 V, 12 A (16 A)									
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Male headers with straight solder pins, 2 ... 20 poles		Female headers with straight solder pins, 2 ... 20 poles		Female connectors, 2 ... 20 poles		Male connectors, 2 ... 20 poles		Female connectors with push-buttons, 2 ... 20 poles	
○		○		○		○		○	
721-132/001-000	200	722-132	100	721-102/026-000	100	721-602	100	2721-102/026-000	100
721-150/001-000	50	722-150	10	721-120/026-000	10	721-620	10	2721-120/026-000	10
Male headers with angled solder pins, 2 ... 20 poles		Female headers with angled solder pins, 2 ... 20 poles		Female connectors with locking levers, 2 ... 20 poles		Male connectors with mounting flanges, 2 ... 20 poles		Female connectors with push-buttons and locking levers, 2 ... 20 poles	
○		○		○		○		○	
721-432/001-000	200	722-232	100	721-102/037-000	100	721-602/019-000	100	2721-102/037-000	100
721-450/001-000	50	722-250	10	721-120/037-000	10	721-620/019-000	10	2721-120/037-000	10
Male headers with straight press-in pins, 8 A, 2 ... 12 poles		Female headers with straight solder pins and locking levers, 2 ... 20 poles		Female connectors with snap-in mounting feet, 2 ... 20 poles		Male connectors with snap-in mounting feet, 2 ... 20 poles		Female connectors with push-buttons and snap-in mounting feet, 2 ... 20 poles	
○		○		○		○		○	
721-162/100-000	200	722-132/039-000	100	721-102/008-000	100	721-602/018-000	100	2721-102/008-000	100
721-172/100-000	100	722-150/039-000	10	721-120/008-000	10	721-620/018-000	10	2721-120/008-000	10
Male headers with straight solder pins, 16 A, 2 ... 20 poles		Female headers with angled solder pins and locking levers, 2 ... 20 poles		Female connectors with mounting flanges, 2 ... 20 poles		Male connectors with snap-in flanges, 2 ... 20 poles		Female connectors with push-buttons and mounting flanges, 2 ... 20 poles	
○		○		○		○		○	
721-162/001-000	200	722-232/039-000	100	721-102/031-000	100	721-602/114-000	100	2721-102/031-000	100
721-180/001-000	50	722-250/039-000	10	721-120/031-000	10	721-620/114-000	10	2721-120/031-000	10
Male headers with angled solder pins, 16 A, 2 ... 20 poles		Female headers with straight solder pins and mounting flanges, 2 ... 20 poles		Angled female connectors, conductor entry same direction as latches, 2 ... 20 poles					
○		○		○					
721-462/001-000	200	722-132/031-000	100	722-202/026-000	100				
721-480/001-000	50	722-150/031-000	10	722-220/026-000	10				
Male connectors for rail-mounted terminal blocks, 2 ... 20 poles		Female headers with angled solder pins and mounting flanges, 2 ... 20 poles		Angled female connectors, conductor entry opposite of latches, 2 ... 20 poles					
○		○		○					
721-162/003-000	200	722-232/031-000	100	722-102/026-000	100				
721-180/003-000	50	722-250/031-000	10	722-120/026-000	10				
Female connectors for rail-mounted terminal blocks, 2 ... 20 poles		Female headers with straight solder pins and spacers, 2 ... 20 poles		2-conductor female connectors, 2 ... 16 poles				Female connectors with flanges for panel mounting, 2 ... 20 poles	
○		○		○				○	
722-132/005-000	100	722-132/047-000	100	721-2102/026-000	100			721-302/031-000	100
722-150/005-000	10	722-150/047-000	10	721-2116/026-000	25			721-320/031-000	10
Female connectors with locking levers for rail-mounted terminal blocks, 2 ... 20 poles		Female headers with angled solder pins and spacers, 2 ... 20 poles		2-conductor female connectors with locking levers, 2 ... 16 poles				Female connectors with snap-in feet for panel mounting, 2 ... 20 poles	
○		○		○				○	
722-132/005-000/039-000	100	722-232/047-000	100	721-2102/037-000	100			721-302/008-000	100
722-150/005-000/039-000	10	722-250/047-000	10	721-2116/037-000	10			721-320/008-000	10

MCS - MULTI CONNECTION SYSTEM

- Product Overview by Pin Spacing -

231 / 232 / 731 / 231 Series 5 mm, MIDI Classic, 320 V, 12 A									
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Male headers with straight solder pins, 2 ... 24 poles 		Female headers with straight solder pins, 2 ... 24 poles 		Female connectors, 2 ... 24 poles 		Male connectors, 2 ... 24 poles 		Female connectors with push-buttons, 2 ... 24 poles 	
231-132/001-000 200 231-154/001-000 50		232-132 100 232-154 10		0.08 ... 2.5 mm ² / 28 ... 12 AWG 231-102/026-000 100 231-124/026-000 10		0.08 ... 2.5 mm ² / 28 ... 12 AWG 231-602 100 231-624 10		0.2 ... 2.5 mm ² / 24 ... 12 AWG 2231-102/026-000 100 2231-124/026-000 10	
Male headers with angled solder pins, 2 ... 24 poles 		Female headers with angled solder pins, 2 ... 24 poles 		Female connectors with locking levers, 2 ... 24 poles 		Male connectors with mounting flanges, 2 ... 24 poles 		Female connectors with push-buttons and locking levers, 2 ... 24 poles 	
231-432/001-000 200 231-454/001-000 50		232-232 100 232-254 10		0.08 ... 2.5 mm ² / 28 ... 12 AWG 231-102/037-000 100 231-124/037-000 10		0.08 ... 2.5 mm ² / 28 ... 12 AWG 231-602/019-000 100 231-624/019-000 10		0.2 ... 2.5 mm ² / 24 ... 12 AWG 2231-102/037-000 100 2231-124/037-000 10	
Male headers with straight solder pins and mounting flanges, 2 ... 14 poles 		Female headers with straight solder pins and locking levers, 2 ... 24 poles 		Female connectors with snap-in mounting feet, 2 ... 24 poles 		Male connectors with snap-in mounting feet, 2 ... 24 poles 		Female connectors with push-buttons and snap-in mounting feet, 2 ... 24 poles 	
231-132/040-000 200 231-144/040-000 50		232-132/039-000 100 232-154/039-000 10		0.08 ... 2.5 mm ² / 28 ... 12 AWG 231-102/008-000 100 231-124/008-000 10		0.08 ... 2.5 mm ² / 28 ... 12 AWG 231-602/018-000 100 231-624/018-000 10		0.2 ... 2.5 mm ² / 24 ... 12 AWG 2231-102/008-000 100 2231-124/008-000 10	
Male headers with angled solder pins and mounting flanges, 2 ... 14 poles 		Female headers with angled solder pins and locking levers, 2 ... 24 poles 		Female connectors with mounting flanges, 2 ... 24 poles 		Male connectors with snap-in flanges, 2 ... 24 poles 		Female connectors with push-buttons and mounting flanges, 2 ... 24 poles 	
231-432/040-000 200 231-444/040-000 50		232-232/039-000 100 232-254/039-000 10		0.08 ... 2.5 mm ² / 28 ... 12 AWG 231-102/031-000 100 231-124/031-000 10		0.08 ... 2.5 mm ² / 28 ... 12 AWG 231-602/114-000 50 231-624/114-000 10		0.2 ... 2.5 mm ² / 24 ... 12 AWG 2231-102/031-000 100 2231-124/031-000 10	
Male headers with straight solder pins, 2 ... 12 poles 	THR	Female headers with straight solder pins and mounting flanges, 2 ... 24 poles 		Angled female connectors, conductor entry same direction as latches, 2 ... 24 poles 				Female connectors with push-buttons and integrated end plate, 2 ... 24 poles 	
231-132/001-000/105-604 200 231-142/001-000/105-604 100		232-132/031-000 100 232-154/031-000 10		0.08 ... 2.5 mm ² / 28 ... 12 AWG 232-202/026-000 100 232-224/026-000 10				0.2 ... 2.5 mm ² / 24 ... 12 AWG 2231-102/102-000 100 2231-124/102-000 10	
Male headers with angled solder pins, 2 ... 12 poles 	THR	Female headers with angled solder pins and mounting flanges, 2 ... 24 poles 		Angled female connectors, conductor entry opposite of latches, 2 ... 24 poles 				Double-pin male connectors for DIN-35 rail mounting, 2 ... 24 poles 	
231-432/001-000/105-604 200 231-442/001-000/105-604 100		232-232/031-000 100 232-254/031-000 10		0.08 ... 2.5 mm ² / 28 ... 12 AWG 232-102/026-000 100 232-124/026-000 10				232-502/007-000 100 232-524/007-000 10	
Double-deck male headers, 2 ... 16 poles 				2-conductor female connectors, 2 ... 16 poles 				Female connectors with mounting flanges for panel mounting, 2 ... 20 poles 	
232-332 100 232-346 25				0.2 ... 2.5 mm ² / 24 ... 12 AWG 231-2102/026-000 100 231-2116/026-000 25				0.08 ... 2.5 mm ² / 28 ... 12 AWG 731-502/031-000 100 731-520/031-000 10	
Male connectors for rail-mounted terminal blocks, 2 ... 20 poles 		Female connectors for rail-mounted terminal blocks, 2 ... 20 poles 		2-conductor female connectors with locking levers, 2 ... 16 poles 				Female connectors with snap-in feet for panel mounting, 2 ... 20 poles 	
231-162/003-000 200 231-180/003-000 50		232-132/005-000 100 232-150/005-000 10		0.2 ... 2.5 mm ² / 24 ... 12 AWG 231-2102/037-000 100 231-2116/037-000 10				0.08 ... 2.5 mm ² / 28 ... 12 AWG 731-502/008-000 100 731-520/008-000 10	

MCS – MULTI CONNECTION SYSTEM

– Product Overview by Pin Spacing –

231 / 232 / 731 / 2231 Series									
5.08 mm MIDI Classic, 320 V, 12 A (16 A)									
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Male headers with straight solder pins, 2 ... 24 poles		Female headers with straight solder pins, 2 ... 24 poles		Female connectors, 2 ... 24 poles		Male connectors, 2 ... 24 poles		Female connectors with push-buttons, 2 ... 24 poles	
●		●		●		●		●	
231-332/001-000	200	232-162	100	231-302/026-000	100	231-632	100	2231-302/026-000	100
231-354/001-000	50	232-184	10	231-324/026-000	10	231-654	10	2231-324/026-000	10
Male headers with angled solder pins, 2 ... 24 poles		Female headers with angled solder pins, 2 ... 24 poles		Female connectors with locking levers, 2 ... 24 poles		Male connectors with mounting flanges, 2 ... 24 poles		Female connectors with push-buttons and locking levers, 2 ... 24 poles	
●		●		●		●		●	
231-532/001-000	200	232-262	100	231-302/037-000	100	231-632/019-000	100	2231-302/037-000	100
231-554/001-000	50	232-284	10	231-324/037-000	10	231-654/019-000	10	2231-324/037-000	10
Male headers with straight solder pins, 16 A, 2 ... 24 poles		Female headers with straight solder pins and locking levers, 2 ... 24 poles		Female connectors with snap-in mounting feet, 2 ... 24 poles		Male connectors with snap-in mounting feet, 2 ... 24 poles		Female connectors with push-buttons and snap-in mounting feet, 2 ... 24 poles	
●		●		●		●		●	
231-362/001-000	200	232-162/039-000	100	231-302/008-000	100	231-632/018-000	100	2231-302/008-000	100
231-384/001-000	50	232-184/039-000	10	231-324/008-000	10	231-654/018-000	10	2231-324/008-000	10
Male headers with angled solder pins, 16 A, 2 ... 24 poles		Female headers with angled solder pins and locking levers, 2 ... 24 poles		Female connectors with mounting flanges, 2 ... 24 poles		Male connectors with snap-in flanges, 2 ... 24 poles		Female connectors with push-buttons and mounting flanges, 2 ... 24 poles	
●		●		●		●		●	
231-562/001-000	200	232-262/039-000	100	231-302/031-000	100	231-632/114-000	50	2231-302/031-000	100
231-584/001-000	50	232-284/039-000	10	231-324/031-000	10	231-654/114-000	10	2231-324/031-000	10
Double-deck male headers, 2 ... 16 poles		Female headers with straight solder pins and mounting flanges, 2 ... 24 poles		2-conductor female connectors, 2 ... 16 poles				Angled female connectors, conductor entry same direction as latches, 2 ... 24 poles	
●		●		●				●	
232-362	100	232-162/031-000	100	231-2302/026-000	100			232-402/026-000	100
232-376	25	232-184/031-000	10	231-2316/026-000	25			232-424/026-000	10
		Female headers with angled solder pins and mounting flanges, 2 ... 24 poles		2-conductor female connectors with locking levers, 2 ... 16 poles				Angled female connectors, conductor entry opposite of latches, 2 ... 24 poles	
		●		●				●	
		232-262/031-000	100	231-2302/037-000	100			232-302/026-000	100
		232-284/031-000	10	231-2316/037-000	10			232-324/026-000	10
Male headers with straight solder pins and threaded flanges, 2 ... 16 poles				2-conductor female connectors with screw flanges, 2 ... 16 poles		Male connectors with snap-in and threaded flanges, 2 ... 16 poles		Double-pin male connectors for DIN-35 rail mounting, 2 ... 24 poles	
●				●		●		●	
231-332/108-000	200			231-2302/107-000	100	231-632/129-000	50	232-532/007-000	100
231-346/108-000	50			231-2316/107-000	10	231-646/129-000	10	232-554/007-000	10
Male headers with angled solder pins and threaded flanges, 2 ... 16 poles				Female connectors with screw flanges, 2 ... 16 poles		Male connectors with threaded flanges, 2 ... 16 poles		Female connectors with push-buttons and screw flanges, 2 ... 24 poles	
●				●		●		●	
231-532/108-000	200			231-302/107-000	100	231-632/109-000	100	2231-302/107-000	100
231-546/108-000	50			231-316/107-000	10	231-646/109-000	10	2231-316/107-000	10

MCS - MULTI CONNECTION SYSTEM

- Product Overview by Pin Spacing -

721 / 722 / 723 / 2721 Series									
7.5 mm MIDI, 100 % Mismatching Protection, 630 V, 12 A (16 A)									
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Male headers with straight solder pins, 2 ... 12 poles		Female headers with straight solder pins, 2 ... 12 poles		Female connectors, 2 ... 12 poles		Male connectors, 2 ... 12 poles		Female connectors with push-buttons, 2 ... 12 poles	
721-232/001-000	200	722-732	100	721-202/026-000	100	723-602	100	2721-202/026-000	100
721-242/001-000	50	722-742	10	721-212/026-000	25	723-612	25	2721-212/026-000	25
Male headers with angled solder pins, 2 ... 12 poles		Female headers with angled solder pins, 2 ... 12 poles		Female connectors with locking levers, 2 ... 12 poles		Male connectors with mounting flanges, 2 ... 12 poles		Female connectors with push-buttons and locking levers, 2 ... 20 poles	
721-832/001-000	200	722-832	100	721-202/037-000	50	723-602/019-000	100	2721-202/037-000	50
721-842/001-000	50	722-842	10	721-212/037-000	10	723-612/019-000	25	2721-212/037-000	10
Male headers with straight solder pins, 16 A, 2 ... 12 poles		Female headers with straight solder pins and locking levers, 2 ... 12 poles		Female connectors with snap-in mounting feet, 2 ... 12 poles		Male connectors with snap-in mounting feet, 2 ... 12 poles		Female connectors with push-buttons and snap-in mounting feet, 2 ... 12 poles	
721-262/001-000	200	722-732/039-000	100	721-202/008-000	50	723-602/018-000	100	2721-202/008-000	100
721-272/001-000	50	722-742/039-000	10	721-212/008-000	10	723-612/018-000	25	2721-212/008-000	25
Male headers with angled solder pins, 16 A, 2 ... 12 poles		Female headers with angled solder pins and locking levers, 2 ... 12 poles		Female connectors with mounting flanges, 2 ... 12 poles		Male connectors with snap-in flanges, 2 ... 12 poles		Female connectors with push-buttons and mounting flanges, 4 ... 12 poles	
721-862/001-000	200	722-832/039-000	100	721-202/031-000	50	723-602/114-000	100	2721-202/031-000	50
721-872/001-000	50	722-842/039-000	10	721-212/031-000	10	723-612/114-000	25	2721-212/031-000	10
		Female headers with straight solder pins and mounting flanges, 2 ... 12 poles		2-conductor female connectors, 2 ... 16 poles					
				0.2 ... 2.5 mm ² / 24 ... 12 AWG					
				722-732/031-000	100	721-2202/026-000	100		
				722-742/031-000	10	721-2212/026-000	25		
		Female headers with angled solder pins and mounting flanges, 2 ... 12 poles		2-conductor female connectors with locking levers, 2 ... 16 poles					
				0.2 ... 2.5 mm ² / 24 ... 12 AWG					
				722-832/031-000	100	721-2202/037-000	100		
				722-842/031-000	10	721-2212/037-000	25		
		Female headers with straight solder pins and spacers, 2 ... 12 poles						Female connectors with flanges for panel mounting, 2 ... 12 poles	
								0.08 ... 2.5 mm ² / 28 ... 12 AWG	
				722-732/047-000	100			721-332/031-000	50
				722-742/047-000	10			721-342/031-000	10
		Female headers with angled solder pins and spacers, 2 ... 12 poles						Female connectors with snap-in feet for panel mounting, 2 ... 12 poles	
								0.08 ... 2.5 mm ² / 28 ... 12 AWG	
				722-832/047-000	100			721-332/008-000	100
				722-842/047-000	10			721-342/008-000	25

























MCS – MULTI CONNECTION SYSTEM







– Product Overview by Pin Spacing –

231 / 232 / 731 / 732 / 2231 Series									
7.5 mm MIDI Classic, 100 % Mismatching Protection, 630 V, 12 A (16 A)									
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Male headers with straight solder pins, 2 ... 16 poles		Female headers with straight solder pins, 2 ... 16 poles		Female connectors, 2 ... 16 poles		Male connectors, 2 ... 16 poles		Female connectors with push-buttons, 2 ... 16 poles	
231-232/001-000	200	232-732	100	231-202/026-000	100	731-602	100	2231-202/026-000	100
231-246/001-000	50	232-746	10	231-216/026-000	10	731-616	10	2231-216/026-000	10
Male headers with angled solder pins, 2 ... 16 poles		Female headers with angled solder pins, 2 ... 16 poles		Female connectors with locking levers, 2 ... 16 poles		Male connectors with mounting flanges, 2 ... 16 poles		Female connectors with push-buttons and locking levers, 2 ... 16 poles	
231-832/001-000	200	232-832	100	231-202/037-000	50	731-602/019-000	100	2231-202/037-000	50
231-846/001-000	50	232-846	10	231-216/037-000	10	731-616/019-000	10	2231-216/037-000	10
Male headers with straight solder pins, 16 A, 2 ... 16 poles		Female headers with straight solder pins and locking levers, 2 ... 16 poles		Female connectors with snap-in mounting feet, 2 ... 16 poles		Male connectors with snap-in mounting feet, 2 ... 16 poles		Female connectors with push-buttons and snap-in mounting feet, 2 ... 16 poles	
231-262/001-000	200	232-732/039-000	100	231-202/008-000	100	731-602/018-000	100	2231-202/008-000	100
231-276/001-000	50	232-746/039-000	10	231-216/008-000	10	731-616/018-000	10	2231-216/008-000	10
Male headers with angled solder pins, 16 A, 2 ... 16 poles		Female headers with angled solder pins and locking levers, 2 ... 16 poles		Female connectors with mounting flanges, 2 ... 16 poles		Male connectors with snap-in mounting flanges, 2 ... 16 poles		Female connectors with push-buttons and mounting flanges, 2 ... 16 poles	
231-862/001-000	200	232-832/039-000	100	231-202/031-000	50	731-602/114-000	50	2231-202/031-000	50
231-876/001-000	50	232-846/039-000	10	231-216/031-000	10	731-616/114-000	10	2231-216/031-000	10
Male headers with straight solder pins, 2 ... 12 poles		Female headers with straight solder pins and mounting flanges, 2 ... 16 poles		2-conductor female connectors, 2 ... 12 poles					
231-232/001-000/105-604	200	232-732/031-000	100	231-2202/026-000	100				
231-242/001-000/105-604	50	232-746/031-000	10	231-2212/026-000	25				
Male headers with angled solder pins, 2 ... 12 poles		Female headers with angled solder pins and mounting flanges, 2 ... 16 poles		2-conductor female connectors with locking levers, 2 ... 12 poles				Double-pin male connectors for DIN-35 rail mounting, 2 ... 12 poles	
231-832/001-000/105-604	200	232-832/031-000	100	231-2202/037-000	100			232-562/007-000	50
231-842/001-000/105-604	50	232-846/031-000	10	231-2212/037-000	25			232-572/007-000	10
Male headers with straight solder pins, 16 A, 2 ... 12 poles		Female headers with straight solder pins and spacers, 2 ... 16 poles						Angled female connectors with mounting flanges, 2 ... 24 poles	
231-262/001-000/105-604	200	232-732/047-000	100					731-532/031-000	50
231-272/001-000/105-604	50	232-746/047-000	10					731-546/031-000	10
Male headers with angled solder pins, 16 A, 2 ... 12 poles		Female headers with angled solder pins and spacers, 2 ... 16 poles						Angled female connectors with snap-in mounting feet, 2 ... 12 poles	
231-862/001-000/105-604	200	232-832/047-000	100					731-532/008-000	100
231-872/001-000/105-604	50	232-846/047-000	10					731-546/008-000	10

MCS - MULTI CONNECTION SYSTEM

- Product Overview by Pin Spacing -

231 / 232 / 731 / 2231 Series									
7.62 mm MIDI Classic, 100 % Mismatching Protection, 630 V, 12 A (16 A)									
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Male headers with straight solder pins, 2 ... 12 poles		Female headers with straight solder pins, 2 ... 12 poles		Female connectors, 2 ... 12 poles		Male connectors, 2 ... 12 poles		Female connectors with push-buttons, 2 ... 12 poles	
231-732/001-000	200	232-762	100	231-702/026-000	100	731-632	50	2231-702/026-000	100
231-742/001-000	50	232-772	10	231-712/026-000	10	731-642	10	2231-712/026-000	10
Male headers with angled solder pins, 2 ... 12 poles		Female headers with angled solder pins, 2 ... 12 poles		Female connectors with locking levers, 2 ... 12 poles		Male connectors with mounting flanges, 2 ... 12 poles		Female connectors with push-buttons and locking levers, 2 ... 12 poles	
231-932/001-000	200	232-862	100	231-702/037-000	50	731-632/019-000	50	2231-702/037-000	50
231-942/001-000	50	232-872	10	231-712/037-000	10	731-642/019-000	10	2231-712/037-000	10
Male headers with straight solder pins, 16 A, 2 ... 12 poles		Female headers with straight solder pins and locking levers, 2 ... 12 poles		Female connectors with snap-in mounting feet, 2 ... 12 poles		Male connectors with snap-in mounting feet, 2 ... 12 poles		Female connectors with push-buttons and snap-in mounting feet, 2 ... 12 poles	
231-762/001-000	200	232-762/039-000	100	231-702/008-000	100	731-632/018-000	100	2231-702/008-000	100
231-772/001-000	50	232-772/039-000	10	231-712/008-000	10	731-642/018-000	10	2231-712/008-000	10
Male headers with angled solder pins, 16 A, 2 ... 12 poles		Female headers with angled solder pins and locking levers, 2 ... 12 poles		Female connectors with mounting flanges, 2 ... 12 poles		Male connectors with snap-in flanges, 2 ... 12 poles		Female connectors with push-buttons and mounting flanges, 2 ... 12 poles	
231-962/001-000	200	232-862/039-000	100	231-702/031-000	50	731-632/114-000	50	2231-702/031-000	50
231-972/001-000	50	232-872/039-000	10	231-712/031-000	10	731-646/114-000	10	2231-712/031-000	10
		Female headers with straight solder pins and mounting flanges, 2 ... 12 poles		2-conductor female connectors, 2 ... 12 poles		Double-pin male connectors for DIN-35 rail mounting, 2 ... 12 poles		Angled female connectors, conductor entry opposite of latches, 2 ... 12 poles	
		232-762/031-000	100	231-2702/026-000	100	232-582/007-000	50	732-122/026-000	100
		232-772/031-000	10	231-2712/026-000	25	232-592/007-000	10	732-132/026-000	25

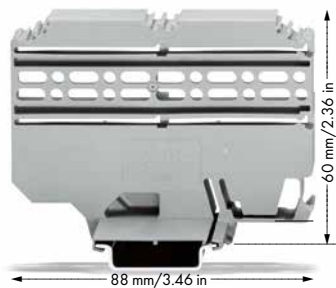
831 Series									
7.62 mm MAXI, 100 % Mismatching Protection, 1,000 V, 41 A									
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Male headers with straight solder pins, 2 ... 9 poles		Female connectors, 2 ... 9 poles		Male connectors, 2 ... 9 poles		Male connectors with integrated mounting adapter for DIN-35 rail, 2 ... 9 poles			
831-3602	48			831-3102	48	831-3202	48	831-3202/007-000	48
831-3609	12			831-3109	12	831-3209	12	831-3209/007-000	12
Male headers with angled solder pins, 2 ... 9 poles		Female connectors with locking levers, 2 ... 9 poles							
831-3622	48			831-3102/037-000	48				
831-3629	12			831-3109/037-000	12				

MCS - MULTI CONNECTION SYSTEM MIDI Classic

Multi Mounting Adapter, Strain Relief Housings, Accessories

Multi mounting adapter for male and female connectors with snap-in mounting feet

Adapter width: 10 mm/0.394 in.



Snap-on type strain relief housings for:
- female connectors with CAGE CLAMP®
- male connectors with CAGE CLAMP®



Accessories

Color	Item No.	Pack. Unit
Test plug, with 500 mm cable		
	2 mm Ø	210-136 50
	2.3 mm Ø	210-137 50
Test plug adapter, for female connectors, light gray		
	5/5.08 mm pin spacing	231-661 100
	7.5/7.62 mm pin spacing	231-662 100

Color	Item No.	Pack. Unit
	209-148	25

Pole No.	Item No.	Item No.	Pack. Unit
Snap-on type strain relief housing, consists of strain relief support and housing, for 734 Series			
3.5 mm pin spacing 3.81 mm pin spacing			
	light gray	orange	
2	734-602 ①	734-632 ①	50
3	734-603 ①	734-633 ①	25
:	:	:	
6	734-606	734-636	25
7	734-607	-	25
8	734-608	734-638	25
9	734-609	734-639	25
10	734-610	734-640	25
12	734-612	734-642	25

		231-193 100
		231-391 100
Screw with nut, M 2 x 12, for fixing element		
		231-195 100



If either the male or the female connector is equipped with mounting feet and mounted on the adapter via its oblong holes or open grooves (A/B), but the mating half is not, then the connection remains pluggable.



The adapter can be marked either with WMB or miniature WSB markers.



for 231 and 721 Series			
5 mm pin spacing 5.08 mm pin spacing			
2	232-602	232-632	25
3	232-603	232-633	25
:	:	:	
6	232-606	232-636	25
7	232-607	-	25
8	232-608	232-638	25
9	232-609	232-639	25
10	232-610	232-640	25
12	232-612	232-642	25

for 231, 721 and 731 Series			
7.5 mm pin spacing 7.62 mm pin spacing			
2	232-662 ②	232-682 ②	25
3	232-663 ②	232-683 ②	25
4	232-664	232-684	25
5	232-665	232-685	25
7	232-667	232-687	25

Cable clamp, for strain relief	209-177	25
	Pole no.:	Pin spacing (mm):
	6 ... 12 poles	3.5 + 3.81
	4 ... 6 poles	5 + 5.08
	3 poles	7.5 + 7.62
Cable clamp, for strain relief	209-174	25
	7 or more poles	5 + 5.08
	5 or more poles	7.5 + 7.62

Fixing screw, for cable clamp	209-176	50
	Pole no.:	Pin spacing (mm):
	4 ... 6 poles	5 + 5.08
	3 poles	7.5 + 7.62
Fixing screw, for cable clamp	209-172	50
	6 ... 12 poles	3.5 + 3.81
	7 or more poles	5 + 5.08
	5 or more poles	7.5 + 7.62

Fixing screw, for cable clamp	209-173	50
	Pole no.:	Pin spacing (mm):
	4 ... 6 poles	5 + 5.08
	3 poles	7.5 + 7.62

Mounting adapter		209-137 1
Spacer, for male connectors		
		231-500 200

Lockout cap		
		231-668 500
		231-669 500

Operating tool with a partially insulated shaft,		
	type 1, (2.5 x 0.4) mm blade	
		210-719 1
	type 2, (3.5 x 0.5) mm blade	
		210-720 1





Operating tool, for male and female connectors equipped with CAGE CLAMP® connection		
	MINI/MIDI	210-250 1
	MINI/MICRO	210-251 1

Comb-style jumper bar, for 5/5.08 mm pin spacing		
	2-way	231-902 200
	3-way	231-903 100
	5-way	231-905 100
	7-way	231-907 100
	10-way	231-910 100





Marking strip, 100 self-adhesive strips		
2.5 mm pin spacing		
	1 ... 16 (400x)	210-331/250-202
3.5 mm pin spacing		
	1 ... 16 (240x)	210-332/350-202
3.81 mm pin spacing		
	1 ... 16 (160x)	210-332/381-202
5 mm pin spacing		
	1 ... 12 (300x)	210-331/500-103
5.08 mm pin spacing		
	1 ... 16 (200x)	210-331/508-103
7.5 mm pin spacing		
	1 ... 16 (100x)	210-331/750-202
7.62 mm pin spacing		
	1 ... 16 (100x)	210-331/762-202

① 2 ... 5 poles only suitable for cable ties (734 Series) ② 2 ... 3 poles only suitable for cable ties (231, 721 and 731 Series)


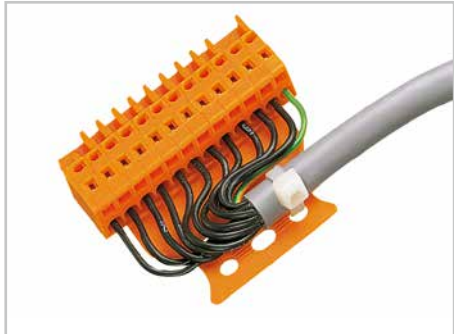

MCS – MULTI CONNECTION SYSTEM MINI and MIDI Accessories

	733 Series Pin Spacing: 2.5 mm			734 Series Pin Spacing: 3.5 mm			231 / 721 / 722 Series					
	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Pin Spacing: 5 mm			Pin Spacing: 7.5 mm		
							Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Coding keys for male connectors 	○ ●	733-330 733-331	100 100	○ ● ○	734-130 734-159 734-400	100 100 100	○ ○	231-129 231-160	100 100	○	231-130	100
Insulation stops 		-		○	734-671	8x25	○ ○ ●	231-670 231-671 231-672	200 200 200	○ ○ ●	231-673 231-674 231-675	200 200 200
Operating levers 	○ ●	733-130 733-191	4x25 4x25	○ ●	734-230 734-191	4x25 4x25	○ ●	231-131 231-291	4x25 4x25	○ ●	231-131 231-291	4x25 4x25
Operating tools 	○ ●	233-332 233-331	25 25	○ ●	734-190 734-231	4x25 4x25	○ ●	231-159 231-231	4x25 4x25	○ ●	231-159 231-231	4x25 4x25

Field-Assembled Strain Relief Plates for Female Connectors

	Pin Spacing	Pole No.	Width	Color/Item No.			Pack. Unit	Pole No.	Pin Spacing	
	2.5 mm	2 ... 4	6 mm	○ 734-127	● 734-327	● 734-227	4x25	2 ... 3	3.5 / 3.81 mm	
		5 ... 9	12.5 mm	○ 734-128	● 734-328	● 734-228	4x25	4 ... 8		
		10 ... 12	25 mm	○ 734-129	● 734-329	● 734-229	4x25	9 ... 12		
		-	35 mm	○ 734-126	● 734-326	● 734-226	4x25	13 ... 16		
		-	55 mm	○ 734-426	● 734-430	● 734-428	2x25	17 ... max.		
	5 / 5.08 mm	2	6 mm	○ 734-127	● 734-327	● 734-227	4x25	-	7.5 / 7.62 mm	
		3 ... 4	12.5 mm	○ 734-128	● 734-328	● 734-228	4x25	2 ... 3		
		5 ... 7	25 mm	○ 734-129	● 734-329	● 734-229	4x25	4 ... 6		
		8 ... 11	35 mm	○ 734-126	● 734-326	● 734-226	4x25	7 ... 9		
		12 ... 16	55 mm	○ 734-426	● 734-430	● 734-428	2x25	10 ... 12		
		17 ... 24	75 mm	○ 734-427	● 734-431	● 734-429	2x25	13 ... 16		

Factory-Assembled Strain Relief Plates for Female Connectors

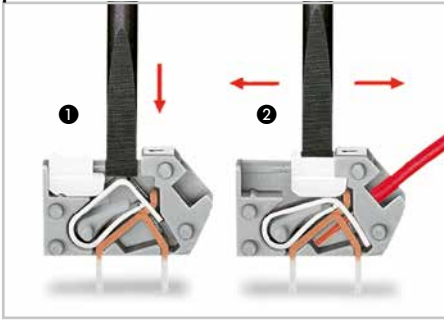
Item No. Suffix	733 Series, Pin Spacing: 2.5 mm Pole No.	713 Series, Pin Spacing: 3.5 mm Pole No.	734 Series, Pin Spacing: 3.5 / 3.81 mm Pole No.	231 / 721 Series, Pin Spacing: 5 / 5.08 mm Pole No.	231 / 721 Series, Pin Spacing: 7.5 / 7.62 mm Pole No.
.../032-000	2 ... 4	6 ... 12	2 ... 3	2 ... 3	2
.../033-000	5 ... 9	14 ... 20	4 ... 8	4 ... 5	3 ... 5
.../034-000	10 ... 12	22 ... 28	9 ... 12	6 ... 9	6 ... 7
.../035-000	-	30 ... 36	13 ... 16	10 ... 24	8 ... 16
.../036-000	-	-	17 ... max.	-	-
Item No. Suffix	2721 / 2231 / 721 Series and 2-Conductor Female Connectors, Pin Spacing: 5 / 5.08 mm Pole No.	2721 / 2231 / 721 Series and 2-Conductor Female Connectors, Pin Spacing: 7.5 / 7.62 mm Pole No.			
.../132-000	2	-			
.../133-000	3 ... 4	2 ... 3			
.../134-000	5 ... 7	4 ... 6			
.../135-000	8 ... 11	7 ... 9			
.../136-000	12 ... 16	10 ... 12			
.../137-000	17 ... 24	13 ... 16			

Sample order:

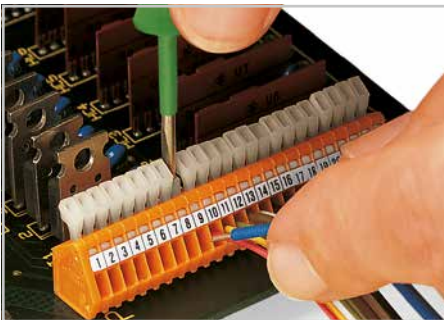
Angled female connector with strain relief plate, 7.62 mm pin spacing, 5-pole, orange: **732-125/026-000/033-000**

PCB Terminal Strips – Description and Installation –

Actuation with locking slide/lever/ push-button

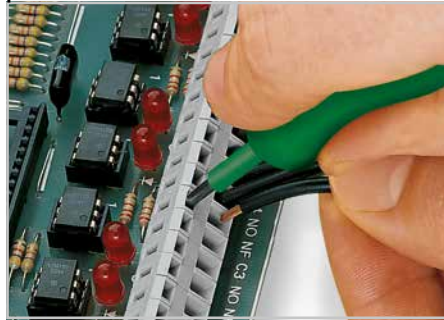


Conductor termination: **1** To momentarily open the clamping unit, use screwdriver and then insert stripped conductor. **2** To open clamping unit for extended period, move locking slide toward conductor entry hole. Then fully insert stripped conductor and move locking slide back to original position (also possible to perform with fingernail).

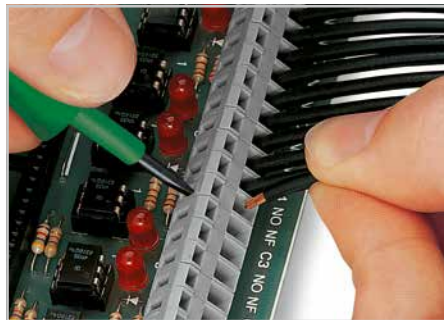


Inserting/removing conductor.

Actuation without locking slide/lever/ push-button

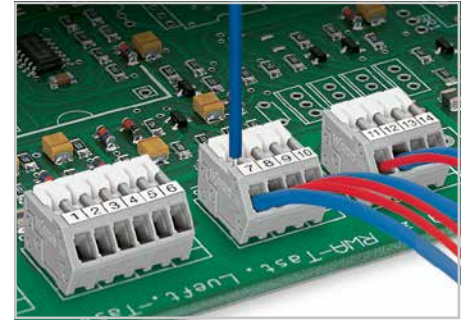


Inserting conductor via screwdriver (3.5 mm blade):
Conductor entry and clamp operation are parallel.

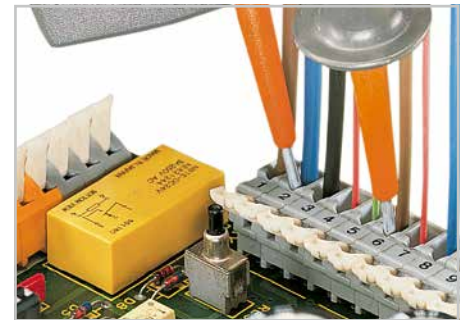


Inserting conductor via screwdriver (3.5 mm blade):
Conductor entry and clamp operation are perpendicular.

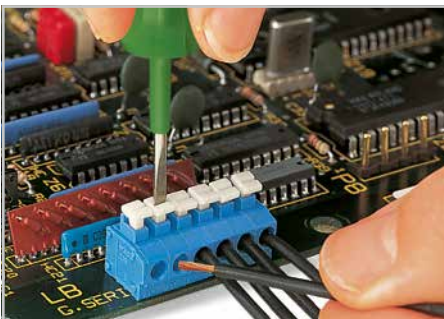
Testing



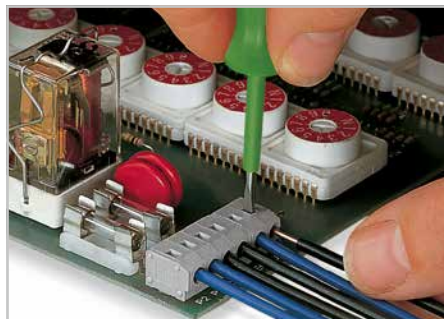
Inserting/removing conductor.



Testing with test probes.



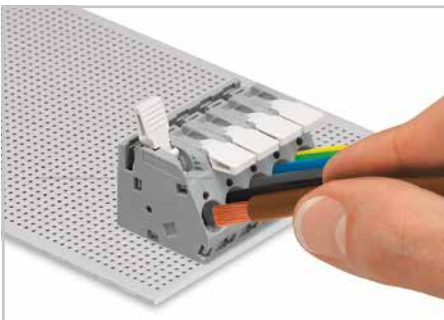
Inserting/removing fine-stranded conductor via
push-button.



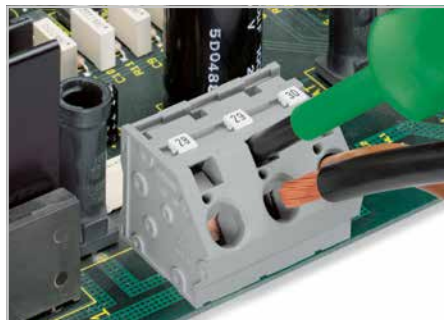
Removing conductor using a screwdriver – terminal strip
without push-buttons.



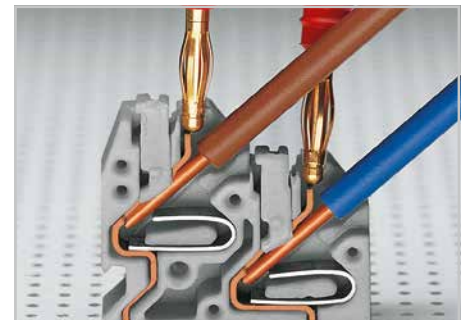
Inserting/removing conductor via finger-operated lever –
257 Series.
For terminal strips with finger-operated levers, see Full Line
Catalog.



Inserting/removing conductor – 2706 and 2716 Series.

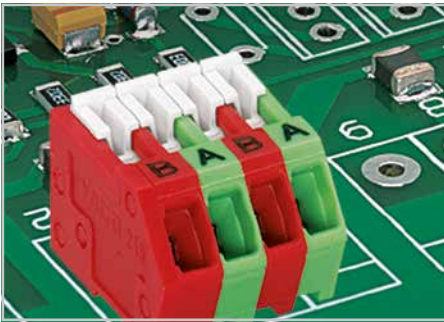


Inserting conductor via screwdriver (5.5 mm blade).



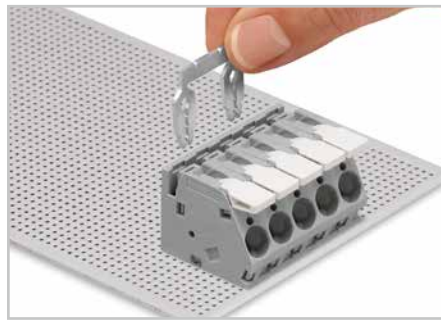
Testing with 2 mm Ø test plug.

Marking



Factory direct marking.

Commoning



Insert the comb-style jumper bar.

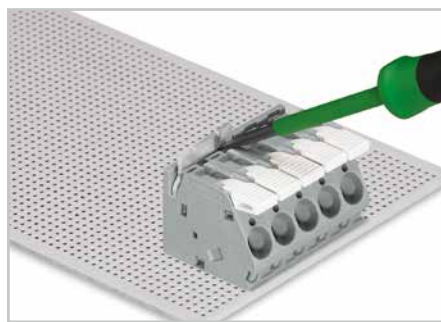
Specialty functions



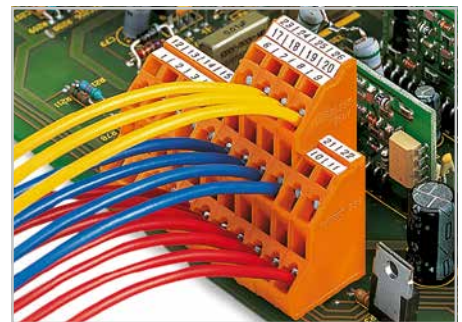
For terminal strips in other colors, please contact factory.



Marking via self-adhesive marking strips (above) or factory direct marking.

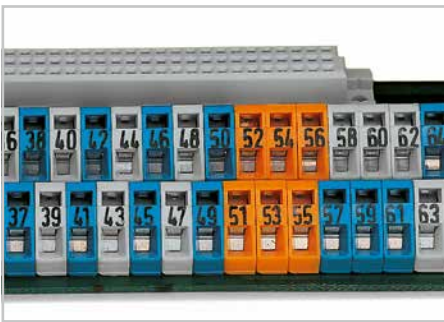


Push jumper bar down firmly using a screwdriver until it hits the backstop – 2706 and 2716 Series.



Space-saving triple-deck terminal strip

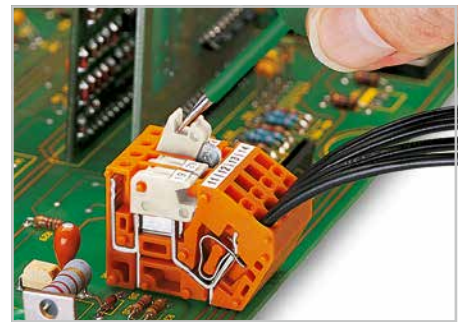
4



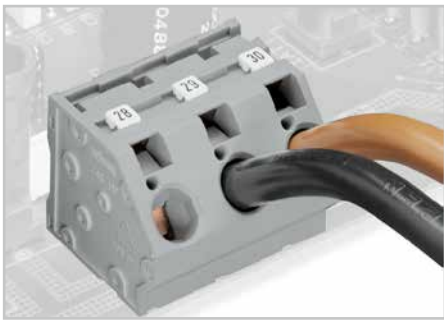
Mixed-color terminal strips with factory direct marking



Custom terminal strips are available upon request.



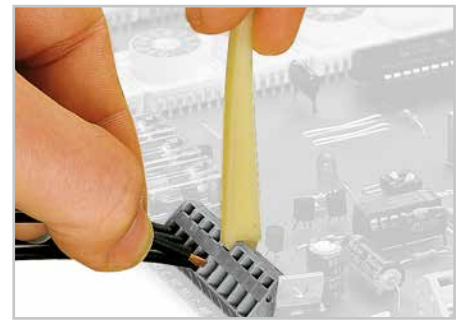
Opening knife disconnect.



Marking via miniature WSB and WMB markers or factory direct marking – 745 Series.



Horizontal commoning:
Connection of adjacent terminals
Note: Interruption of horizontal commoning reduces spacing to the adjacent solder pins.



Inserting conductor via operating tool.

PCB Terminal Blocks

- Product Overview by Pin Spacing -

Colors available:

- green-yellow
- gray
- dark gray
- light gray
- white
- orange
- light green
- black
- blue
- red
- yellow
- brown
- green
- violet
- pink

Ex e II approval

Press-in technology

Through-hole reflow soldering

Surface-mount technology

Only available in this pin spacing

2.5 mm	
Item No.	Pack. Unit
233 Series, 2 ... 24 poles, 160 V / 6 A	
0.08 ... 0.5 mm ² / 28 ... 20 AWG	
233-102	600
233-124	80
233 Series, 2 ... 24 poles, 160 V / 6 A	
0.08 ... 0.5 mm ² / 28 ... 20 AWG	
233-202	600
233-224	80
234 Series, 2 ... 24 poles, 160 V / 6 A	
0.08 ... 0.5 mm ² / 28 ... 20 AWG	
234-202	600
234-224	80
250 Series, 2 ... 24 poles, 160 V / 4 A	
0.2 ... 0.5 mm ² / 24 ... 20 AWG	
250-402	720
250-424	60
250 Series, 2 ... 8 poles, 160 V / 4 A THR	
0.2 ... 0.5 mm ² / 24 ... 20 AWG	
250-402/350-604	720
250-408/350-604	220
218 Series, 2 ... 24 poles, 160 V / 6 A	
0.08 ... 0.5 mm ² / 28 ... 20 AWG	
218-102	1000
218-124	60
218 Series, 2 ... 7 poles, 160 V / 6 A THR	
0.08 ... 0.5 mm ² / 28 ... 20 AWG	
218-102/000-604	1000
218-107/000-604	240

2.54 mm	
Item No.	Pack. Unit
233 Series, 2 ... 24 poles, 160 V / 6 A	
0.08 ... 0.5 mm ² / 28 ... 20 AWG	
233-402	600
233-424	80
233 Series, 2 ... 24 poles, 160 V / 6 A	
0.08 ... 0.5 mm ² / 28 ... 20 AWG	
233-502	600
233-524	80
234 Series, 2 ... 24 poles, 160 V / 6 A	
0.08 ... 0.5 mm ² / 28 ... 20 AWG	
234-502	600
234-524	80
250 Series, 2 ... 24 poles, 160 V / 4 A	
0.2 ... 0.5 mm ² / 24 ... 20 AWG	
250-1402	720
250-1424	60
218 Series, 2 ... 24 poles, 160 V / 6 A	
0.08 ... 0.5 mm ² / 28 ... 20 AWG	
218-502	1000
218-524	60
218 Series, 2 ... 7 poles, 160 V / 6 A THR	
0.08 ... 0.5 mm ² / 28 ... 20 AWG	
218-502/000-604	1000
218-507/000-604	240

3.5 mm	
Item No.	Pack. Unit
739 Series, 2 ... 12 poles, 160 V / 17.5 A	
0.08 ... 1.5 mm ² / 28 ... 14 AWG	
739-302	560
739-312	100
805 Series, 2 ... 24 poles, 320 V / 17.5 A	
0.2 ... 1.5 mm ² / 24 ... 16 AWG	
805-102	580
805-124	40
805 Series, 2 ... 8 poles, 320 V / 17.5 A THR	
0.2 ... 1.5 mm ² / 24 ... 16 AWG	
805-302/200-604	600
805-308/200-604	160
250 Series, 2 ... 24 poles, 160 V / 8 A	
0.2 ... 1.5 mm ² / 24 ... 16 AWG	
250-102	560
250-124	40
250 Series, 2 ... 8 poles, 320 V / 8 A THR	
0.2 ... 1.5 mm ² / 24 ... 16 AWG	
250-202/353-604	560
250-208/353-604	160
739 Series, 3 ... 12 poles, 160 V / 4 A	
0.08 ... 1.5 mm ² / 28 ... 14 AWG	
739-303/100-000	400
739-312/100-000	100
744 Series, 2 ... 10 poles, 320 V / 2 A	
0.5 ... 1.5 mm ² / 20 ... 16 AWG "s"	
744-292	1000
744-210	200
251 Series, 2 ... 7 poles, 320 V / 2 A (6 A)	
0.5 ... 1.5 mm ² / 20 ... 16 AWG "s"	
251-102	600
251-107	180

3.81 mm	
Item No.	Pack. Unit
739 Series, 2 ... 12 poles, 320 V / 17.5 A	
0.08 ... 1.5 mm ² / 28 ... 14 AWG	
739-332	520
739-342	100
235 Series, 2 ... 48 poles, 320 V / 17.5 A	
0.5 ... 1.5 mm ² / 20 ... 16 AWG	
235-101	520
235-148	20
235 Series, 2 ... 48 poles, 320 V / 17.5 A	
0.5 ... 1.5 mm ² / 20 ... 16 AWG "s"	
235-101/330-000	520
235-148/330-000	20
735 Series, 2 ... 7 poles, 320 V / 10 A	
0.5 ... 1.5 mm ² / 20 ... 16 AWG "s"	
735-122	660
735-127	180
739 Series, 3 ... 12 poles, 160 V / 4 A	
0.08 ... 1.5 mm ² / 28 ... 14 AWG	
739-333/100-000	360
739-342/100-000	100

PCB Terminal Blocks

- Product Overview by Pin Spacing -




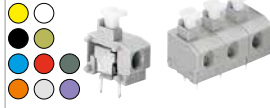



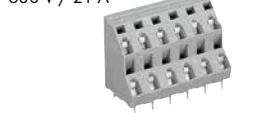





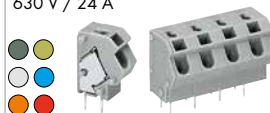

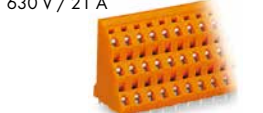






















5 mm			
Item No.	Pack. Unit	Item No.	Pack. Unit
236 Series , 2 ... 48 poles, 320 V / 24 A		236 Series , 2 ... 6 poles, 320 V / 24 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 236-101 420		● 236-402/334-604 420	
○ 236-148 20		● 236-406/334-604 140	
736 Series , 2 x 2 ... 24 x 2 poles, 320 V / 21 A		740 Series , 2 ... 24 poles, 320 V / 16 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 736-102 161		○ 740-102 460	
○ 736-124 14		○ 740-124 40	
737 Series , 2 x 3 ... 24 x 3 poles, 320 V / 21 A		253 Series , 2 ... 16 poles, 320 V / 17.5 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 1.5 mm ² / 20 ... 16 AWG "s"	
○ 737-102 92		○ 253-102 400	
○ 737-124 8		○ 253-116 40	
738 Series , 2 x 4 ... 24 x 4 poles, 320 V / 18 A		250 Series , 2 ... 16 poles, 320 V / 17.5 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 1.5 mm ² / 20 ... 16 AWG	
○ 738-102 72		○ 250-502 400	
○ 738-124 6		○ 250-516 40	
255 Series , 2 ... 48 poles, 320 V / 24 A		250 Series , 2 ... 24 poles, 320 V / 10 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 1.5 mm ² / 20 ... 16 AWG	
○ 255-401 400		○ 250-702 264	
○ 255-448 20		○ 250-724 24	
256 Series , 2 ... 48 poles, 320 V / 24 A		816 Series , 2 ... 12 poles, 320 V / 14 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		2 x 0.2 ... 1.5 mm ² / 2 x 24 ... 16 AWG	
○ 256-401 400		○ 816-102 400	
○ 256-448 20		○ 816-112 60	
257 Series , 2 ... 48 poles, 320 V / 24 A		254 Series , 2 ... 48 poles, 320 V / 24 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 2.5 mm ² / 20 ... 12 AWG "s"	
○ 257-401 400		○ 254-451 420	
○ 257-448 20		○ 254-498 20	
739 Series , 2 ... 24 poles, 320 V / 24 A		804 Series , 2 ... 16 poles, 320 V / 24 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.25 ... 2.5 mm ² / 20 ... 12 AWG	
○ 739-102 400		○ 804-102 420	
○ 739-124 20		○ 804-116 60	
742 Series , 1 ... 3 conductors, 320 V / 16 A		742 Series , 1 ... 3 conductors, 320 V / 16 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 742-101 384		○ 742-153 100	
742 Series , 1/2-conductor, 320 V / 16 A		742 Series , 1 ... 3 conductors, 320 V / 15 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 742-121 300		○ 742-111 300	
		○ 742-163 100	
741 Series , 2 ... 16 poles, 320 V / 16 A		741 Series , 2 ... 16 poles, 320 V / 16 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 741-102 400		○ 741-116 40	
735 Series , 2 ... 7 poles, 320 V / 10 A		735 Series , 2 ... 7 poles, 320 V / 10 A	
0.5 ... 1.5 mm ² / 20 ... 16 AWG "s"		0.5 ... 1.5 mm ² / 20 ... 16 AWG "s"	
○ 735-302 500		○ 735-307 140	
235 Series , 2 ... 48 poles, 320 V / 24 A		235 Series , 2 ... 48 poles, 320 V / 24 A	
0.5 ... 2.5 mm ² / 20 ... 14 AWG "s"		0.5 ... 2.5 mm ² / 20 ... 14 AWG "s"	
○ 235-402 421		○ 235-448 20	
745 Series , 2 ... 12 poles, 320 V / 32 A		745 Series , 2 ... 12 poles, 320 V / 32 A	
0.08 ... 4 mm ² / 28 ... 12 AWG		0.08 ... 4 mm ² / 28 ... 12 AWG	
○ 745-3102 276		○ 745-3112 48	
739 Series , 2 ... 24 poles, 320 V / 24 A		739 Series , 2 ... 24 poles, 320 V / 24 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 739-152 400		○ 739-174 20	
739 Series , 3 ... 12 poles, 320 V / 8 A		739 Series , 3 ... 12 poles, 320 V / 8 A	
0.08 ... 1.5 mm ² / 28 ... 14 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG	
○ 739-153/100-000 360		○ 739-162/100-000 100	

5.08 mm			
Item No.	Pack. Unit	Item No.	Pack. Unit
236 Series , 2 ... 48 poles, 320 V / 24 A		742 Series , 1 ... 3 conductors, 320 V / 16 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 236-101 420		○ 742-106 384	
○ 236-148 20		○ 742-158 100	
736 Series , 2 x 2 ... 24 x 2 poles, 320 V / 21 A		742 Series , 1/2-conductor, 320 V / 16 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 736-302 161		○ 742-126 300	
○ 736-324 14		○ 742-176 200	
737 Series , 2 x 3 ... 24 x 3 poles, 320 V / 21 A		742 Series , 1 ... 3 conductors, 320 V / 15 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 737-302 92		○ 742-116 300	
○ 737-324 8		○ 742-168 100	
738 Series , 2 x 4 ... 24 x 4 poles, 320 V / 18 A		741 Series , 2 ... 16 poles, 320 V / 16 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 738-302 72		○ 741-202 400	
○ 738-324 6		○ 741-216 40	
255 Series , 2 ... 48 poles, 320 V / 24 A		255 Series , 2 ... 48 poles, 320 V / 24 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 255-401 400		○ 255-448 20	
256 Series , 2 ... 48 poles, 320 V / 24 A		235 Series , 2 ... 48 poles, 320 V / 24 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 2.5 mm ² / 20 ... 14 AWG "s"	
○ 256-401 400		○ 235-401 420	
○ 256-448 20		○ 235-448 20	
257 Series , 2 ... 48 poles, 320 V / 24 A		254 Series , 2 ... 48 poles, 320 V / 24 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 2.5 mm ² / 20 ... 12 AWG "s"	
○ 257-401 400		○ 254-451 420	
○ 257-448 20		○ 254-498 20	
739 Series , 2 ... 24 poles, 320 V / 24 A		739 Series , 3 ... 12 poles, 320 V / 8 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 1.5 mm ² / 28 ... 14 AWG	
○ 739-152 400		○ 739-153/100-000 360	
○ 739-174 20		○ 739-162/100-000 100	

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PCB Terminal Blocks

- Product Overview by Pin Spacing -

7.5 mm				7.62 mm			
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
236 Series , 2 ... 24 poles, 630 V / 24 A		235 Series , 2 ... 24 poles, 630 V / 17.5 A		745 Series , 2 ... 12 poles, 630 V / 32 A		236 Series , 2 ... 24 poles, 630 V / 24 A	
							
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 1.5 mm ² / 20 ... 14 AWG		0.08 ... 4 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 236-201 280		○ 235-501/331-000 280		○ 745-3152 228		○ 236-201 280	
○ 236-224 20		○ 235-524/331-000 20		○ 745-3162 36		○ 236-224 20	
736 Series , 2 x 2 ... 16 x 2 poles, 630 V / 21 A		235 Series , 2 ... 24 poles, 630 V / 24 A		745 Series , 2 ... 12 poles, 630 V / 32 A		736 Series , 2 x 2 ... 16 x 2 poles, 630 V / 21 A	
							
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 2.5 mm ² / 20 ... 14 AWG "s"		0.08 ... 4 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 736-502 133		○ 235-501 280		○ 745-152 180		○ 736-602 133	
○ 736-516 14		○ 235-524 20		○ 745-162 30		○ 736-616 14	
737 Series , 2 x 3 ... 16 x 3 poles, 630 V / 21 A		254 Series , 2 ... 24 poles, 630 V / 24 A		745 Series , 2 ... 12 poles, 630 V / 41 A		737 Series , 2 x 3 ... 16 x 3 poles, 630 V / 21 A	
							
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 2.5 mm ² / 20 ... 12 AWG "s"		0.2 ... 6 mm ² / 24 ... 10 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 737-502 76		○ 254-551 280		○ 745-302 128		○ 737-602 76	
○ 737-516 8		○ 254-574 20		○ 745-312 16		○ 737-616 8	
255 Series , 2 ... 24 poles, 630 V / 24 A		741 Series , 2 ... 10 poles, 630 V / 16 A		2706 Series , 2 ... 12 poles, 630 V / 41 A		255 Series , 2 ... 24 poles, 630 V / 24 A	
							
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 6 mm ² / 20 ... 10 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 255-501 280		○ 741-302 340		○ 2706-102 85		○ 255-501 280	
○ 255-524 20		○ 741-310 60		○ 2706-112 15		○ 255-524 20	
256 Series , 2 ... 24 poles, 320 V / 24 A		250 Series , 2 ... 12 poles, 630 V / 17.5 A		2706 Series , 2 ... 12 poles, 630 V / 41 A		256 Series , 2 ... 24 poles, 320 V / 24 A	
							
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 1.5 mm ² / 20 ... 16 AWG		0.5 ... 6 mm ² / 20 ... 10 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 256-501 280		○ 250-602 340		○ 2706-152 85		○ 256-501 280	
○ 256-524 20		○ 250-612 40		○ 2706-162 15		○ 256-524 20	
257 Series , 2 ... 24 poles, 630 V / 24 A		804 Series , 2 ... 12 poles, 320 V / 24 A		746 Series , 2 ... 12 poles, 1,000 V / 50 A		257 Series , 2 ... 24 poles, 630 V / 24 A	
							
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.25 ... 2.5 mm ² / 20 ... 12 AWG		2 x 0.5 ... 10 mm ² / 2 x 20 ... 8 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 257-501 280		○ 804-302 340		○ 746-2302 60		○ 257-501 280	
○ 257-524 20		○ 804-312 40		○ 746-2312 16		○ 257-524 20	
739 Series , 2 ... 12 poles, 630 V / 24 A						739 Series , 2 ... 12 poles, 630 V / 24 A	
							
0.08 ... 2.5 mm ² / 28 ... 12 AWG						0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 739-202 340						○ 739-232 340	
○ 739-212 40						○ 739-242 40	
739 Series , 3 ... 12 poles, 630 V / 8 A						739 Series , 3 ... 12 poles, 630 V / 8 A	
							
0.08 ... 2.5 mm ² / 28 ... 12 AWG						0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 739-203/100-000 220						○ 739-233/100-000 220	
○ 739-212/100-000 40						○ 739-242/100-000 40	

PCB Terminal Blocks

- Product Overview by Pin Spacing -

















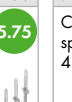




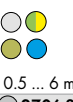

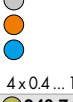








10 mm			
Item No.	Pack. Unit	Item No.	Pack. Unit
236 Series , 2 ... 24 poles, 1,000 V / 10 A		235 Series , 2 ... 24 poles, 1,000 V / 17.5 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 1.5 mm ² / 20 ... 14 AWG	
○ 236-301 200		○ 235-801/331-000 220	
○ 236-324 20		○ 235-824/331-000 20	
736 Series , 2 x 2 ... 12 x 2 poles, 1,000 V / 21 A		235 Series , 2 ... 24 poles, 1,000 V / 24 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 2.5 mm ² / 20 ... 14 AWG "s"	
○ 736-702 112		○ 235-801 220	
○ 736-712 14		○ 235-824 20	
737 Series , 2 x 3 ... 12 x 3 poles, 1,000 V / 21 A		254 Series , 2 ... 24 poles, 1,000 V / 24 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 2.5 mm ² / 20 ... 12 AWG "s"	
○ 737-702 64		○ 254-651 280	
○ 737-712 8		○ 254-674 20	
255 Series , 2 ... 24 poles, 1,000 V / 24 A		741 Series , 2 ... 8 poles, 1,000 V / 16 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 255-601 200		○ 741-502 280	
○ 255-624 20		○ 741-508 60	
256 Series , 2 ... 24 poles, 630 V / 24 A		745 Series , 2 ... 5 poles, 320 V / 76 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.2 ... 16 mm ² / 24 ... 6 AWG	
○ 256-601 200		○ 745-502/006-000 48	
○ 256-624 20		○ 745-505/006-000 20	
257 Series , 2 ... 24 poles, 1,000 V / 24 A		2706 Series , 2 ... 12 poles, 1,000 V / 41 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 6 mm ² / 20 ... 10 AWG	
○ 257-601 200		○ 2706-202 70	
○ 257-624 20		○ 2706-212 10	
739 Series , 2 ... 12 poles, 630 V / 24 A		2706 Series , 2 ... 12 poles, 1,000 V / 41 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 6 mm ² / 20 ... 10 AWG	
○ 739-3202 280		○ 2706-252 70	
○ 739-3212 40		○ 2706-262 10	
745 Series , 2 ... 12 poles, 1,000 V / 32 A		2716 Series , 2 ... 8 poles, 320 V / 75 A	
0.08 ... 4 mm ² / 28 ... 12 AWG		1.5 ... 16 mm ² / 16 ... 6 AWG	
○ 745-3202 192		○ 2716-102 65	
○ 745-3212 24		○ 2716-108 15	
		2716 Series , 2 ... 8 poles, 1,000 V / 76 A	
		1.5 ... 16 mm ² / 16 ... 6 AWG	
		○ 2716-152 52	
		○ 2716-158 12	

10.16 mm			
Item No.	Pack. Unit	Item No.	Pack. Unit
236 Series , 2 ... 24 poles, 1,000 V / 10 A		235 Series , 2 ... 24 poles, 1,000 V / 17.5 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 1.5 mm ² / 20 ... 14 AWG	
○ 236-301 200		○ 235-801/331-000 220	
○ 236-324 20		○ 235-824/331-000 20	
736 Series , 2 x 2 ... 12 x 2 poles, 1,000 V / 21 A		235 Series , 2 ... 24 poles, 1,000 V / 24 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 2.5 mm ² / 20 ... 14 AWG "s"	
○ 736-802 112		○ 235-801 220	
○ 736-812 14		○ 235-824 20	
737 Series , 2 x 3 ... 12 x 3 poles, 1,000 V / 21 A		254 Series , 2 ... 24 poles, 1,000 V / 24 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.5 ... 2.5 mm ² / 20 ... 12 AWG "s"	
○ 737-802 64		○ 254-651 280	
○ 737-812 8		○ 254-674 20	
255 Series , 2 ... 24 poles, 1,000 V / 24 A		741 Series , 2 ... 8 poles, 1,000 V / 16 A	
0.08 ... 2.5 mm ² / 28 ... 12 AWG		0.08 ... 2.5 mm ² / 28 ... 12 AWG	
○ 255-601 200		○ 741-602 280	
○ 255-624 20		○ 741-608 60	
256 Series , 2 ... 24 poles, 630 V / 24 A			
0.08 ... 2.5 mm ² / 28 ... 12 AWG			
○ 256-601 200			
○ 256-624 20			
257 Series , 2 ... 24 poles, 1,000 V / 24 A			
0.08 ... 2.5 mm ² / 28 ... 12 AWG			
○ 257-601 200			
○ 257-624 20			

4















PCB Terminal Blocks

- Product Overview by Pin Spacing -

12.5 mm		15 mm		20 mm		Pluggable PCB Terminal Blocks		Comb-Style Jumper Bars	
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
745 Series, 2 ... 12 poles, 1,000 V / 32 A	 168	745 Series, 2 ... 12 poles, 1,000 V / 41 A	 64	745 Series, 2 ... 5 poles, 1,000 V / 76 A	 8	252 Series, 2 ... 10 poles, 320 V / 2 A	 600	Comb-style jumper bar, 5 mm pin spacing, for 745 Series - 4 mm ²	745-181 250
 0.08 ... 4 mm ² / 28 ... 12 AWG	745-3252 168	 0.2 ... 6 mm ² / 24 ... 10 AWG	745-1452 64	 0.2 ... 16 mm ² / 24 ... 6 AWG	745-652/006-000 32	 2x0.4...0.8mm \varnothing / 2x26...20AWG"s	745-110 150		745-185 200
745-3262 12		745 Series, 2 ... 5 poles, 1,000 V / 76 A	 8			252 Series, 2 ... 10 poles, 320 V / 2 A	 600	Comb-style jumper bar, 7.5 mm pin spacing, for 745 Series - 4 mm ²	745-191 250
 0.2 ... 6 mm ² / 24 ... 10 AWG	745-1402 80	 0.2 ... 16 mm ² / 24 ... 6 AWG	745-602/006-000 36			 2x0.4...0.8mm \varnothing / 2x26...20AWG"s	745-160 150		745-195 200
745-1412 8		2716 Series, 2 ... 8 poles, 1,000 V / 76 A	 10			243 Series, 2 ... 8 poles, 320 V / 6 A	 50	Comb-style jumper bar, 10 mm pin spacing, for 745 Series - 4 mm ²	745-281 250
2706 Series, 2 ... 12 poles, 1,000 V / 41 A	 5	 1.5 ... 16 mm ² / 16 ... 6 AWG	2716-202 50			 4 x 0.4 ... 1.0 mm \varnothing / 4 x 24 ... 18 AWG	243-742 50		745-285 200
 0.5 ... 6 mm ² / 20 ... 10 AWG	2706-302 65	2716 Series, 2 ... 8 poles, 1,000 V / 76 A	 8			 806 Series, 2 ... 12 poles, 320 V / 10 A	 400	Comb-style jumper bar, 7.5 mm pin spacing, for 745 Series - 6 mm ² and 2706 Series	745-281 250
2706-312 5		 1.5 ... 16 mm ² / 16 ... 6 AWG	2716-252 40			 2 x 0.2 ... 1.5 mm \varnothing / 2 x 24 ... 16 AWG	806-102 400		745-381 250
		2716-258 8				806-112 60		Comb-style jumper bar, 10 mm pin spacing, for 745 Series - 6 mm ² and 2706 Series	745-385 200
									745-391 250
								Comb-style jumper bar, 10 mm pin spacing, for 745 Series - 16 mm ² and 2716 Series	745-395 200
									745-582 400
								Comb-style jumper bar, 15 mm pin spacing, for 745 Series - 16 mm ² and 2716 Series	745-585 200
									745-631 200
								Comb-style jumper bar, 20 mm pin spacing, for 745 Series - 16 mm ² and 2716 Series	745-635 200
									745-681 300
									745-685 200



SMD PCB Terminal Blocks

- Product Overview by Pin Spacing -






3 mm		4 mm		6 mm		8 mm			
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit		
2059 Series, 1 ... 3 poles, 160 V / 3 A	SMT	2060 Series, 1 ... 3 poles Solder pin length: 2.4 mm 160 V / 9 A	THR	2061 Series, 1 ... 3 poles Solder pin length: 2.4 mm 320 V / 17.5 A	THR	2061 Series, 1 ... 3 poles Solder pin length: 1.5 mm 320 V / 17.5 A	THR	2060 Series, 2 poles, 630 V / 9 A	SMT
									
0.14 ... 0.5 mm ² / 26 ... 20 AWG "s"		0.2 ... 0.75 mm ² / 24 ... 18 AWG		0.5 ... 1.5 mm ² / 20 ... 16 AWG		0.5 ... 1.5 mm ² / 20 ... 16 AWG		0.2 ... 0.75 mm ² / 24 ... 18 AWG	
○ 2059-301/998-403 31800		○ 2060-1451/998-404 10800		○ 2061-1601/998-404 5760		○ 2061-1641/998-404 5760		○ 2060-852/998-404 6750	
○ 2059-303/998-403 21000		○ 2060-1453/998-404 4950		○ 2061-1603/998-404 2880		○ 2061-1643/998-404 2880			
		2060 Series, 1 ... 3 poles Solder pin length: 2.4 mm 160 V / 9 A	THR	2061 Series, 1 ... 3 poles Solder pin length: 2.4 mm 320 V / 17.5 A	THR	2061 Series, 1 ... 3 poles Solder pin length: 1.5 mm 320 V / 17.5 A	THR	2060 Series, 2 poles Solder pin length: 2.4 mm 630 V / 9 A	THR
									
		0.2 ... 0.75 mm ² / 24 ... 18 AWG		0.5 ... 1.5 mm ² / 20 ... 16 AWG		0.5 ... 1.5 mm ² / 20 ... 16 AWG		0.2 ... 0.75 mm ² / 24 ... 18 AWG	
		● 2060-1471/998-404 10800		● 2061-1621/998-404 5760		● 2061-1661/998-404 5760		● 2060-1872/998-404 4590	
		● 2060-1473/998-404 4950		● 2061-1623/998-404 2880		● 2061-1663/998-404 2880			
		2060 Series, 1 ... 3 poles, 160 V / 9 A	SMT	2061 Series, 1 ... 3 poles, 320 V / 17.5 A	SMT			2060 Series, 2 poles Solder pin length: 2.4 mm 630 V / 9 A	THR
									
		0.2 ... 0.75 mm ² / 24 ... 18 AWG		0.5 ... 1.5 mm ² / 20 ... 16 AWG				0.2 ... 0.75 mm ² / 24 ... 18 AWG	
		○ 2060-451/998-404 13500		○ 2061-601/998-404 8100				○ 2060-1852/998-404 4590	
		○ 2060-453/998-404 6750		○ 2061-603/998-404 4050					
		2060 Series, 1 ... 3 poles, 160 V / 9 A	SMT	2061 Series, 1 ... 3 poles, 320 V / 17.5 A	SMT				
									
		0.2 ... 0.75 mm ² / 24 ... 18 AWG		0.5 ... 1.5 mm ² / 20 ... 16 AWG					
		● 2060-471/998-404 13500		● 2061-621/998-404 8100					
		● 2060-473/998-404 6750		● 2061-623/998-404 4050					

4

Board-to-Board Links for SMD PCB Terminal Blocks with Push-Buttons

	4 mm pin spacing, 1 ... 4 poles		8 mm pin spacing, 2 poles
			
	2060-951/028-000 1500		2060-962/028-000 375
	2060-954/028-000 250		

Operating Tools

for 2059 Series	for 2060 Series	for 2061 Series
		
206-859 5	206-860 5	206-861 5
insulated, for 2059 Series	insulated, for 2060 Series	insulated, for 2061 Series
		
2059-189 600	2060-189 300	2061-189 300



WINSTA® – The Pluggable Connection System

By interconnecting all electrical components, WINSTA® endows modern buildings with high levels of flexibility and durability that readily satisfy stringent norms and standards.

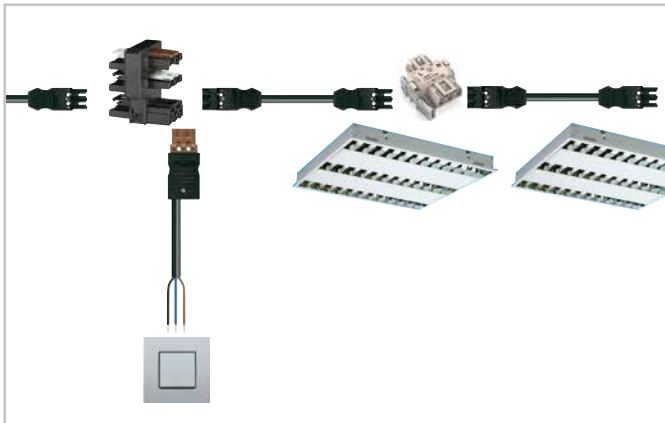
The WINSTA® system offers connections for virtually any building requirement from power supply to bus lines. Each unique WINSTA® model has been specifically developed to satisfy pole requirements, installation restrictions and current-carrying capacities.

Each model line contains both individual components (e.g., plugs, sockets, h-distribution connectors, T-distribution connectors, distribution boxes) and cable assemblies in standardized construction industry lengths.

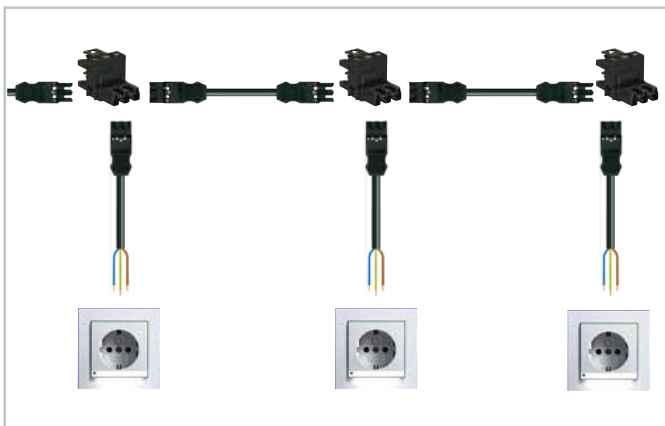


Installation Examples:

Built-in ceiling lights



Wall sockets



Floor tanks



WINSTA® Project Engineering

WAGO offers consulting and project planning services to help devise the best possible solution for your project. Our experienced team of professionals will gladly help you implement your project with our products.

5

Bid forms at
www.wago.com



WINSTA® – The Pluggable Connection System

WINSTA® MINI

For Space-Restricted Applications

- Sensors (switches, push-buttons, window contacts, pressure switches, temperature sensors, etc.)
- Actuators (control valves, magnetic valves, servo motors, blinds/sun protection, etc.)
- Protection class II for halogen lamps and luminaires
- Control signals
- 1.5 mm² (16 AWG), 250 V, 16 A

2 ... 5 poles
890 and 891 Series

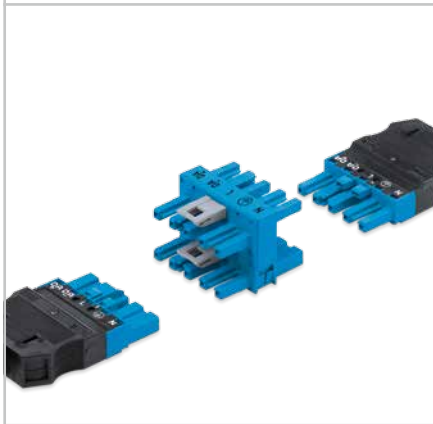


WINSTA® MIDI

For Maximum Possibilities

- General building installation, ideal for modern buildings
- Standard lighting fixtures and safety lights
- Tradeshow and shop installation
- Motor homes
- Lab work stations
- Rolling stock
- Shipbuilding
- 4 mm² (12 AWG), 250/400 V, 25 A

2 ... 5 poles
770 and 771 Series



WINSTA® MAXI

For High-Current Applications

- Power supply via 6 mm² (10 AWG) cable for extended cable runs
- 32 A power supply in distribution boxes for high energy requirements
- 6 mm² (10 AWG), 250/400 V, 35 A

5 poles
831 Series



WINSTA® MINI special

For Specialty Applications

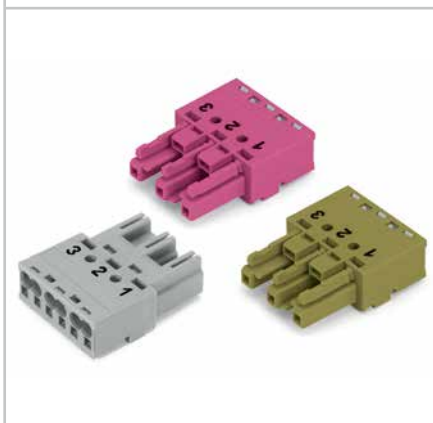
2 ... 5 poles
890 and 891 Series



WINSTA® MIDI special

For Specialty Applications

2 ... 5 poles
770 and 771 Series



WINSTA® Boxes

Distribution Boxes

899 Series

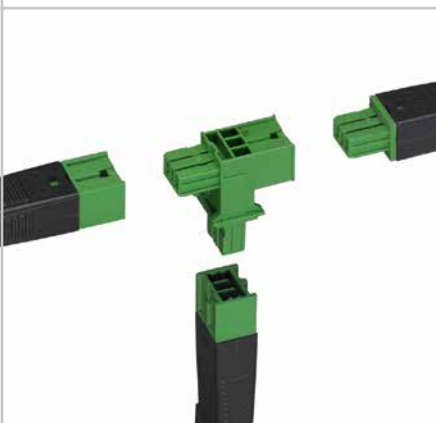
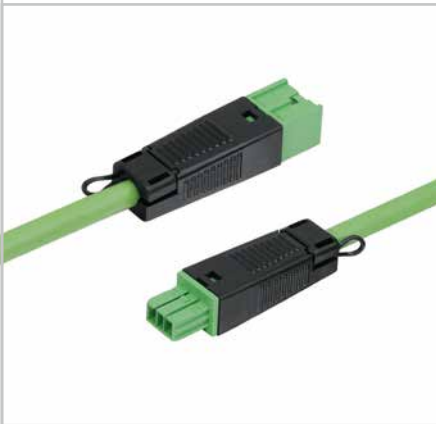


WINSTA® KNX

For the Standardized Bus

- KNX/EIB
- Control signals
- 0.8 mm Ø, 50 V, 3 A

2 poles
893 and 894 Series



WINSTA® IDC

For Maximum Flexibility

- Supply and tap off is possible at any time and at any location along the flat cable. No cutting, no stripping, no dismantling – very user-friendly
- A 120° rotation is all that is required to connect the flat cable
- Space-efficient across the flat cable through longitudinal tap off
- 2.5/4 mm² (14/12 AWG), 400 V, 25 A
- 10 mm² (8 AWG), 690 V, 57 A
- 16 mm² (6 AWG), 690 V, 76 A

2, 3, 5 and 7 poles
772, 893, 895, 896 and 897 Series



WINSTA® RD

For Round Conduits and Ducts

- Outside diameter of 17.5 mm for applications in electrical conduits with an inner diameter > 18 mm
- Prefabricated houses
- Recessed luminaires
- Wall and ceiling cutouts



3 and 4 poles
774 Series

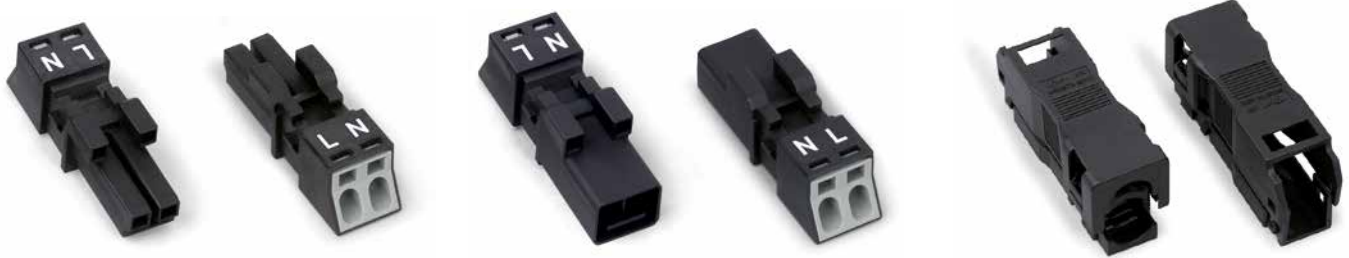


WINSTA® MINI

Sockets and Plugs





890 Series

0.25 ... 1.5 mm ² 250 V/4 kV/3 ① 400 V/6 kV/3 ②③ I _N 16 A ①②/13 A ③  9 mm / 0.35 in. ④ Approvals	22 ... 16 AWG	0.25 ... 1.5 mm ² 250 V/4 kV/3 ① 400 V/6 kV/3 ②③ I _N 16 A ①②/13 A ③  9 mm / 0.35 in. ④ Approvals	22 ... 16 AWG	Snap-on type strain relief housings for sockets and plugs
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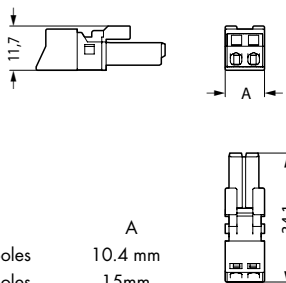
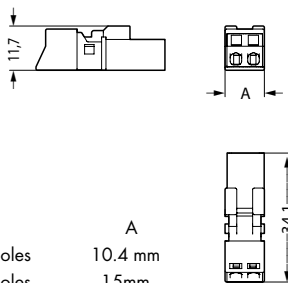
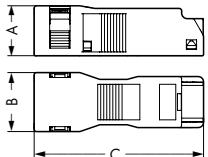


Color/Pole No.	Item No.	Pack. Unit	Color/Pole No.	Item No.	Pack. Unit	Color/Pole No.	Item No.	Pack. Unit
Socket without strain relief housing			Plug without strain relief housing			Strain relief housing, for 3.8 ... 8.2 mm cable diameter		
● 2 poles	890-202 ①	50	● 2 poles	890-212 ①	50	● 2 poles	890-502	50
○ 2 poles	890-222 ①	50	○ 2 poles	890-232 ①	50	○ 2 poles	890-512	50
						for 4.5 ... 10 mm cable diameter		
● 3 poles	890-203 ①	50	● 3 poles	890-213 ①	50	● 3 poles	890-503	50
○ 3 poles	890-223 ①	50	○ 3 poles	890-233 ①	50	○ 3 poles	890-513	50
						for 6.5 ... 10.5 mm cable diameter		
● 4 poles	890-204 ②	50	● 4 poles	890-214 ②	50	● 4 poles	890-504	50
○ 4 poles	890-224 ②	50	○ 4 poles	890-234 ②	50	○ 4 poles	890-514	50
						for 6.5 ... 10.5 mm cable diameter		
● 5 poles	890-205 ③	50	● 5 poles	890-215 ③	50	● 5 poles	890-505	50
○ 5 poles	890-225 ③	50	○ 5 poles	890-235 ③	50	○ 5 poles	890-515	50

Accessories, 890 Series

Locking lever, tool operated, for "flying leads"  <ul style="list-style-type: none"> ● 890-111 100 (2x50) ○ 890-131 100 (2x50) 	Locking lever, tool operated, for "flying leads"  <ul style="list-style-type: none"> ● 890-111 100 (2x50) ○ 890-131 100 (2x50)
Operating tool with a partially insulated shaft, type 1, (2.5 x 0.4) mm blade  210-719 1	Operating tool with a partially insulated shaft, type 1, (2.5 x 0.4) mm blade  210-719 1

Dimensions



																																																														
<table border="0"> <tr> <td></td> <td>A</td> <td></td> <td></td> </tr> <tr> <td>2 poles</td> <td>10.4 mm</td> <td></td> <td></td> </tr> <tr> <td>3 poles</td> <td>15 mm</td> <td></td> <td></td> </tr> <tr> <td>4 poles</td> <td>19.2 mm</td> <td></td> <td></td> </tr> <tr> <td>5 poles</td> <td>23.6 mm</td> <td></td> <td></td> </tr> </table>		A			2 poles	10.4 mm			3 poles	15 mm			4 poles	19.2 mm			5 poles	23.6 mm			<table border="0"> <tr> <td></td> <td>A</td> <td></td> <td></td> </tr> <tr> <td>2 poles</td> <td>10.4 mm</td> <td></td> <td></td> </tr> <tr> <td>3 poles</td> <td>15 mm</td> <td></td> <td></td> </tr> <tr> <td>4 poles</td> <td>19.2 mm</td> <td></td> <td></td> </tr> <tr> <td>5 poles</td> <td>23.6 mm</td> <td></td> <td></td> </tr> </table>		A			2 poles	10.4 mm			3 poles	15 mm			4 poles	19.2 mm			5 poles	23.6 mm			<table border="0"> <tr> <td></td> <td>A</td> <td>B</td> <td>C</td> </tr> <tr> <td>2 poles</td> <td>13.2 mm</td> <td>15.6 mm</td> <td>44.8 mm</td> </tr> <tr> <td>3 poles</td> <td>14 mm</td> <td>17.9 mm</td> <td>46.8 mm</td> </tr> <tr> <td>4 poles</td> <td>16 mm</td> <td>23.2 mm</td> <td>55 mm</td> </tr> <tr> <td>5 poles</td> <td>15.8 mm</td> <td>26.7 mm</td> <td>55.15 mm</td> </tr> </table>		A	B	C	2 poles	13.2 mm	15.6 mm	44.8 mm	3 poles	14 mm	17.9 mm	46.8 mm	4 poles	16 mm	23.2 mm	55 mm	5 poles	15.8 mm	26.7 mm	55.15 mm
	A																																																													
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3 poles	14 mm	17.9 mm	46.8 mm																																																											
4 poles	16 mm	23.2 mm	55 mm																																																											
5 poles	15.8 mm	26.7 mm	55.15 mm																																																											

WINSTA® MINI

Snap-In Sockets and Plugs

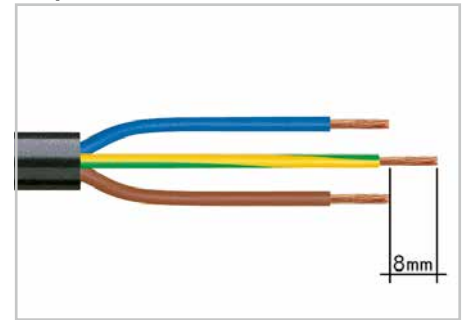
890 Series

PUSH-IN CAGE CLAMP®

0.25 ... 1.5 mm ² 250 V/4 kV/3 ① 400 V/6 kV/3 ②③ I _N 16 A ①②/13 A ③  9 mm / 0.35 in. ④ Approvals	22 ... 16 AWG 0.25 ... 1.5 mm ² 250 V/4 kV/3 ① 400 V/6 kV/3 ②③ I _N 16 A ①②/13 A ③  9 mm / 0.35 in. ④ Approvals
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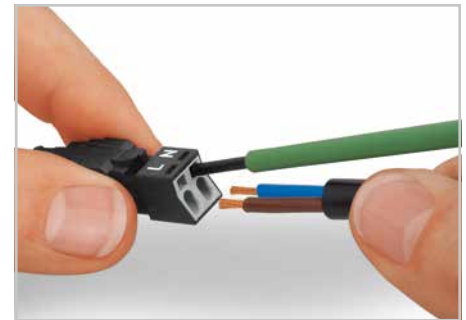


Preparation



- Strip length, outer insulation = 30 mm (2-pole),
37 mm (3-pole)
45 mm (4- and 5-pole)
- Strip length = 9 mm
- Extended ground conductor = 8 mm

Termination via Push-in CAGE CLAMP®



To terminate fine-stranded conductors, open clamping unit via screwdriver (2.5 mm blade width) and insert stripped conductor until it hits backstop. Solid conductors can be terminated by simply pushing them in.

Locking lever assembly



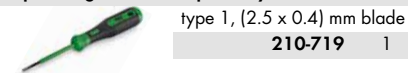
All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

Color/Pole No.	Item No.	Pack. Unit	Color/Pole No.	Item No.	Pack. Unit
Snap-in socket			Snap-in plug		
● 2 poles	890-702 ①	50	● 2 poles	890-712 ①	50
○ 2 poles	890-722 ①	50	○ 2 poles	890-732 ①	50
● 3 poles	890-703 ①	50	● 3 poles	890-713 ①	50
○ 3 poles	890-723 ①	50	○ 3 poles	890-733 ①	50
● 4 poles	890-704 ②	50	● 4 poles	890-714 ②	50
○ 4 poles	890-724 ②	50	○ 4 poles	890-734 ②	50
● 5 poles	890-705 ③	50	● 5 poles	890-715 ③	50
○ 5 poles	890-725 ③	50	○ 5 poles	890-735 ③	50

5

Accessories, 890 Series

Operating tool with a partially insulated shaft,



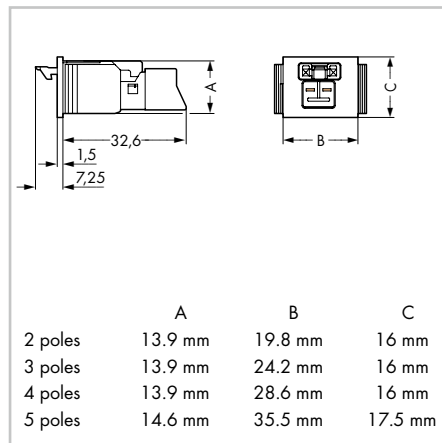
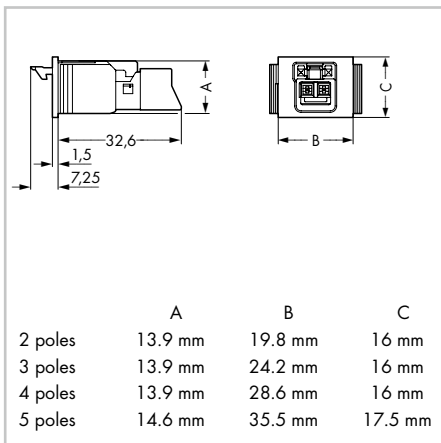
type 1, (2.5 x 0.4) mm blade
210-719 1

Operating tool with a partially insulated shaft,



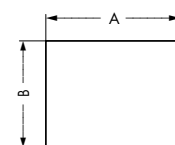
type 1, (2.5 x 0.4) mm blade
210-719 1

Dimensions



Cutout Dimensions

Plate thickness: 0.5 ... 2 mm
Cutout tolerance: +0.1 mm



	A	B
2 poles	17.8 mm	14 mm
3 poles	22.2 mm	14 mm
4 poles	26.6 mm	14 mm
5 poles	33 mm	15.6 mm



④ For all approvals and corresponding ratings, visit www.wago.com.

For technical explanations and abbreviations, see technical section.

WINSTA® MIDI

Sockets and Plugs

770 Series

<p>2 x 0.5 ... 4 mm² 250 V/4 kV/3 ① 400 V/6 kV/3 ② I_N 25 A</p> <p> 9 mm / 0.35 in.</p> <p>③ Approvals</p>	<p>20 ... 12 AWG</p>	<p>2 x 0.5 ... 4 mm² 250 V/4 kV/3 ① 400 V/6 kV/3 ② I_N 25 A</p> <p> 9 mm / 0.35 in.</p> <p>③ Approvals</p>	<p>20 ... 12 AWG</p>	<p>Snap-on type strain relief housings for sockets and plugs</p>
--	----------------------	--	----------------------	--

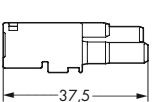
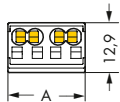
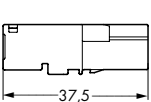
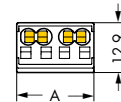
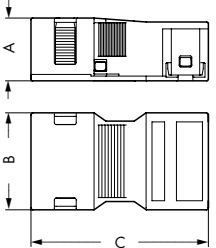


Color/Pole No.	Item No.	Pack. Unit	Color/Pole No.	Item No.	Pack. Unit	Color/Pole No.	Item No.	Pack. Unit
Socket without strain relief housing			Plug without strain relief housing			Strain relief housing,		
						for 7 ... 10.5 mm cable diameter		
● 2 poles	770-202 ①	100	● 2 poles	770-212 ①	100	● 2 poles	770-502/041-000	50
○ 2 poles	770-222 ①	100	○ 2 poles	770-232 ①	100	○ 2 poles	770-512/041-000	50
						for 8 ... 11 mm cable diameter		
● 3 poles	770-203 ①	100	● 3 poles	770-213 ①	100	● 3 poles	770-503	50
○ 3 poles	770-223 ①	100	○ 3 poles	770-233 ①	100	○ 3 poles	770-513	50
						for 9 ... 13 mm cable diameter		
● 4 poles	770-204 ②	100	● 4 poles	770-214 ②	100	● 4 poles	770-504	50
○ 4 poles	770-224 ②	100	○ 4 poles	770-234 ②	100	○ 4 poles	770-514	50
						for 9 ... 13 mm cable diameter		
● 5 poles	770-205 ②	100	● 5 poles	770-215 ②	100	● 5 poles	770-505	50
○ 5 poles	770-225 ②	100	○ 5 poles	770-235 ②	100	○ 5 poles	770-515	50

Accessories, 770 Series

<p>Lockout cap, for socket, separable, 12-pole</p>  <ul style="list-style-type: none"> ● 770-201 100 ○ 770-221 100 	<p>Lockout cap, for plug, separable, 5-pole</p>  <ul style="list-style-type: none"> ● 770-360 100 	<p>Coding pin, for plug (A and B coding)</p>  <ul style="list-style-type: none"> ○ 770-401 100
<p>Locking lever, tool operated, for "flying leads"</p>  <ul style="list-style-type: none"> ● 770-111 100 (4x25) ○ 770-131 100 (4x25) 	<p>Locking lever, tool operated, for "flying leads"</p>  <ul style="list-style-type: none"> ● 770-111 100 (4x25) ○ 770-131 100 (4x25) 	<p>Operating tool with a partially insulated shaft, type 1, (2.5 x 0.4) mm blade</p>  <ul style="list-style-type: none"> ● 210-719 1

Dimensions

 	 	
<p>2 poles A 20 mm</p> <p>3 poles A 30 mm</p> <p>4 poles A 40 mm</p> <p>5 poles A 50 mm</p>	<p>2 poles A 20 mm</p> <p>3 poles A 30 mm</p> <p>4 poles A 40 mm</p> <p>5 poles A 50 mm</p>	<p>2 poles A 15.9 mm B 24.6 mm C 45 mm</p> <p>3 poles A 15 mm B 34.6 mm C 50 mm</p> <p>4 poles A 17 mm B 44.6 mm C 50 mm</p> <p>5 poles A 17 mm B 54.6 mm C 50 mm</p>

③ For all approvals and corresponding ratings, visit www.wago.com.



For technical explanations and abbreviations, see technical section.

WINSTA® MIDI

Snap-In Sockets and Plugs

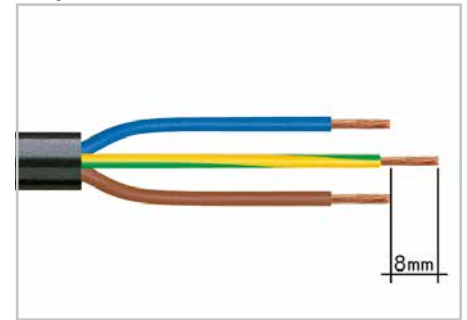
770 Series

PUSH-IN CAGE CLAMP®

2 x 0.5 ... 4 mm ² 250 V/4 kV/3 ① 400 V/6 kV/3 ② I _N 25 A  9 mm / 0.35 in. ③ Approvals	20 ... 12 AWG	2 x 0.5 ... 4 mm ² 250 V/4 kV/3 ① 400 V/6 kV/3 ② I _N 25 A  9 mm / 0.35 in. ③ Approvals	20 ... 12 AWG
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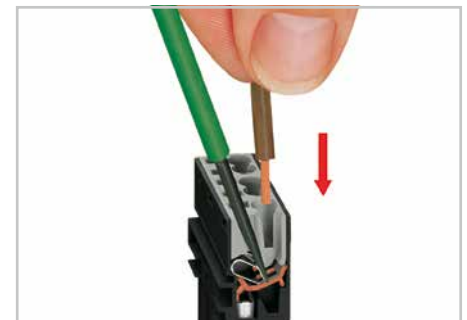


Preparation



1. Strip length, outer insulation = 35 mm (2-pole),
55 mm (3-, 4- and 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

Termination via Push-in CAGE CLAMP®



To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert stripped conductor until it hits backstop. Solid conductors can be terminated by simply pushing them in.





Locking lever assembly



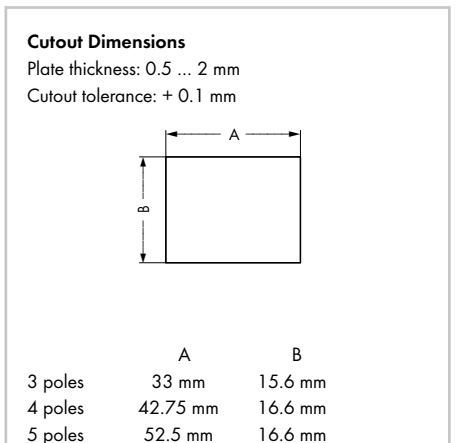
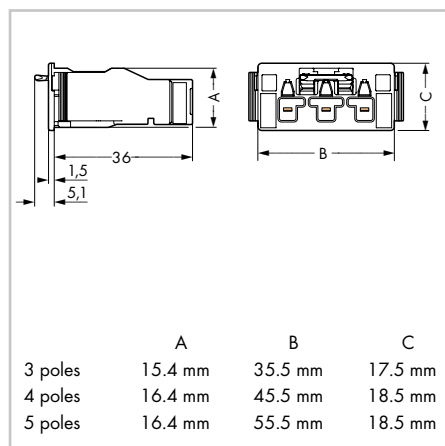
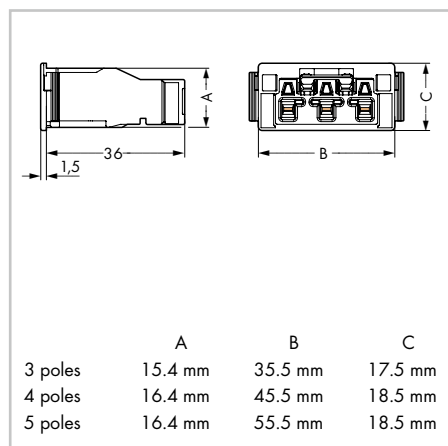
All connectors for fixed installations (snap-in versions for lighting fixtures, devices or all types of PCBs and distribution cabinets) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for "flying leads" (plug/socket).

Color/Pole No.	Item No.	Pack. Unit	Color/Pole No.	Item No.	Pack. Unit
Snap-in socket			Snap-in plug		
● 3 poles	770-703 ①	100	● 3 poles	770-713 ①	100
○ 3 poles	770-723 ①	100	○ 3 poles	770-733 ①	100
● 4 poles	770-704 ②	100	● 4 poles	770-714 ②	100
○ 4 poles	770-724 ②	100	○ 4 poles	770-734 ②	100
● 5 poles	770-705 ②	100	● 5 poles	770-715 ②	100
○ 5 poles	770-725 ②	100	○ 5 poles	770-735 ②	100

Accessories, 770 Series

Lockout cap, for socket, separable, 12-pole  <ul style="list-style-type: none"> ● 770-201 100 ○ 770-221 100 	Lockout cap, for plug, separable, 5-pole  <ul style="list-style-type: none"> ● 770-360 100
Operating tool with a partially insulated shaft, type 1, (2.5 x 0.4) mm blade  <ul style="list-style-type: none"> 210-719 1 	Coding pin, for plug (A and B coding)  <ul style="list-style-type: none"> ○ 770-401 100

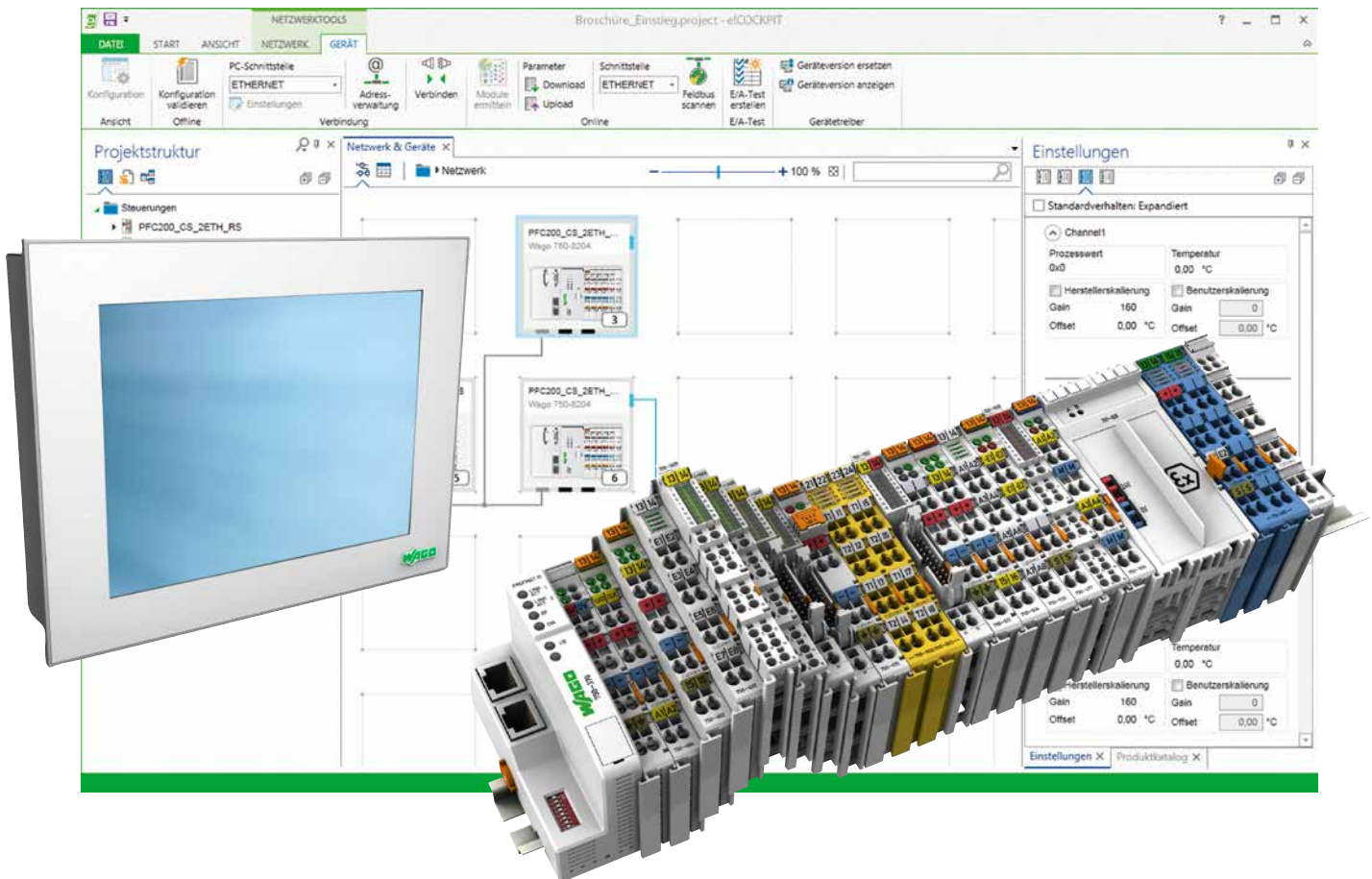
Dimensions



③ For all approvals and corresponding ratings, visit www.wago.com.

For technical explanations and abbreviations, see technical section.

Automation Technology










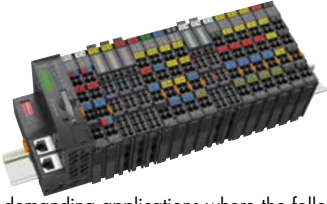
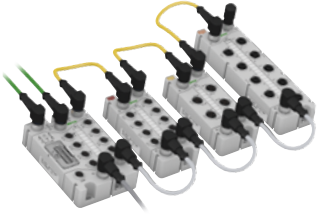





Interface Electronic



6

WAGO Automation Technology

Software	<p>Engineering Software</p>  <p>• PC-based software • Customized tools for every automation task</p>	<p>Runtime Software</p>  <p>• Standard machine component • Comprehensive, fully tested software modules for controlling, operation and monitoring</p>	<p>Mobile Software (Apps)</p>  <p>• Machine operation and monitoring on tablet and smartphone</p>
Operation & Monitoring	<p>PERSPECTO® Control Panels</p> 	<p>e!DISPLAY 7300T Web Panels</p>  <p>• Web-based visualization • 8.9 cm ... 25.6 cm (4.3" ... 10.1")</p>	<p>PERSPECTO® Web Panels</p>  <p>• Web-based visualization • 8.9 cm ... 30.7 cm (3.5" ... 12")</p>
Controllers		<p>PFC200 / PFC200 XTR</p>  <p>• High processing speed • Wide variety of interfaces • Runtime system for CODESYS 2 and 3 • Also programmable in high-level language based on Linux®</p>	<p>PFC100</p>  <p>• Extremely compact design • e!RUNTIME environment based on CODESYS 3 • Real-time Linux® operating system • TSL 1.2, IPsec, OpenVPN and firewall</p>
I/O-Systems	<p>I/O-System – 750 and 753 Series</p>  <p>• Highly versatile • More than 500 modules available • Functional safety • Ex i</p>	<p>I/O-System – 750 XTR Series</p>  <p>For demanding applications where the following are critical:</p> <ul style="list-style-type: none"> • Extreme temperature stability • Immunity to electromagnetic interference and impulse voltages • Vibration and shock resistance 	<p>I/O-System – SPEEDWAY 767 Series</p>  <p>• Uncompromising protection – even in the harshest environments outside the control cabinet • IP67 degree of protection • Fully encapsulated</p>
Infrastructure	<p>ETHERNET Switches</p>  <p>• Copper cables • Fiber optic cables • Ring redundancy</p>	<p>Radio Technology</p>  <p>• Bluetooth® • WLAN • EnOcean®</p>	<p>TO-PASS® Telecontrol Technology</p>  <p>• Telecontrol technology based on GSM/GPRS • See Full Line Catalog</p>

Software Solutions (Applications)



- Reusable, customizable solutions

Software

Engineering Software
Runtime Software
Mobile Software (Apps)
Software Solutions (Applications)

Operation & Monitoring

PERSPECTO® Web Panels
PERSPECTO® Control Panels
e!DISPLAY 7300T Web Panels

750 Series Controllers



- Decentralized intelligence based on fieldbus couplers
- Programmable to IEC 61131-3
- Modular WAGO-I/O-SYSTEM 750

750 XTR Controllers



For demanding applications where the following are critical:

- Extreme temperature stability
- Immunity to electromagnetic interference and impulse voltages
- Vibration and shock resistance

Controllers

PERSPECTO® Control Panels

PFC100/PFC200
750 Series Controllers
750 XTR Controllers

I/O-Systems

750 and 753 Series
Fieldbus Couplers
I/O Modules
750 XTR Series
SPEEDWAY

Sensor/Actuator Boxes, IP67



- Passive M8/M12 sensor/actuator boxes
- Machine-level signal connection in harsh environments

Power Supplies Accessories



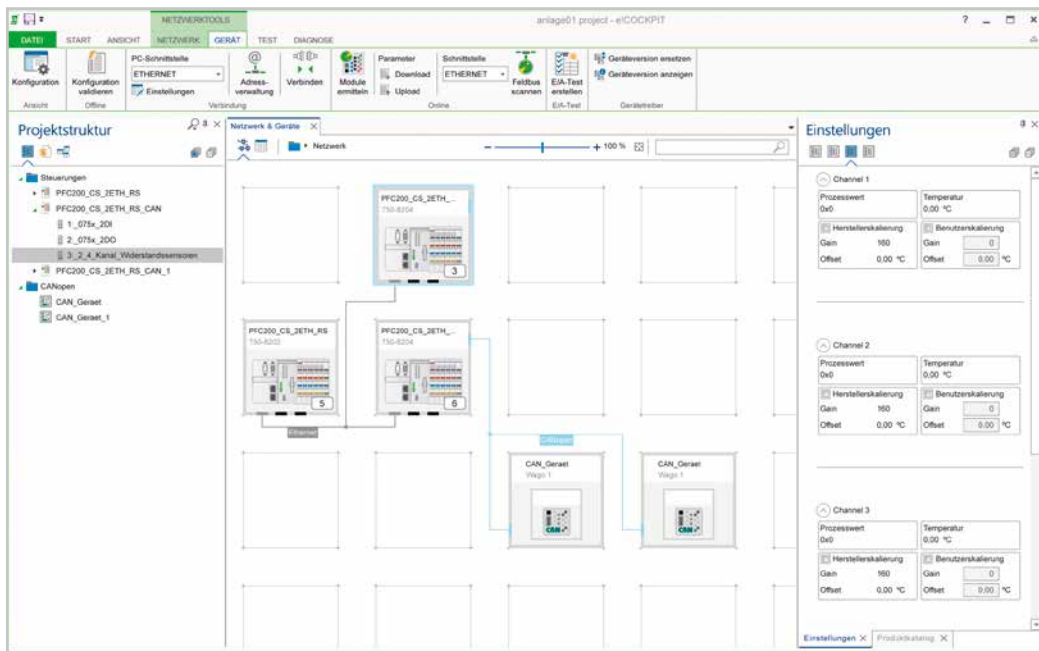
Infrastructure

ETHERNET Switches
Radio Technology
TO-PASS® Telecontrol Technology
Sensor/Actuator Boxes

Accessories

Power Supplies
Cables and Pluggable Connectors, IP67

e!COCKPIT CODESYS 3-Based Integrated Engineering



e!COCKPIT automation software for faster machine and system startup: WAGO'S new engineering software shortens development time for automation projects while impressing with a modern and clearly laid out user interface. At the software's core is CODESYS 3 for simple and versatile creation of applications.

Ensuring a project's long-term viability through sustainable cost savings hinges on a user's ability to quickly adapt to new software that offers a high degree of reusability.

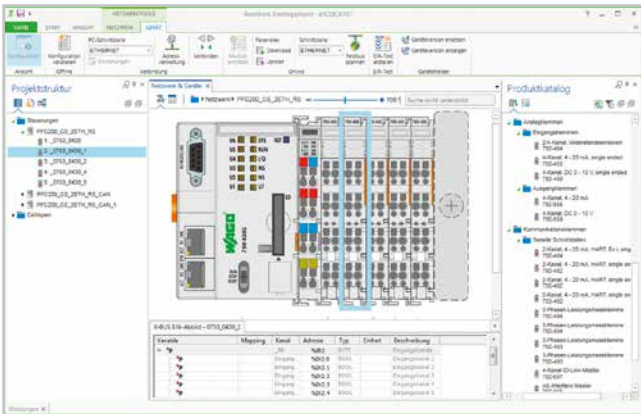
WAGO set out to fulfill these exact requirements by developing its own engineering software: e!COCKPIT. This integrated development environment supports every automation task from hardware configuration, programming, simulation and visualization up to commissioning – all in one software package.

Use the programming tool to cover all important automation bases while simultaneously engineering particularly complex projects quickly and easily.

Description	Item No.	Pack. Unit	Technical Data
e!COCKPIT workstation license	2759-101/1110-2002	1	Supported operating systems Windows 7 (32- and 64-bit), Windows 8, Windows 8.1 (32- and 64-bit) System requirements: Processor: Core2Duo Memory: 2 GB Hard disk storage: 1 GB Graphics resolution: 1,366 x 768 px Supported devices Controllers based on CODESYS 3, I/O modules (750/753) Supported fieldbuses CANopen, MODBUS TCP/UDP, MODBUS RTU, PROFIBUS Supported device descriptions DTP, EDS, GSD Connectivity TCP, USB, OPC, CODESYS network variables, CODESYS DataServer Programming languages IEC 61131-3: ST, LD, FBD, IL, FC, CFC Import/export formats CODESYS 3 project files (*.project) Delivery type Installation file (download)
e!COCKPIT multi-user license, 10 ea.	2759-101/1110-2010	1	
e!COCKPIT multi-user license, 15 ea.	2759-101/1110-2015	1	
e!COCKPIT multi-user license, 20 ea.	2759-101/1110-2020	1	
e!COCKPIT site license	2759-101/1110-3000	1	
e!COCKPIT buy-out license	2759-101/1110-4000	1	
Workstation license: Can be installed on up to two PCs (e.g., notebook & desktop) Multi-user license: Can be installed up to the number specified Site license: Unlimited installations at a company location Buy-out license: Unlimited installations within a company at every country's location. In addition, the software shall be used in the company's products that contain WAGO's automation components to form a functional unit.			
Accessories	Item No.	Pack. Unit	
WAGO USB communication cable, 2.5 m long	750-923	1	
WAGO USB communication cable, 5 m long	750-923/000-001	1	
			Internet connection may be required for license activation.

e!COCKPIT

Features Overview



Programming

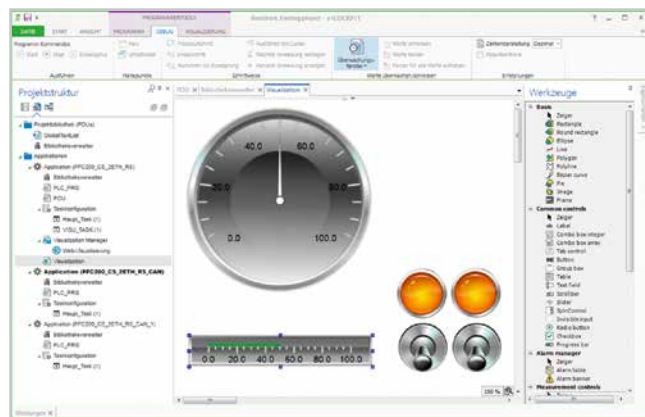
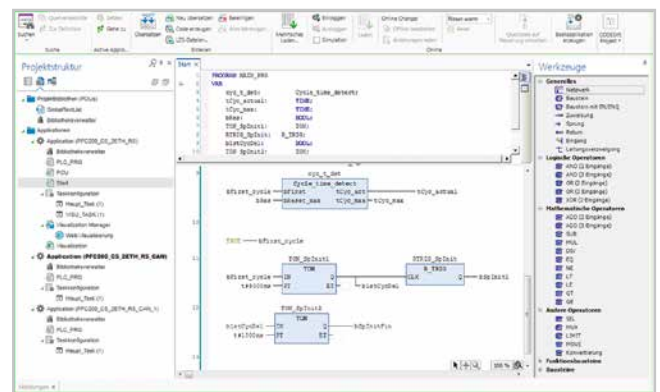
e!COCKPIT offers multiple software development options:

- IEC 61131-3 PLC programming languages: Structured Text (ST), Ladder Diagram (LD), Function Block Diagram (FBD), Instruction List (IL), Sequential Function Chart (SFC), Continuous Function Chart (CFC)
- For flexibility, all programming languages can be combined with one another
- Created programs can be easily debugged on the engineering PC via simulation
- New paradigms such as object-oriented programming are included

Configuration and Parameterization

The integrated e!COCKPIT configurators provide modern operating tools and workspaces, such as:

- Graphical network topology: Complex dependencies between network participants and their current states are easily and intuitively accessed
- Drag & Drop: Simplifies interaction with devices
- Copy & Paste: Individual devices or whole network branches can be duplicated quickly
- Batch processing: Parameter values are set simultaneously for several devices



Diagnostics

Being acutely aware of the automation network's current status is an absolute must for the rapid detection and elimination of errors – be it during development in the office or directly on the machine during commissioning.

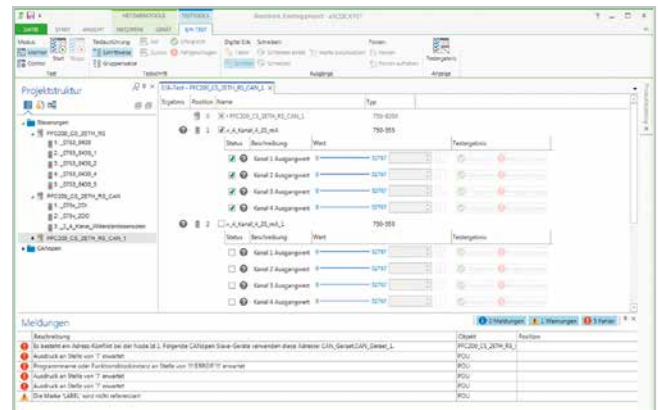
e!COCKPIT provides comprehensive diagnostic capabilities:

- Individual views always display the controllers' status information, for example, both graphically and in tabular form
- To keep the project on time, error messages are transmitted directly and clearly
- The structured wiring test program systematically identifies wiring errors

Visualization

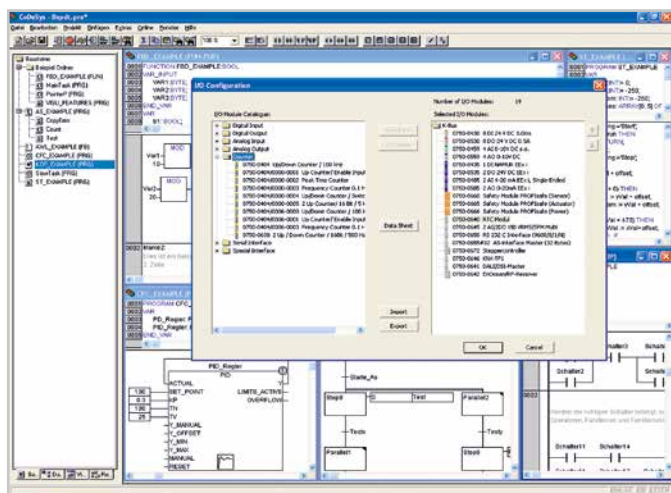
Advanced user interfaces for operating and monitoring machines are standard. Today, HMI-based design is a critical factor that influences the purchase of an entire automation line. e!COCKPIT employs Drag & Drop to streamline the design of modern user interfaces. The integrated visualization editor provides:

- Access to IEC program variables
- Closed simulation of HMI and PLC program on the engineering PC
- Guaranteed language independence via Unicode character set
- Current standards such as HTML 5 or CSS



WAGO-I/O-PRO V2.3

IEC 61131-3 Programming Tool



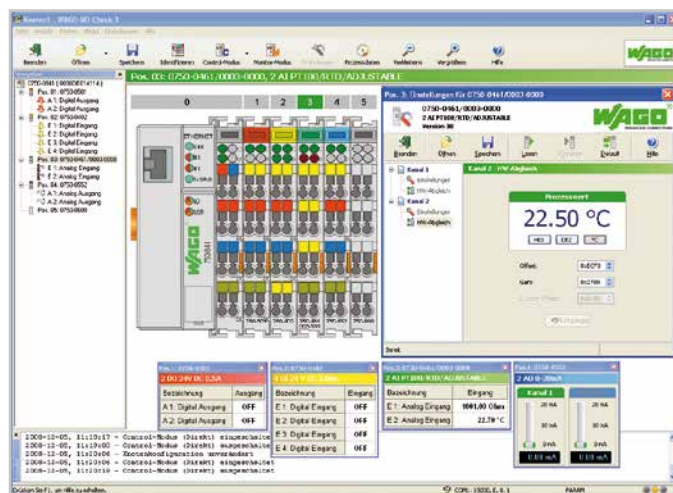
WAGO-I/O-PRO is a programming and visualization tool for control programs. This software is used to develop PLC applications for the WAGO-I/O-SYSTEM 750 Series Programmable Fieldbus Controllers.

WAGO-I/O-PRO runs in line with the IEC 61131-3 standard, which specifies the requirements for a programming system. The IL, SFC, LD, FBD and ST programming languages are supported. The optimal programming language can be chosen for each application.

With extensive programming functions, the software readily meets the increasing requirements of control program development (e.g., reusability and modularization).

WAGO-I/O-CHECK

Commissioning Tool for the WAGO-I/O-SYSTEM 750



WAGO-I/O-CHECK is an easy-to-use Windows application for operating and displaying a WAGO-I/O-SYSTEM 750 node without connecting the node to a fieldbus system.

The software reads the configuration from the node and displays it as an on-screen graphic. The graphic can be printed together with a configuration list as documentation.

With WAGO-I/O-CHECK, it is possible to display and determine the process data of the bus modules. The field wiring, including all sensors and actuators, can thus be checked before startup.

Description	Item No.	Pack. Unit
WAGO-I/O-PRO V2.3, RS-232 Kit	759-333	1
WAGO-I/O-PRO V2.3, USB Kit	759-333/000-923	1
WAGO-I/O-PRO V2.3, CD-ROM	759-911	1

Approvals

Marine applications	ABS, DNV, GL, KR, NKK and RINA
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Technical Data

Supported operating systems	Windows XP (SP3 or later), Windows 7
System requirements:	
Processor	1 GHz or higher, with 32 bits (x86) or 64 bits (x64)
Memory	1 GB RAM (min.), 2 GB RAM or more (recommended)
Hard disk storage	300 MB (min.)
CD-ROM	Required
Graphics resolution	1024 x 786 (min.), 1280 x 1024 or higher (recommended)
Mouse	Required
Other	Open serial interface
Delivery type	RS-232 Kit: CD-ROM with software and serial communication cable (750-920)
	USB Kit: CD-ROM with software and USB communication cable (750-923)
	CD-ROM: CD-ROM with software (without communication cable)

Windows® is a registered trademark of Microsoft Corporation.

Description	Item No.	Pack. Unit
WAGO-I/O-CHECK, RS-232 Kit	759-302	1
WAGO-I/O-CHECK, USB Kit	759-302/000-923	1
WAGO-I/O-CHECK, CD-ROM	759-920	1

Technical Data

Supported operating systems	Windows XP (SP3 or later), Windows 7
System requirements:	
Processor	1 GHz or higher, with 32 bits (x86) or 64 bits (x64)
Memory	1 GB RAM (min.), 2 GB RAM or more (recommended)
Hard disk storage	150 MB (min.)
CD-ROM	Required
Graphics resolution	1024 x 786 (min.), 1280 x 1024 or higher (recommended)
Mouse	Required
Delivery type	RS-232 Kit: CD-ROM with software and serial communication cable (750-920)
	USB Kit: CD-ROM with software and USB communication cable (750-923)
	CD-ROM: CD-ROM with software (without communication cable)

Windows® is a registered trademark of Microsoft Corporation.

WAGO WebVisu App For Mobile System Operation/Monitoring



Using the WAGO WebVisu App, you can access CODESYS 2 WebVisu websites on mobile devices. The system or machine to be monitored can then be operated and monitored at any time on the go. You can define up to 100 controllers for direct and quick access via the URL.

The free WAGO WebVisu App is available in iOS for iPhones and iPads in the Apple "App Store," and in Android for smartphones and tablets in the "Google Play™" store.

Note: An overview of the supported WAGO controllers, operating manuals and application notes can be found on our website or at www.wago.com/webvisu.

Description

WAGO WebVisu App

Technical Data

System requirements:

Operating system	iOS (version 4.3 or later) Android (version 2.2 or later)
Compatibility	iPhone, iPad and iPod touch, Android smartphones and tablets

Simply scan the QR code with your mobile device and you will automatically be directed to the WebVisu App in "App Store" or "Google Play™."

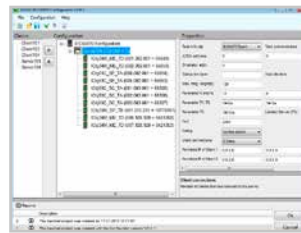


Apple, the Apple logo, iPhone, iPad and iPod touch are registered trademarks of Apple Inc. registered in the USA and other countries.

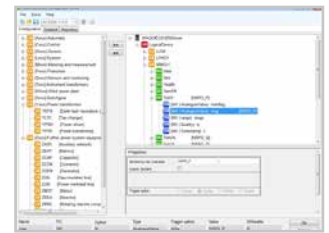
"App Store" is a service mark of Apple Inc.

"Google Play™" is a registered trademark of Google Inc.

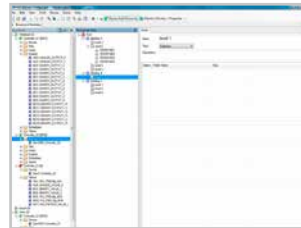
Additional Software



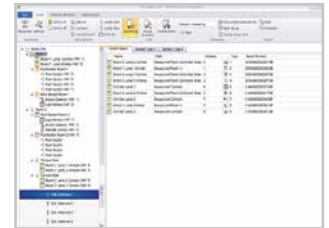
IEC 60870 Configuration Dialog



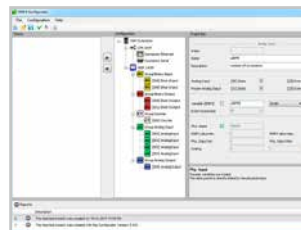
IEC 61850 Configuration Dialog



WAGO BACnet Configurator



DALI Configurator



DNP3 Configurator

Description

IEC 60870 Configurator

Configuration dialog integrated in WAGO-I/O-PRO v2.3 for IEC 60870-5-101/-103/-104 communication parameterization

IEC 61850 Configurator

Configuration dialog integrated in WAGO-I/O-PRO v2.3 for IEC 61850 communication parameterization

DNP3 Configurator

Configuration dialog integrated in WAGO-I/O-PRO v2.3 for DNP3 communication parameterization

WAGO BACnet Configurator

Supported operating systems Windows XP (SP3 or later), Windows 7
For a free download, visit www.wago.com.

DALI Configurator

Included in WAGO-I/O-CHECK (version 3.5.1 and higher) or as a stand-alone application at www.wago.com

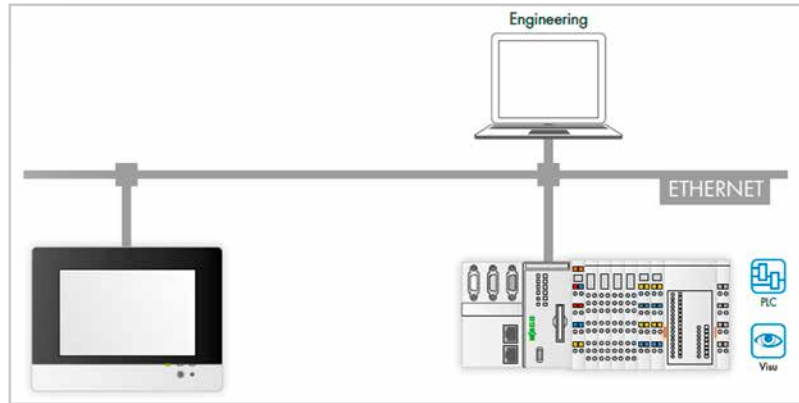
LON® Configurator





Included in WAGO-I/O-PRO (Version 2.3.9.34 and higher) at: www.wago.com

WAGO ETS Plug-In


Supported operating systems Windows XP, Windows 7
For free download, visit www.wago.com.

e!DISPLAY 7300T Web Panels



	Description	Diagonal Screen Size	Screen Resolution	USB 2.0	ETHERNET/ MODBUS TCP	microSD Card	Item No.
	e!DISPLAY 7300T Web Panel	10.9 cm (4.3"), 16:9	480 x 272 pixels	2	2	1	762-3000
	e!DISPLAY 7300T Web Panel	14.5 cm (5.7"), 4:3	640 x 480 pixels	2	2	1	762-3001
	e!DISPLAY 7300T Web Panel	18 cm (7.0"), 16:9	800 x 480 pixels	2	2	1	762-3002
	e!DISPLAY 7300T Web Panel	25.7 cm (10.1"), 16:9	1280 x 800 pixels	2	2	1	762-3003

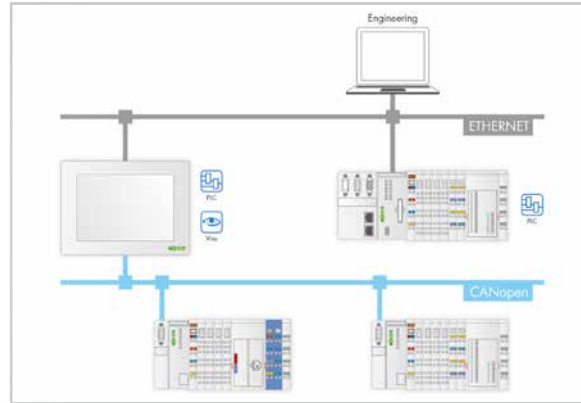
Accessories

	Description					Item No.
	Memory Card	microSD, 1 GB				758-879/000-002

Features:

- Analog, resistive (single-touch) screen
- Four display diagonals available: 4.3", 5.7", 7.0" and 10.1"
- Status LEDs (1 x operating status, 2 x operational feedback)
- Front-mount brightness adjustment
- Variable mounting position (viewing angle, horizontal/vertical: +/- 65°)
- Easy installation via universal mounting system (VESA mount) and wide mounting collar
- Protection class (front/back): IP65/IP20
- Passive cooling system

PERSPECTO® Web and Control Panels



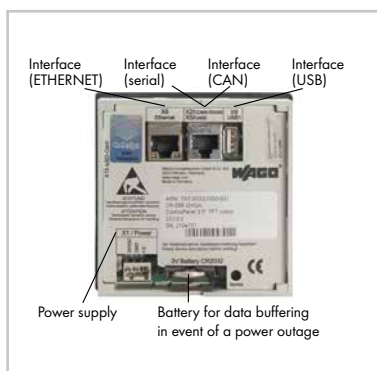
	Description	Diagonal Screen Size	Screen Resolution	USB 2.0	ETHERNET/ MODBUS TCP	CANopen	Others	Item No.
	PERSPECTO® , Web Panels	8.9 cm (3.5")	320 x 240 pixels	1			Web browser	762-1035
		14.5 cm (5.7")	320 x 240 pixels	2			Web browser	762-1057
		26.4 cm (10.4")	640 x 480 pixels	2			Web browser	762-1104
		30.7 cm (12.1")	800 x 600 pixels	2			Web browser	762-1121
	PERSPECTO® , Control Panels (programmable via CODESYS 2)	8.9 cm (3.5")	320 x 240 pixels	1	x	M/S	MODBUS RTU	762-3035/000-001
		14.5 cm (5.7")	320 x 240 pixels	2	x	M/S	MODBUS RTU	762-3057/000-001
		26.4 cm (10.4")	640 x 480 pixels	2	x	M/S	MODBUS RTU	762-3104/000-001
		30.7 cm (12.1")	800 x 600 pixels	2	x	M/S	MODBUS RTU	762-3121/000-001
		38.1 cm (15")	1024 x 768 pixels	4	x		MODBUS RTU	762-3150/000-001
		38.1 cm (15")	1024 x 768 pixels	4	x	M/S	MODBUS RTU	762-3150/000-003

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Accessories

	Description					Pack. Unit	Item No.
	Memory Cards	CF, 1 GB				1	758-879/000-000
		SD, 2 GB				1	758-879/000-001
		microSD, 1 GB				1	758-879/000-002
	Connection Cables	DVI-D, 3 m				1	758-879/000-100
		USB A-B, 3 m				1	758-879/000-101
	Mounting Sets	for WP, CP 35				1	758-879/000-300
		for WP, CP 57				1	758-879/000-301
		for WP, CP 104				1	758-879/000-302
		for WP, CP 121				1	758-879/000-303
		for CP 150				1	758-879/000-304

M: Master, S: Slave



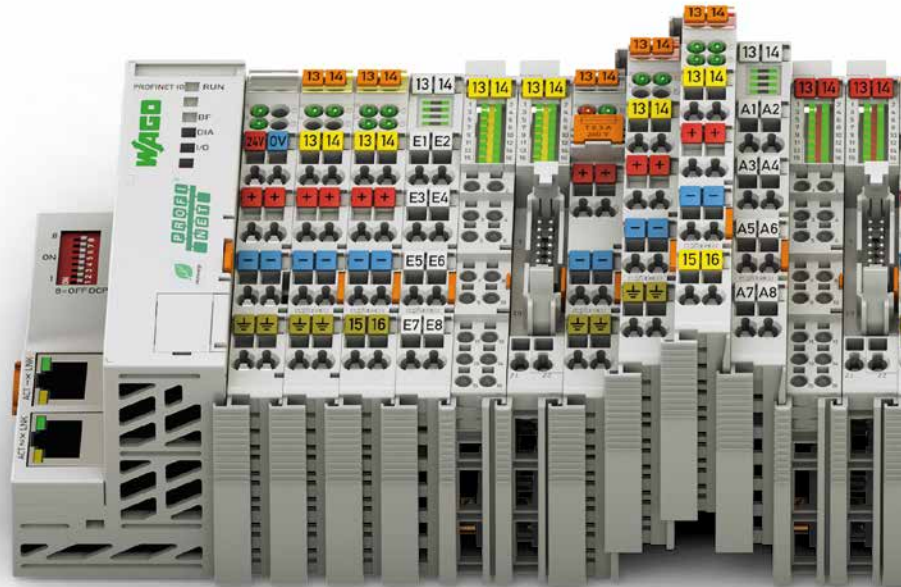
General Specifications

HBT (Half Brightness Time)	50000 hrs.
Operating system	Windows CE
Control elements	Touch, analog, resistive
Power supply	DC 24 V (18 V ... 30 V)
Operating temperature	0°C ... +50°C
Storage temperature	-10 °C ... +60 °C
Relative humidity (without condensation)	10 % ... 85 %
Protection type	Front IP65, back IP20

WAGO-I/O-SYSTEM, 750/753 Series



IEC 60870-5-101/-103/-104
IEC 61850
IEC 61400-25
DNP3



Maximum Fieldbus Independence

The system's modularity is also reflected in its support for numerous fieldbus systems and ETHERNET standards. Depending on the application, it is possible to choose between fieldbus couplers and communication modules for different protocols.

Worldwide Approvals

International approvals for building and industrial automation, as well as the process and marine industries, guarantee worldwide use – even under harsh operating conditions, e.g., ATEX, BR-Ex, IECEx, UL, UL ANSI/ISA and marine applications.

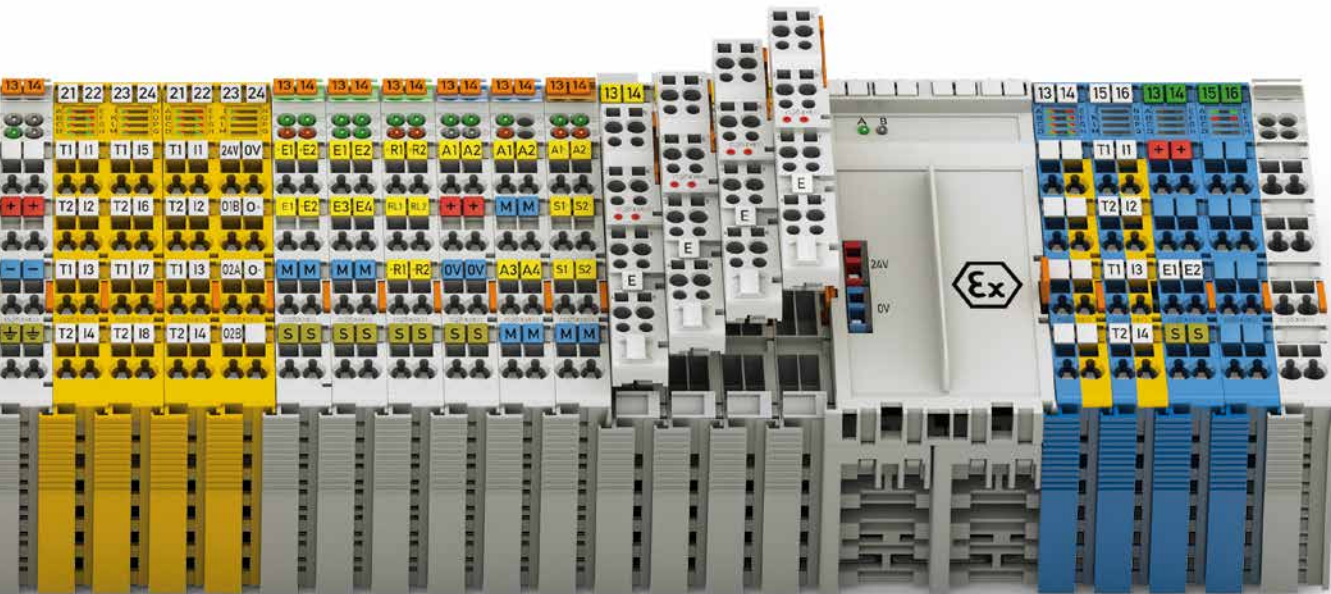
Clear Identification

Module functionality is identified via integrated or pluggable marker carriers. Terminal assignment and technical data are printed onto the side of the module. The WAGO WSB marker system also allows for module- and channel-related identification.

Extremely Compact

Our patented mechanical design leads to extremely compact I/O nodes. In fact, select I/O modules can accommodate up to 16 channels in a 12 mm (1/2") wide housing.

- Finely granular I/O modules enable node customization.
- Space-saving design permits high integration density.



Pluggable Connections

For ultimate convenience, the 753 Series Modules are 100 % compatible with the 750 Series and feature pluggable connectors. A detachable wiring interface allows an operator to easily replace a module without removing and then rewiring all pre-existing wiring. This convenience virtually eliminates installation errors and saves time – if needed, this can be executed via placeholder modules.

Maximum Flexibility

Each node in the WAGO I/O-SYSTEM can be configured to meet each channel's requirements, and various potentials and signal types are available (granularity of 1 – 16 channels). Digital and analog I/O modules, as well as specialty modules, can be freely mixed in the same node. Supply modules permit different voltages within the same node.

Maximum Reliability and Ruggedness

The WAGO I/O-SYSTEM is engineered and tested for use in the most demanding environmental conditions in accordance with the highest standards, e.g., those required in marine applications. The system is distinguished from other products that are solely intended for industrial use because of:

- Greatly increased vibration rating
- Significantly greater immunity to interference (ESD)
- Lower emission of interference
- Larger voltage fluctuation range
- Improved ruggedness for continuous operation in upper temperature ranges

In addition, CAGE CLAMP® spring pressure connections ensure superior reliability.

Integrated QA measures in the production process and 100 % function testing ensure consistent quality.

Easy to Use

The modular, DIN-rail-mount design allows for easy, tool-free installation. The straightforward design prevents installation errors. In addition, proven CAGE CLAMP® technology offers fast, vibration-proof and maintenance-free connections that are independent of operator skill. Depending on the I/O module's granularity, field peripherals can be directly wired using 1-, 2-, 3- or 4-wire technology.

- Fieldbus-independent – Support all standard fieldbus protocols and ETHERNET standards
- Flexible platform adapts to diverse applications and environments
- Tested and approved worldwide
- Wide range of accessories for marking system and connection technology
- CAGE CLAMP® technology provides vibration-proof, fast and maintenance-free connections

WAGO-I/O-SYSTEM 750

- Description and Handling -

The Bus Module – The Universal Basic Module

Assembly



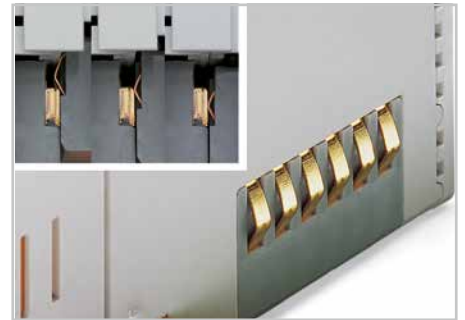
Fine modularity for DIN-rail assembly

Power jumper contacts (field side)



Safe, automatic connection by tinned, self-cleaning slide contacts with high contact safety through make-first, break-last ground contact

Data contacts

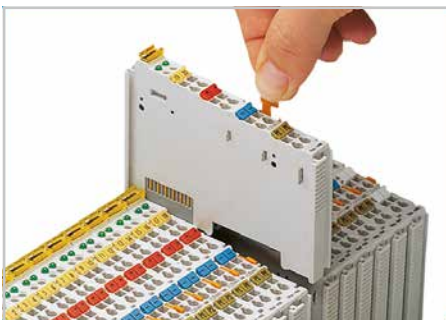


Safe, automatic connection by gold-plated, self-cleaning slide contacts with high contact safety

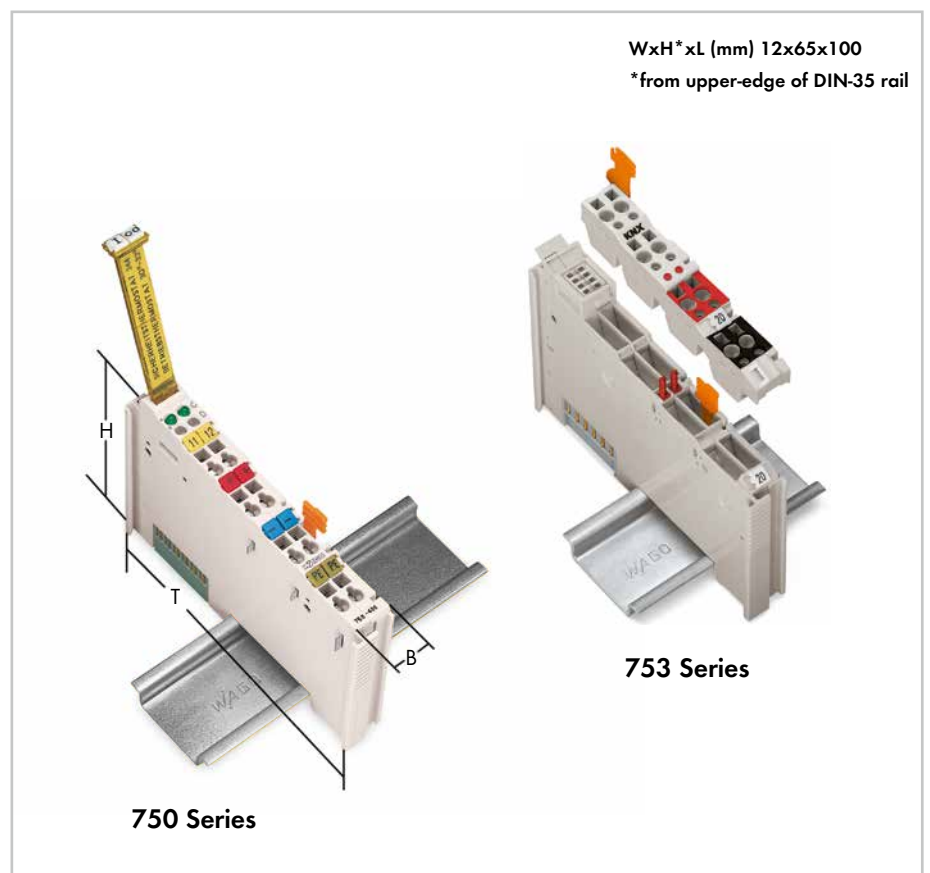


Secure connection with dovetails

Exchange within the assembly



Quickly exchange a module within the assembly - without tools.



Locking the fieldbus coupler



1 Locking

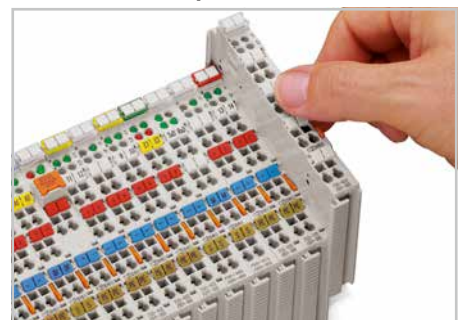
2 Releasing

Accessing the programming interface



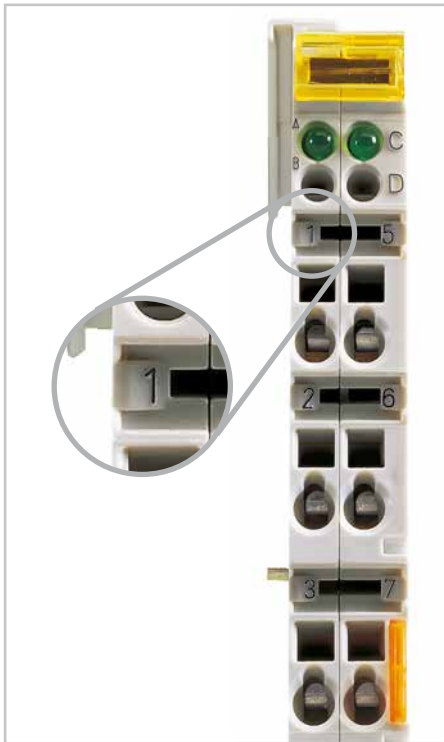
Accessing the programming interface - Programming a fieldbus controller WAGO-I/O-CHECK, WAGO-I/O-PRO CAA.

End module required

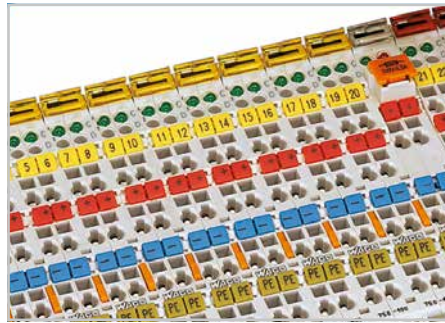


The end module physically terminates the fieldbus node and guarantees safe data transmission.

Color-coded for simplicity



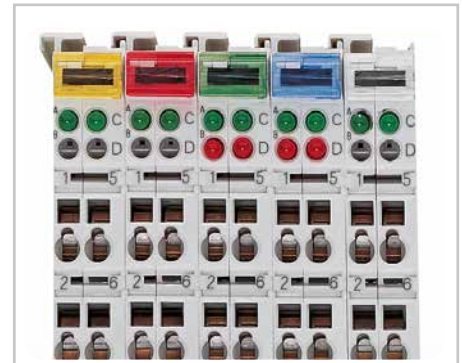
Connection points identified via factory-direct printing.



Marking clamping units via colored miniature WSB markers.



Pullout group marker carriers provide large self-marking areas.

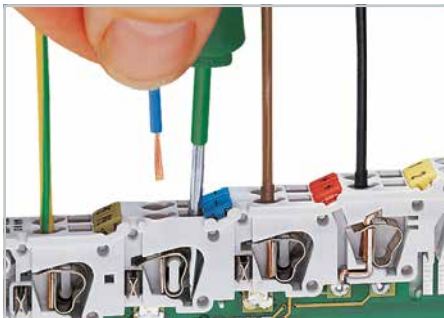


- Yellow** – Digital Inputs (DI)
- Red** – Digital Outputs (DO)
- Green** – Analog Inputs (AI)
- Blue** – Analog Outputs (AO)
- Clear** – Supply and
Specialty Modules

Transparent group marker carriers indicate module type by color.

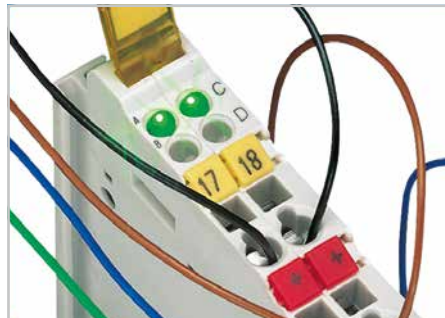
6

CAGE CLAMP® connection



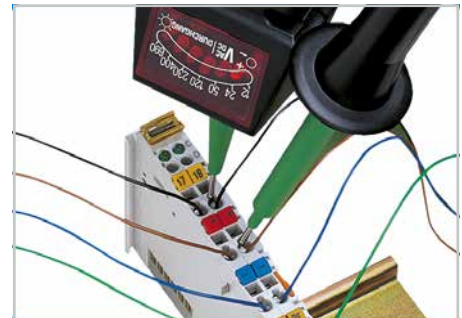
Vibration-proof, fast and maintenance-free connections for conductors ranging 0.08 ... 2.5 mm² (28 ... 14 AWG)

Status indicator



LED diagnostic and status indications for safe startup and system control.

Testing



Tracing signals with wired conductors.

Fuse holder



Function at locked position 1:
Power output to I/O group is off.



Function at locked position 2:
Easy fuse replacement via hinged cover.
Use UL-recognized fuses only!

Pluggable connections














753 Series see Full Line Catalog or visit www.wago.com.

Controllers

PFC100 and PFC200

750 Series

	Description	CPU	ETHERNET MODBUS TCP	PROFIBUS	CANopen	Others	Item No.
	PFC100 CS 2ETH ECO	Cortex A8, 600 MHz	x				750-8100
	PFC100 CS 2ETH	Cortex A8, 600 MHz	x				750-8101
	PFC100 CS 2ETH/T Operating temperature: -20 °C ... +60 °C						750-8101/ 025-000
	PFC100 CS 2ETH RS	Cortex A8, 600 MHz	x				750-8102
	PFC100 CS 2ETH RS/T Operating temperature: -20 °C ... +60 °C						750-8102/ 025-000










	Description	CPU	ETHERNET MODBUS TCP	PROFIBUS	CANopen	Others	Item No.
	PFC200 CS 2ETH RS CAN DPS	Cortex A8, 600 MHz	x	S	M/S	MODBUS RTU	750-8206
	PFC200 CS 2ETH RS CAN DPS/T Operating temperature: -20 °C ... +60 °C						750-8206/ 025-000
	PFC200 CS 2ETH RS CAN DPS TELE/T Operating temperature: -20 °C ... +60 °C	Cortex A8, 600 MHz	x	S	M/S	MODBUS RTU IEC 60870-5 IEC 61850 IEC 61400-25 DNP3	750-8206/ 025-001
	PFC200 CS 2ETH RS CAN	Cortex A8, 600 MHz	x		M/S	MODBUS RTU	750-8204
	PFC200 CS 2ETH RS CAN/T Operating temperature: -20 °C ... +60 °C						750-8204/ 025-000
	PFC200 CS 2ETH CAN	Cortex A8, 600 MHz	x		M/S		750-8203
	PFC200 CS 2ETH CAN/T Operating temperature: -20 °C ... +60 °C						750-8203/ 025-000
	PFC200 CS 2ETH RS	Cortex A8, 600 MHz	x			MODBUS RTU	750-8202
	PFC200 CS 2ETH RS/T Operating temperature: -20 °C ... +60 °C						750-8202/ 025-000
	PFC200 CS 2ETH RS Telecontrol/T PFC200 CS 2ETH RS TELE ECO/T Operating temperature: -20 °C ... +60 °C	Cortex A8, 600 MHz	x			MODBUS RTU IEC 60870-5 IEC 61850 IEC 61400-25 DNP3	750-8202/ 025-001 750-8202/ 025-002
	PFC200 CS 2ETH RS 3G*	Cortex A8, 600 MHz	x			MODBUS RTU	750-8207
	PFC200 CS 2ETH RS 3G/T* PFC200 CS 2ETH RS 3G Telecontrol/T*	Cortex A8, 600 MHz	x			MODBUS RTU IEC 60870-5 IEC 61850 IEC 61400-25 DNP3	750-8207/ 025-000 750-8207/ 025-001

ETH: ETHERNET, CS: CODESYS, RS: RS-232/-485 Serial Interfaces, TELE: Telecontrol Protocol, T: Ext. Temperature Range, DPS: PROFIBUS Slave, M: Master, S: Slave
*750-8207, 750-8207/025-000 and 750-8207/025-001 are EU-only models.

Note: For PFC200 XTR, see page 177.

Controllers

750 Series

	Description	CPU	ETHERNET					PROFIBUS	CANopen	Others	Item No.
			MODBUS TCP	EtherNet/IP	BACnet/IP	KNX IP					
	ETHERNET Controller	32 bits	x	x					IEC 60870-5 IEC 61850 IEC 61400-25 DNP3	750-880 750-880/025-000* 750-880/025-001* 750-880/025-002* 750-881	
	ETHERNET Controller	32 bits	x	x					Media Redundancy	750-885 750-885/025-000* 750-882	
	Telecontroller	32 bits	x	x					MODBUS RTU IEC 60870-5 IEC 61850 IEC 61400-25 DNP3	750-872	
	ETHERNET TCP/IP Controller, RS-232	32 bits	x	x					MODBUS RTU	750-873	
	ETHERNET Controller	32 bits	x	x						750-852	
	KNX IP Controller	32 bits	x			x				750-889	
	BACnet/IP Controller	32 bits	x		x					750-831	
	BACnet/IP Controller		x		x					750-830	
	BACnet MS/TP Controller	32 bits	x						BACnet MS/TP	750-829	
	ETHERNET TCP/IP Controller	16 bits	x							750-843 750-842	
	DeviceNet Controller	16 bits							DeviceNet	750-806	
	MODBUS Controller	16 bits							MODBUS RTU	750-815/300-000 750-815/325-000* 750-816/300-000	
	PROFIBUS Controller	16 bits						S		750-833 750-833/025-000*	
	CANopen Controller	16 bits						M/S		750-837 750-838	
	INTERBUS Controller								INTERBUS	750-804	

*Operating temperature: -20 °C ... +60 °C

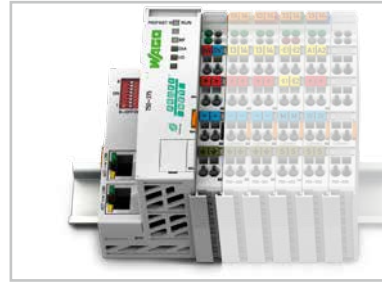
Note: For Controller XTR, see page 177.

Modular I/O-Systems

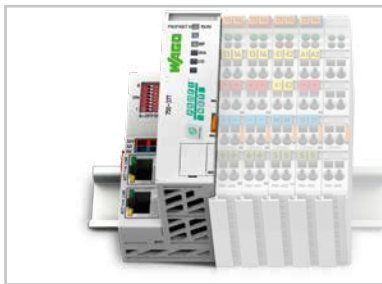
Fieldbus Couplers


Housing Design I with System Power Supply

Dimensions (mm) W x H x L:	51 x 65 x 100 (Height from upper-edge of DIN-rail)
Connection technology:	CAGE CLAMP®
Conductor sizes:	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length:	8 ... 9 mm / 0.33 in.


Housing Design II with System Power Supply

Dimensions (mm) W x H x L:	51 x 65 x 100 (Height from upper-edge of DIN-rail)
-------------------------------	--


Housing Design without System Power Supply

Dimensions (mm) W x H x L:	50 x 65 x 97 (Height from upper-edge of DIN-rail)
Connection technology:	CAGE CLAMP®
Conductor sizes:	0.08 ... 1.5 mm ² / 28 ... 14 AWG
Strip length:	5 ... 6 mm / 0.22 in.


Housing Design ECO

Dimensions (mm) W x H x L:	50 x 65 x 97 (Height from upper-edge of DIN-rail)
Connection technology:	CAGE CLAMP®
Conductor sizes:	0.08 ... 1.5 mm ² / 28 ... 16 AWG
Strip length:	5 ... 6 mm / 0.22 in.

General Specifications

Operating voltage	24 VDC (-25 % ... +30 %)*; *for all marine-certified fieldbus couplers and I/O modules
Operating temperature	0 °C ... +55 °C
Operating temperature for versions with an extended temperature range	-20 °C ... +60 °C
Storage temperature	-25 °C ... +85 °C
Storage temperature for versions with an extended temperature range	-40 °C ... +85 °C
Relative humidity (without condensation)	95 %
Operating altitude	without temperature derating: 0 ... 2,000 m; with temperature derating: 2,000 ... 5,000 m (0.5 K/100 m); max.: 5,000 m
Pollution degree	2 per IEC 61131-2
Vibration resistance	0.5g (4g for all marine-certified fieldbus couplers and I/O modules) per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2 / marine applications
EMC emission of interference	per EN 61000-6-3 / EN 61000-6-4 / marine applications
Protection type	IP20
Mounting position	any
Mounting type	on DIN-35 rail
Housing material	polycarbonate, polyamide 6.6
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Maximum pollutant concentration with a relative humidity < 75 %	SO ₂ ≤ 25 ppm; H ₂ S ≤ 10 ppm
Connection technology	CAGE CLAMP®
Conductor size; strip length for standard I/O modules and fieldbus couplers: 753 Series I/O Modules: ECO Fieldbus Couplers:	0.08 ... 2.5 mm ² /28 ... 14 AWG; 8 ... 9 mm/0.33 in. 0.08 ... 2.5 mm ² /28 ... 14 AWG; 9 ... 10 mm/0.37 in. 0.08 mm ² ... 1.5 mm ² /28 ... 16 AWG; 5 ... 6 mm/0.22 in.
Connection technology	Push-in CAGE CLAMP®
Conductor size; strip length for I/O modules with 16 connection points:	solid: 0.08 ... 1.5 mm ² /28 ... 16 AWG, fine-stranded: 0.25 ... 1.5 mm ² /22 ... 16 AWG; 8 ... 9 mm/0.33 in.
Current via power jumper contacts	10 A (max.)

Modular I/O-Systems

Fieldbus Couplers

750 Series

CAGE CLAMP®

Fieldbus System	Housing Design				Description	Item No.
	With System Power Supply		Without System Power Supply	ECO		
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, 100 Mbit	750-340
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, 2 ports, 100 Mbit	750-370
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, advanced, 2 ports	750-375
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, advanced, 2 ports, Operating temperature: -20 °C ... +60 °C	750-375/025-000
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, advanced, ECO, 2 ports, Operating temperature: -20 °C ... +60 °C	750-377/025-000
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DP/FMS Fieldbus Coupler, 12 Mbaud	750-303
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DP/V1 Fieldbus Coupler, 12 Mbaud	750-333
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DP/V1 Fieldbus Coupler, 12 Mbaud, Operating temperature: -20 °C ... +60 °C	750-333/025-000
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DP/ECO Fieldbus Coupler, 12 Mbaud	750-343
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler with Fiber-Optic Connection, 1.5 Mbaud	750-331
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, 10/100 Mbit	750-352
MODBUS/TCP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, 10 Mbit	750-342
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, 100 Mbit/s	750-354
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, ID switch, 100 Mbit/s	750-354/000-001
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler	750-306
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ECO Fieldbus Coupler	750-346
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler	750-307
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler	750-337
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, Operating temperature: -20 °C ... +60 °C	750-337/025-000
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, D-sub	750-338
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ECO Fieldbus Coupler	750-347
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ECO Fieldbus Coupler, D-sub	750-348
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, 2 ports, 100 Mbit	750-351
MODBUS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, RS-485 (150 ... 115.2 kbaud)	750-315/300-000
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, RS-232 (150 ... 115.2 kbaud)	750-316/300-000
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler, 500 kbaud	750-304
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ECO Fieldbus Coupler, 500 kbaud	750-344
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ECO Fieldbus Coupler, 2 Mbaud	750-345
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler with Fiber-Optic Connection	750-334
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fieldbus Coupler	750-310

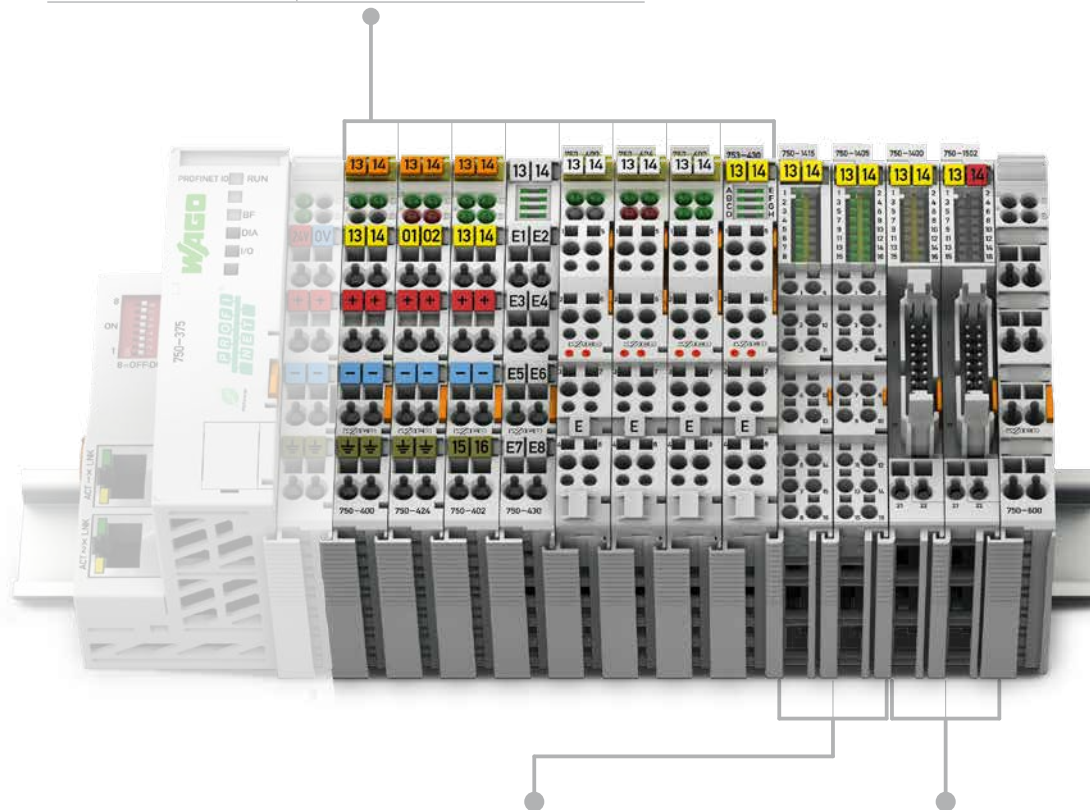
Modular I/O-Systems

Digital Input Modules



750/753 Series Housing Design

Dimensions (mm) W x H x L:	12 x 65 x 100 (Height from upper-edge of DIN-rail)
Connection technology:	CAGE CLAMP®
Conductor sizes:	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length:	750 Series: 8 ... 9 mm / 0.33 in. 753 Series: 9 ... 10 mm / 0.37 in.



750 Series Housing Design with Push-in CAGE CLAMP® (Up to 16 Connection Points)

Connection technology:	Push-in CAGE CLAMP®
Conductor sizes:	solid: 0.08 ... 2.5 mm ² / 28 ... 16 AWG fine-stranded: 0.25 ... 1.5 mm ² / 22 ... 16 AWG
Strip length:	8 ... 9 mm / 0.33 in.

750 Series Housing Design with Ribbon Cable Connection

Dimensions (mm) W x H x L:	12 x 73 x 100 (Height from upper-edge of DIN-rail)
Connection technology:	20-pole male connector/ CAGE CLAMP®



Modular I/O-Systems

Digital Inputs

750 Series

CAGE CLAMP®
PUSH-IN CAGE CLAMP®

Function	2-Channel DI	4-Channel DI	8-Channel DI	8-Channel DIO	16-Channel DI	Description	Item No.		
							Standard	Operating Temperature: /T -20 °C ... +60 °C	Pluggable (Connector, Page 178)
5 VDC		<input type="checkbox"/>				0.2 ms, high-side switching	750-414		
5/12 VDC			<input type="checkbox"/>			(5 ... 14 VDC) 0.2 ms, high-side switching			753-434
24 VDC	<input type="checkbox"/>					3.0 ms, high-side switching	750-400	750-400/025-000	753-400
	<input type="checkbox"/>					0.2 ms, high-side switching	750-401		753-401
	<input type="checkbox"/>					3.0 ms, high-side switching, proximity switch	750-410		753-410
	<input type="checkbox"/>					0.2 ms, high-side switching, proximity switch	750-411		753-411
	<input type="checkbox"/>					3.0 ms, high-side switching, diagnostics, acknowledgment	750-418		753-418
	<input type="checkbox"/>					3.0 ms, high-side switching, diagnostics	750-421		753-421
	<input type="checkbox"/>					NAMUR, proximity switch per DIN EN 60947-5-6	750-425		753-425
	<input type="checkbox"/>					Intruder detection	750-424		753-424
		<input type="checkbox"/>				3.0 ms, high-side switching	750-402	750-402/025-000	753-402
		<input type="checkbox"/>				0.2 ms, high-side switching	750-403		753-403
		<input type="checkbox"/>				3.0 ms, high-side switching	750-432		753-432
		<input type="checkbox"/>				0.2 ms, high-side switching	750-433		753-433
		<input type="checkbox"/>				Pulse extension, 10 ms	750-422		753-422
		<input type="checkbox"/>				3.0 ms, low-side switching	750-408	750-408/025-000	753-408
		<input type="checkbox"/>				0.2 ms, low-side switching	750-409		753-409
		<input type="checkbox"/>				3.0 ms, 3-conductor	750-1420		
		<input type="checkbox"/>				0.2 ms, 3-conductor	750-1421		
		<input type="checkbox"/>				3.0 ms, low-side switching, 3-conductor	750-1422		
		<input type="checkbox"/>				0.2 ms, low-side switching, 3-conductor	750-1423		
			<input type="checkbox"/>			3.0 ms, high-side switching	750-430	750-430/025-000	753-430
			<input type="checkbox"/>			0.2 ms, high-side switching	750-431		753-431
			<input type="checkbox"/>			3.0 ms, low-side switching	750-436		753-436
			<input type="checkbox"/>			0.2 ms, low-side switching	750-437		753-437
			<input type="checkbox"/>			3.0 ms, 2-conductor	750-1415		
			<input type="checkbox"/>			0.2 ms, 2-conductor	750-1416		
			<input type="checkbox"/>			3.0 ms, low-side switching, 2-conductor	750-1417		
			<input type="checkbox"/>			0.2 ms, low-side switching, 2-conductor	750-1418		
				<input type="checkbox"/>		0.5 A, high-side switching, ribbon cable	750-1502		
				<input type="checkbox"/>		0.5 A, high-side switching	750-1506		
				<input type="checkbox"/>	3.0 ms, high-side switching, ribbon cable	750-1400			
				<input type="checkbox"/>	3.0 ms, high-side switching	750-1405			
				<input type="checkbox"/>	0.2 ms, high-side switching	750-1406			
				<input type="checkbox"/>	3.0 ms, low-side switching, ribbon cable	750-1402			
				<input type="checkbox"/>	3.0 ms, low-side switching	750-1407			
24 V AC/DC		<input type="checkbox"/>				20 ms	750-415		753-415
		<input type="checkbox"/>				50 ms, power jumper contacts	750-423		753-423
42 V AC/DC		<input type="checkbox"/>				20 ms	750-428		753-428
48 VDC	<input type="checkbox"/>					3.0 ms, high-side switching	750-412		753-412
60 VDC	<input type="checkbox"/>					3.0 ms, high-side switching			753-429
110 VDC	<input type="checkbox"/>					3.0 ms, high-side or low-side switching	750-427		753-427
220 VDC	<input type="checkbox"/>					3.0 ms, high-side switching	750-407		
120 VAC	<input type="checkbox"/>					10 ms, high-side switching	750-406		753-406
120/230 VAC		<input type="checkbox"/>				(120 ... 230 VAC) 10 ms, high-side switching			753-440
230 VAC	<input type="checkbox"/>					10 ms, high-side switching	750-405		753-405
PTC			<input type="checkbox"/>			Connection to PTC thermistors per DIN 44081/44082	750-1425		
Functional Safety							See page 174		
Ex i							See page 175		

Modular I/O-Systems

Digital Output Modules

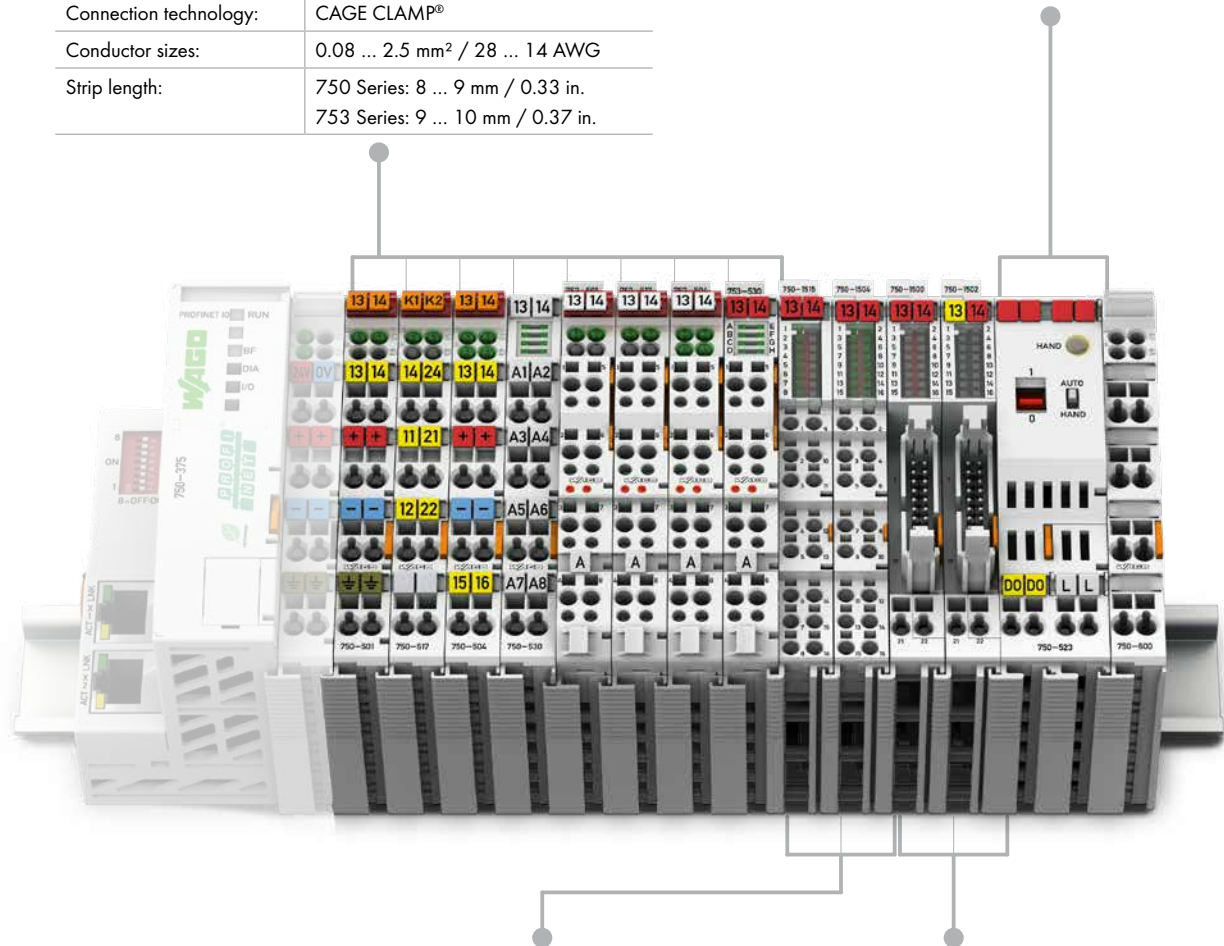


750/753 Series Housing Design

Dimensions (mm) W x H x L:	12 x 65 x 100 (Height from upper-edge of DIN-rail)
Connection technology:	CAGE CLAMP®
Conductor sizes:	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length:	750 Series: 8 ... 9 mm / 0.33 in. 753 Series: 9 ... 10 mm / 0.37 in.

750 Series Specialty Housing

Dimensions (mm) W x H x L:	24 x 65 x 100 (Height from upper-edge of DIN-rail)
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750 Series Housing Design with Push-in CAGE CLAMP® (Up to 16 Connection Points)

Connection technology:	Push-in CAGE CLAMP®
Conductor sizes:	solid: 0.08 ... 2.5 mm ² / 28 ... 16 AWG fine-stranded: 0.25 ... 1.5 mm ² / 22 ... 16 AWG
Strip length:	8 ... 9 mm / 0.33 in.

750 Series Housing Design with Ribbon Cable Connection

Dimensions (mm) W x H x L:	12 x 73 x 100 (Height from upper-edge of DIN-rail)
Connection technology:	20-pole male connector/ CAGE CLAMP®



Modular I/O-Systems

Digital Outputs

750 Series

CAGE CLAMP®
PUSH-IN CAGE CLAMP®

Function	1-Channel DO	2-Channel DO	4-Channel DO	8-Channel DO	8-Channel DIO	16-Channel DO	Description	Item No.		
								Standard	/T Operating Temperature: -20 °C ... +60 °C	Pluggable (Connector, Page 178)
5 VDC			■				High-side switching	750-519		
5/12 VDC				■			(5 ... 14 VDC) 1 A, short-circuit-protected, high-side switching	750-534		753-534
24 VDC		■					0.5 A, short-circuit-protected, high-side switching	750-501		753-501
		■					0.5 A, short-circuit-protected, high-side switching, interference-free	750-501/000-800		753-501/000-800
		■					2.0 A, short-circuit-protected, high-side switching	750-502		753-502
		■					2.0 A, short-circuit-protected, high-side switching, interference-free	750-502/000-800		753-502/000-800
		■					0.5 A, diagnostics, short-circuit-protected, high-side switching	750-506		753-506
		■					0.5 A, diagnostics, short-circuit-protected, high-side switching, interference-free	750-506/000-800		
		■					2.0 A, diagnostics, short-circuit-protected, high-side switching	750-508		753-508
		■					2.0 A, diagnostics, short-circuit-protected, high-side switching, interference-free	750-508/000-800		
				■			0.5 A, short-circuit-protected, high-side switching	750-504	750-504/025-000	753-504
				■			0.5 A, short-circuit-protected, high-side switching, interference-free	750-504/000-800	750-504/025-800	
				■			0.5 A, 2-conductor, short-circuit-protected, high-side switching	750-531		753-531
				■			0.5 A, 2-conductor, short-circuit-protected, high-side switching, interference-free	750-531/000-800		753-531/000-800
				■			Short-circuit-protected, low-side switching	750-516		753-516
				■			0.5 A, 2-conductor, diagnostics, short-circuit-protected, high-side switching	750-532		
					■		0.5 A, short-circuit-protected, high-side switching	750-530	750-530/025-000	753-530
					■		0.5 A, short-circuit-protected, low-side switching	750-536		753-536
					■		0.5 A, diagnostics, short-circuit-protected, high-side switching	750-537		753-537
					■		0.5 A, 2-conductor	750-1515		
					■		0.5 A, low-side switching, 2-conductor	750-1516		
						■	0.5 A, high-side switching, ribbon cable	750-1502		
					■	0.5 A, high-side switching	750-1506			
					■	0.5 A, high-side switching, ribbon cable	750-1500			
					■	0.5 A, high-side switching	750-1504			
					■	0.5 A, low-side switching, ribbon cable	750-1501			
					■	0.5 A, low-side switching	750-1505			
120/230 VAC			■				(120 ... 230 VAC) 0.25 A, high-side switching			753-540
230 VAC/DC		■					0.3 A, solid-state relay	750-509		753-509
230 VAC		■					0.5 A, solid-state relay (3 A < 30 ms)	750-522		
Relay		■					2 changeover contacts, potential-free, 125 VAC, 0.5 A	750-514		753-514
		■					2 changeover contacts, potential-free, 230 VAC, 1 A	750-517		753-517
		■					2 make contacts, non-floating, 230 VAC, 2 A	750-512		753-512
		■					2 make contacts, potential-free, 230 VAC, 2 A	750-513		753-513
		■					2 make contacts, potential-free, 230 VAC, 2 A, without power jumper contacts	750-513/000-001		
	■					1 make contact, potential-free, manual operation, 230 VAC, 16 A	750-523			
Functional Safety								See page 174		
Ex i								See page 175		

Modular I/O-Systems

Analog Input Modules

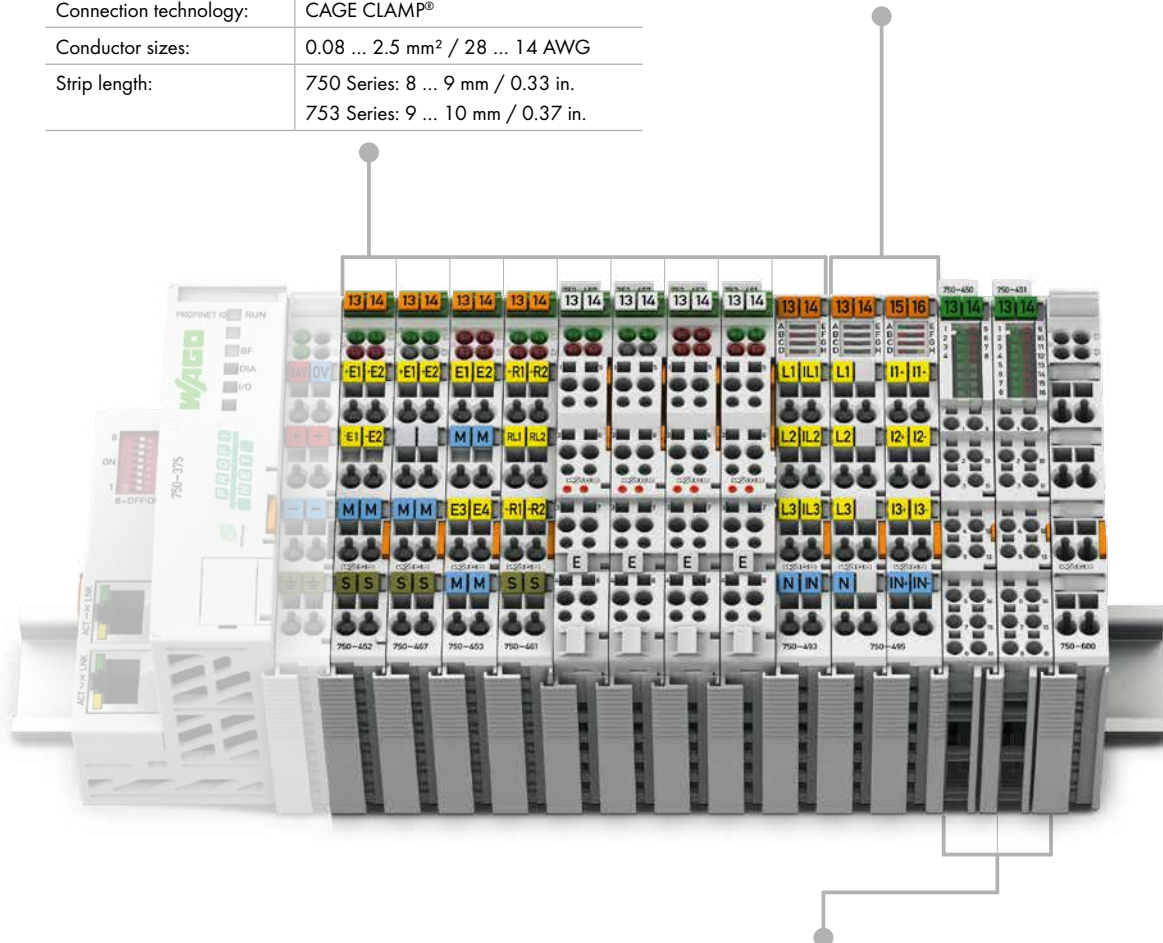


750/753 Series Housing Design

Dimensions (mm) W x H x L:	12 x 65 x 100 (Height from upper-edge of DIN-rail)
Connection technology:	CAGE CLAMP®
Conductor sizes:	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length:	750 Series: 8 ... 9 mm / 0.33 in. 753 Series: 9 ... 10 mm / 0.37 in.

750 Series Housing Design, Double Width

Dimensions (mm) W x H x L:	24 x 65 x 100 (Height from upper-edge of DIN-rail)
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750 Series Housing Design with Push-in CAGE CLAMP® Connections (Up to 16 Connection Points)

Connection technology:	Push-in CAGE CLAMP®
Conductor sizes:	solid: 0.08 ... 2.5 mm ² / 28 ... 16 AWG fine-stranded: 0.25 ... 1.5 mm ² / 22 ... 16 AWG
Strip length:	8 ... 9 mm / 0.33 in.



Modular I/O-Systems

Analog Inputs

750 Series

CAGE CLAMP®
PUSH-IN CAGE CLAMP®

Function	1-Channel AI	2-Channel AI	4-Channel AI	8-Channel AI	Description	Item No.			
						Standard	/S5 or /S7 Customized Data Format	/T Operating Temperature: -20 °C ... +60 °C	Pluggable (Connector, Page 178)
0 ... 20 mA		<input checked="" type="checkbox"/>			Differential input	750-452	750-452/000-200		753-452
		<input checked="" type="checkbox"/>			Single-ended	750-465		750-465/025-000	753-465
		<input checked="" type="checkbox"/>			Single-ended, short-circuit-protected	750-470			
		<input checked="" type="checkbox"/>			Single-ended, short-circuit-protected, 60 Hz	750-470/005-000			
		<input checked="" type="checkbox"/>			Single-ended, 16 bits	750-472	750-472/000-200		753-472
		<input checked="" type="checkbox"/>			Single-ended, 16 bits, 60 Hz	750-472/005-000			
		<input checked="" type="checkbox"/>			Differential input	750-480			753-480
		<input checked="" type="checkbox"/>			Differential input, synchronous	750-480/000-001			
4 ... 20 mA			<input checked="" type="checkbox"/>		Single-ended	750-453			753-453
		<input checked="" type="checkbox"/>			Differential input	750-454	750-454/000-200	750-454/025-000	753-454
		<input checked="" type="checkbox"/>			Single-ended	750-466	750-466/000-200	750-466/025-000	753-466
		<input checked="" type="checkbox"/>			Single-ended, short-circuit-protected	750-473			
		<input checked="" type="checkbox"/>			Single-ended, short-circuit-protected, 60 Hz	750-473/005-000			
		<input checked="" type="checkbox"/>			Single-ended, 16 bits	750-474	750-474/000-200		753-474
		<input checked="" type="checkbox"/>			Single-ended, 16 bits, 60 Hz	750-474/005-000			
		<input checked="" type="checkbox"/>			Differential input	750-492			753-492
0/4 ... 20 mA				<input checked="" type="checkbox"/>	Single-ended, 16 bits, HART	750-482	750-482/000-300	750-482/025-000	753-482
			<input checked="" type="checkbox"/>		Single-ended	750-455		750-455/025-000	753-455
				<input checked="" type="checkbox"/>	Single-ended	750-455/020-000			
				<input checked="" type="checkbox"/>	Single-ended	750-496			
0 ... 1 A	<input checked="" type="checkbox"/>				Differential input	750-475			753-475
0 ... 5 A	<input checked="" type="checkbox"/>				Differential input	750-475/020-000			
± 10 V	<input checked="" type="checkbox"/>				Differential input	750-456	750-456/000-200		753-456
	<input checked="" type="checkbox"/>				Differential input	750-479			753-479
	<input checked="" type="checkbox"/>				Differential input, synchronous	750-479/000-001			
	<input checked="" type="checkbox"/>				Single-ended, 16 bits	750-476	750-476/000-200		753-476
0 ... 10 V		<input checked="" type="checkbox"/>			Single-ended	750-457		750-457/025-000	753-457
	<input checked="" type="checkbox"/>				Differential input	750-477			753-477
	<input checked="" type="checkbox"/>				Single-ended	750-467	750-467/000-200		753-467
	<input checked="" type="checkbox"/>				Single-ended, 16 bits	750-478			753-478
± 10 V/0 ... 10 V			<input checked="" type="checkbox"/>		Single-ended, 16 bits, 60 Hz	750-478/005-000			
			<input checked="" type="checkbox"/>		Single-ended	750-468	750-468/000-200	750-468/025-000	
				<input checked="" type="checkbox"/>	Single-ended	750-459			753-459
				<input checked="" type="checkbox"/>	Single-ended	750-497			
Resistance Sensors	<input checked="" type="checkbox"/>				Differential input	750-483			753-483
	<input checked="" type="checkbox"/>				Pt100 / RTD / NTC 20 kΩ	750-461	750-461/000-200	750-461/025-000	753-461
	<input checked="" type="checkbox"/>				Pt100 / configurable	750-461/003-000			753-461/003-000
	<input checked="" type="checkbox"/>				NTC 20k	750-461/020-000			
	<input checked="" type="checkbox"/>				Resistance measurement (other variants)	750-461/000-00x			
			<input checked="" type="checkbox"/>		Pt100 / RTD	750-460			
			<input checked="" type="checkbox"/>		Pt1000 / RTD	750-460/000-003			
			<input checked="" type="checkbox"/>		Ni1000 TK6180 / RTD	750-460/000-005			
Thermocouples			<input checked="" type="checkbox"/>		4AI RTD (building automation)	750-463			
		<input checked="" type="checkbox"/>			RTD, configurable	750-464			
		<input checked="" type="checkbox"/>			NTC, configurable	750-464/020-000			
		<input checked="" type="checkbox"/>			4AI RTD, configurable	750-450			
				<input checked="" type="checkbox"/>	8AI RTD, configurable	750-451			
		<input checked="" type="checkbox"/>			K/Diagnostics	750-469	750-469/000-200		753-469
		<input checked="" type="checkbox"/>			J/Diagnostics	750-469/000-006			
		<input checked="" type="checkbox"/>			Configurable	750-469/003-000			753-469/003-000
Analog Specialty Functions				<input checked="" type="checkbox"/>	S; T; ±120 mV; E; L/Diagnostics	750-469/000-00x			
				<input checked="" type="checkbox"/>	8AI Thermocouple, configurable	750-458			
	<input checked="" type="checkbox"/>				Resistor bridges (strain gauge)	750-491			
		<input checked="" type="checkbox"/>			Resistor bridges (strain gauge), 125 ms	750-491/000-001			
		<input checked="" type="checkbox"/>			(1A)	750-493			
		<input checked="" type="checkbox"/>			(5A)	750-493/000-001			
		<input checked="" type="checkbox"/>			(480V/1A)	750-494		750-494/025-000	
		<input checked="" type="checkbox"/>			3-phase power measurement module (480V/5A)	750-494/000-001		750-494/025-001	
	<input checked="" type="checkbox"/>			(690V/1A)	750-495				
	<input checked="" type="checkbox"/>			(690V/5A)	750-495/000-001				
	<input checked="" type="checkbox"/>			(690V/RC)	750-495/000-002				

Exi

See page 175

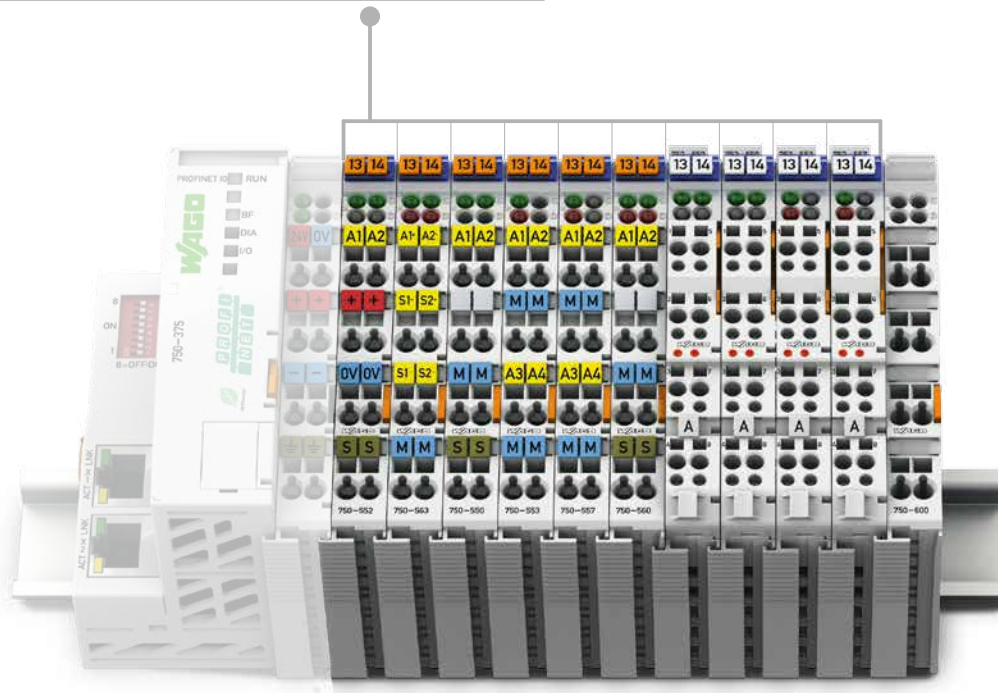
Modular I/O-Systems

Analog Output Modules



750/753 Series Housing Design

Dimensions (mm) W x H x L:	12 x 65 x 100 (Height from upper-edge of DIN-rail)
Connection technology:	CAGE CLAMP®
Conductor sizes:	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length:	750 Series: 8 ... 9 mm / 0.33 in. 753 Series: 9 ... 10 mm / 0.37 in.



Modular I/O-Systems

Analog Outputs

750 Series

CAGE CLAMP®

Function	2-Channel AO	4-Channel AO	Description	Item No.			
				Standard	/S5 Customized Data Format	/T Operating Temperature: -20 °C ... +60 °C	Pluggable (Connector, Page 178)
0 ... 20 mA	■		12 bits	750-552	750-552/000-200	750-552/025-000	753-552
		■	12 bits	750-553			753-553
4 ... 20 mA	■		12 bits	750-554	750-554/000-200	750-554/025-000	753-554
		■	12 bits	750-555			753-555
0/4 ... 20 mA	■		16 bits, configurable	750-563			
0 ... 10 V	■		12 bits	750-550	750-550/000-200		753-550
	■		10 bits, 10 mA	750-560			
		■	12 bits	750-559		750-559/025-000	753-559
± 10 V	■		12 bits	750-556	750-556/000-200		753-556
		■	12 bits	750-557			753-557
0 V / ±10 V	■		16 bits, configurable	750-562			
Exi				See page 175			

Modular I/O-Systems

Function and Technology Modules

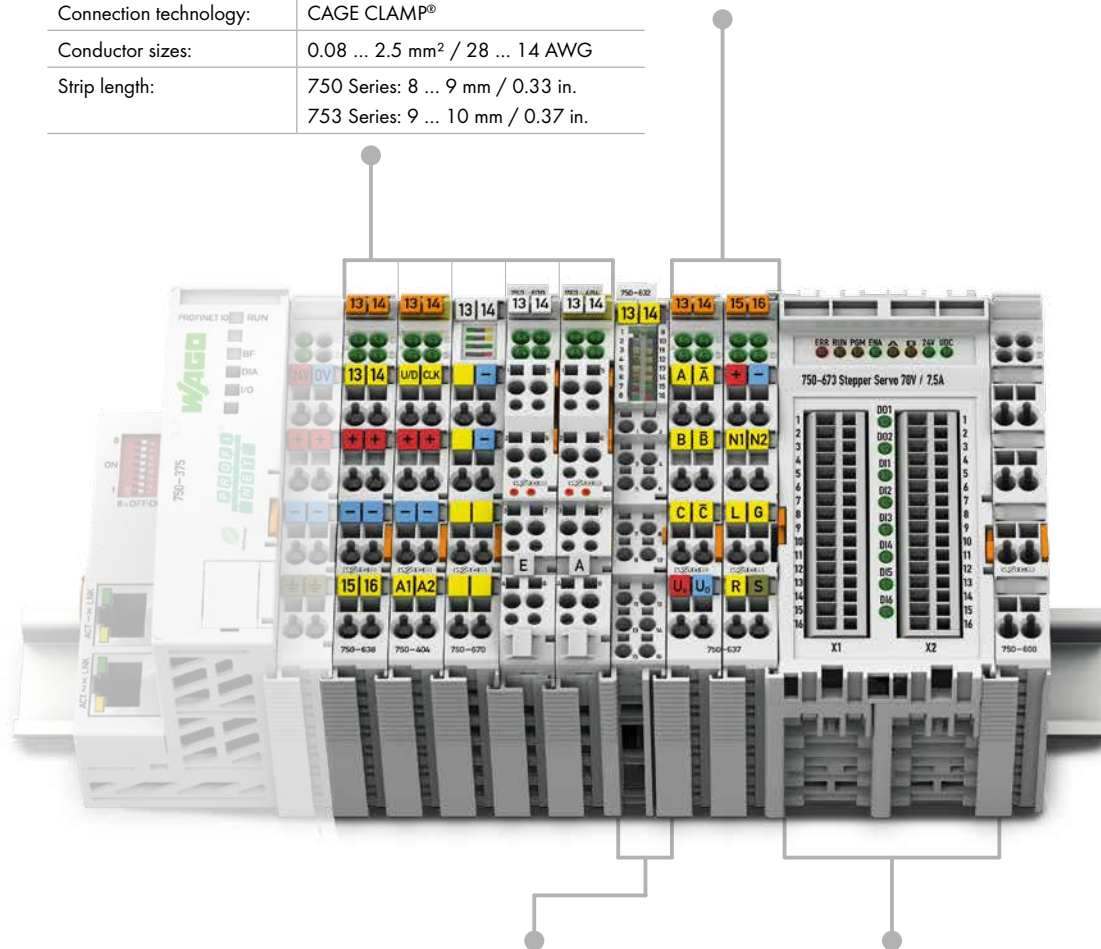


750/753 Series Housing Design

Dimensions (mm) W x H x L:	12 x 65 x 100 (Height from upper-edge of DIN-rail)
Connection technology:	CAGE CLAMP®
Conductor sizes:	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length:	750 Series: 8 ... 9 mm / 0.33 in. 753 Series: 9 ... 10 mm / 0.37 in.

750 Series Housing Design, Double Width

Dimensions (mm) W x H x L:	24 x 65 x 100 (Height from upper-edge of DIN-rail)
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750 Series Housing Design with Push-in CAGE CLAMP® Connections (Up to 16 Connection Points)

Dimensions (mm) W x H x L:	12 x 65 x 100 (Height from upper-edge of DIN-rail)
Connection technology:	Push-in CAGE CLAMP®
Conductor sizes:	solid: 0.08 ... 2.5 mm ² / 28 ... 16 AWG fine-stranded: 0.25 ... 1.5 mm ² / 22 ... 16 AWG
Strip length:	8 ... 9 mm / 0.33 in.

Specialty Housing

Dimensions (mm) W x H x L:	51 x 70 x 100 (Height from upper-edge of DIN-rail)
Connection technology:	CAGE CLAMP®
Conductor sizes:	0.08 ... 1.5 mm ² / 28 ... 14 AWG
Strip length:	5 ... 6 mm / 0.22 in.



Modular I/O-Systems

Function and Technology Modules

750 Series

CAGE CLAMP®
PUSH-IN CAGE CLAMP®

Function	Description	Item No.		
		Standard	/T Operating Temperature: -20 °C ... +60 °C	Pluggable (Connector, Page 178)
Counter Modules	Up/Down Counter, 24 VDC, 100 kHz	750-404		753-404
	Up Counter/Enable Input	750-404/000-001		
	Peak-Time Counter	750-404/000-002		
	Frequency Counter 0.1 Hz ... 100 kHz	750-404/000-003		753-404/000-003
	Up/Down Counter, Switch Output	750-404/000-004		
	2 Up Counters, 16 bits, 5 kHz	750-404/000-005		753-404/000-005
	Up/Down Counter, 24 VDC, 16 bits, 500 Hz	750-638	750-638/025-000	753-638
Pulse Width Output Modules	2-channel pulse width, 24 VDC, short-circuit-protected, high-side switching	750-511		753-511
	2-channel frequency, 2 kHz	750-511/000-001		
	2-channel pulse width, 100 Hz	750-511/000-002		
Distance and Angle Measurement Modules	SSI Transmitter Interface, 24 bits, 125 kHz, gray	750-630		
	SSI Transmitter Interface, 24 bits, 125 kHz, bin.	750-630/000-001		
	SSI Transmitter Interface, 24 bits, 250 kHz, bin.	750-630/000-002		
	SSI Transmitter Interface, 24 bits, 125 kHz, gray, status	750-630/000-004		
	SSI Transmitter Interface, 15 bits, 125 kHz, gray, status	750-630/000-005		
	SSI Transmitter Interface, 24 bits, 250 kHz, gray	750-630/000-006		
	SSI Transmitter Interface, 25 bits, 125 kHz, gray	750-630/000-008		
	SSI Transmitter Interface, 13 bits, 250 kHz, bin.	750-630/000-009		
	SSI Transmitter Interface, 25 bits, 125 kHz, bin.	750-630/000-011		
	SSI Transmitter Interface, 13 bits, 125 kHz, gray	750-630/000-012		
	SSI Transmitter Interface, 29 bits, 125 kHz, bin.	750-630/000-013		
	SSI Transmitter Interface, configurable	750-630/003-000		
	Incremental Encoder Interface	750-631/000-004		
	Incremental Encoder Interface, cam outputs	750-637		
	Incremental Encoder Interface, 24 V, 32 bits, differential	750-637/000-001		
	Incremental Encoder Interface, 24 V, 32 bits, single-ended	750-637/000-002		
	Incremental Encoder Interface, RS-422, 32 bits, single interpreter	750-637/000-003		
	Incremental Encoder Interface, 24 V, 32 bits, single-ended, cam outputs	750-637/000-004		
	Digital Impulse Interface	750-635		753-635
	RTC Module	RTC Module, real-time clock	750-640	
Condition Monitoring	2-Channel, Vibration Velocity/Bearing Condition Monitoring VIB I/O Module	750-645		
Stepper Modules	Stepper Controller, RS-422, 24 V, 20 mA	750-670		
	Stepper Controller, 24 V, 1.5 A	750-671		
	Stepper Controller, 70 V, 7.5 A, 6 IN, 2 OUT	750-672		
	Servo Stepper Controller, 70 V, 7.5 A, 6 IN, 2 OUT	750-673		
DC Drive Controllers	DC Drive Controller, 24 V, 5 A	750-636	750-636/025-000	
	DC Drive Controller, 24 V, 5 A, external motor voltage	750-636/000-700		
	DC Drive Controller, 24 V, 5 A, interference-free	750-636/000-800		
Proportional Valve Module	Proportional Valve Module	750-632		
Ex i		See page 175		

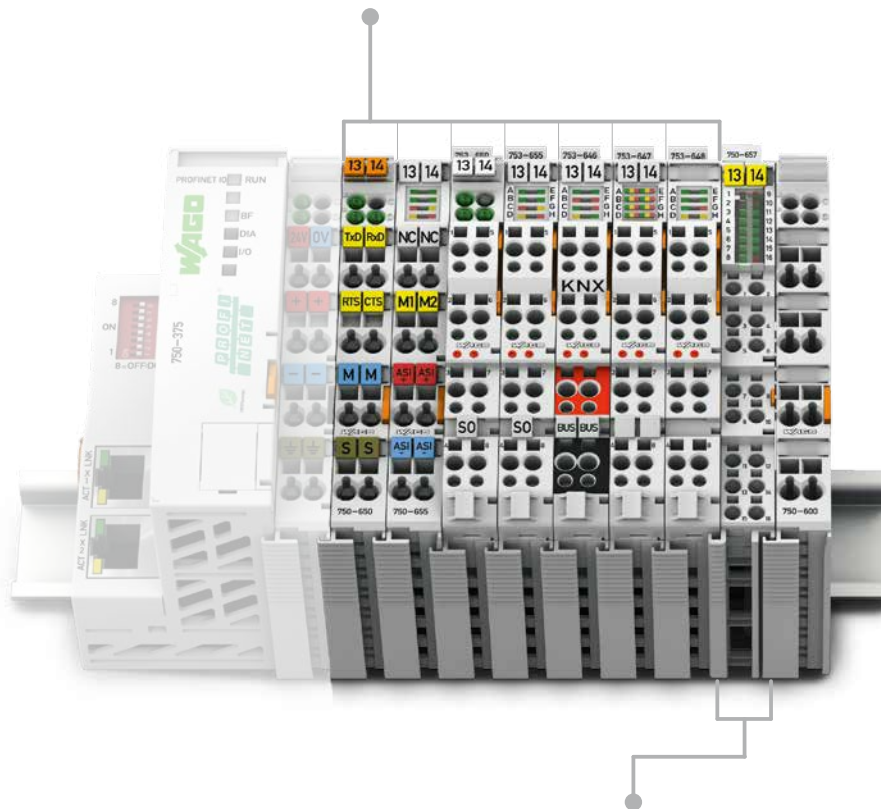
Modular I/O-Systems

Communication Modules



750/753 Series Housing Design

Dimensions (mm) W x H x L:	12 x 65 x 100 (Height from upper-edge of DIN-rail)
Connection technology:	CAGE CLAMP®
Conductor sizes:	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length:	750 Series: 8 ... 9 mm / 0.33 in. 753 Series: 9 ... 10 mm / 0.37 in.



750 Series Housing Design with Push-in CAGE CLAMP® Connections (Up to 16 Connection Points)

Connection technology:	Push-in CAGE CLAMP®
Conductor sizes:	solid: 0.08 ... 2.5 mm ² / 28 ... 16 AWG fine-stranded: 0.25 ... 1.5 mm ² / 22 ... 16 AWG
Strip length:	8 ... 9 mm / 0.33 in.

Modular I/O-Systems

Communication Modules

750 Series

CAGE CLAMP®
PUSH-IN CAGE CLAMP®

Function	Description	Item No.		
		Standard	/T Operating Temperature: -20 °C ... +60 °C	Pluggable (Connector, Page 178)
Serial Interfaces	Serial Interface RS-232 C, 9600, N, 8, 1	750-650		753-650
	Serial Interface RS-232 C, 9600, N, 8, 1, 5 bytes	750-650/000-001		
	Serial Interface RS-232 C, 9600, E, 7, 2	750-650/000-002		
	Serial Interface RS-232 C, 9600, E, 8, 1	750-650/000-006		
	Serial Interface RS-232 C, 19200, N, 8, 1	750-650/000-010		
	Serial Interface RS-232 C, 19200, E, 8, 1	750-650/000-011		
	Serial Interface RS-232 C, 2400, N, 8, 1	750-650/000-012		
	Serial Interface RS-232 C, 4800, E, 8, 1	750-650/000-015		
	Serial Interface RS-232 C, configurable	750-650/003-000		753-650/003-000
	Serial Interface RS-485, 9600, N, 8, 1	750-653	750-653/025-018	753-653
	Serial Interface RS-485, 9600, E, 7, 2	750-653/000-001		
	Serial Interface RS-485, 9600, E, 8, 1	750-653/000-002		
	Serial Interface RS-485, 19200, N, 8, 1, 5 bytes	750-653/000-006		
	Serial Interface RS-485, configurable	750-653/003-000	750-653/025-000	753-653/003-000
	Serial Interface RS-232 C/RS-485	750-652	750-652/025-000	753-652
	TTY Interface, 9600, N, 8, 1	750-651		
	TTY Interface, 9600, E, 8, 1	750-651/000-002		
	Bluetooth®	Bluetooth® RF Transceiver	750-644	
EnOcean	Radio Receiver Module	750-642		
KNX	KNX/EIB/TP1 Module			753-646
DALI	DALI Multi-Master Module			753-647
LON	LON FTT Module			753-648
MP-Bus	MP-Bus Master Module	750-643		
AS-Interface Master	AS-Interface Master	750-655		753-655
IO-Link Master	IO-Link Master	750-657		
CAN Gateway	CAN Gateway	750-658		
Data Exchange	Data Exchange Module	750-654		

6



Modular I/O-Systems

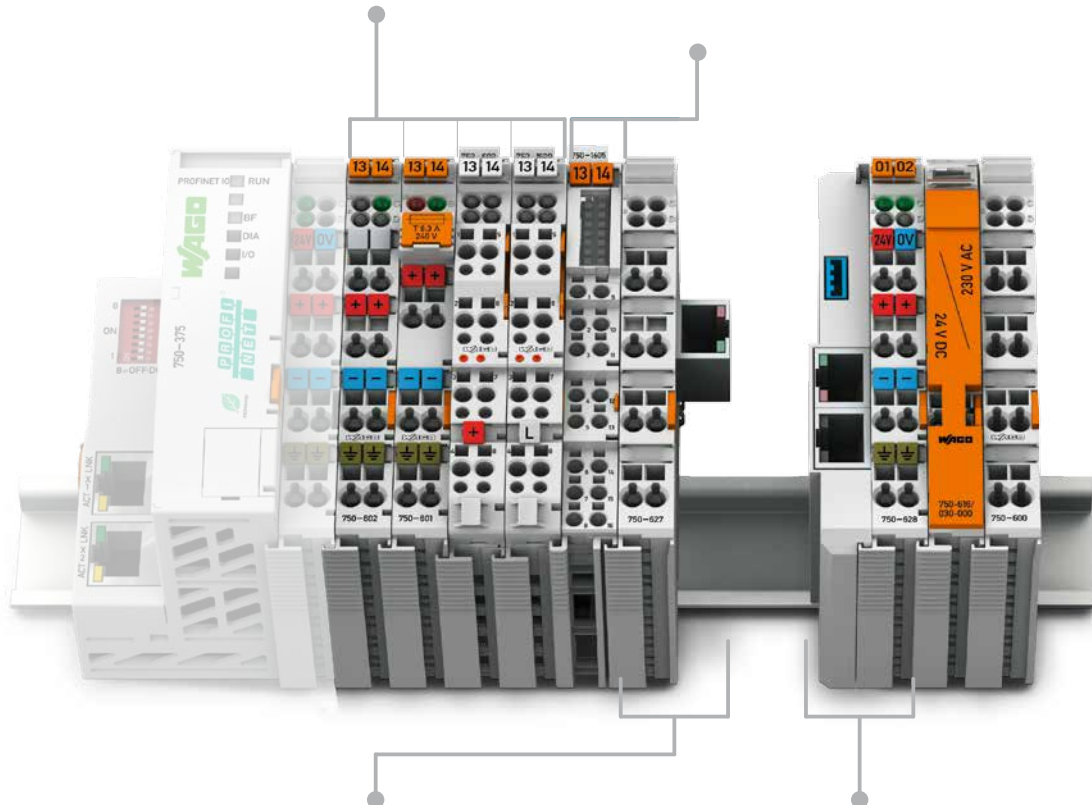
Supply and Segment Modules

750/753 Series Housing Design

Dimensions (mm) W x H x L:	12 x 65 x 100 (Height from upper-edge of DIN-rail)
Connection technology:	CAGE CLAMP®
Conductor sizes:	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length:	750 Series: 8 ... 9 mm / 0.33 in. 753 Series: 9 ... 10 mm / 0.37 in.

750 Series Housing Design with Push-in CAGE CLAMP® Connections (Up to 16 Connection Points)

Connection technology:	Push-in CAGE CLAMP®
Conductor sizes:	solid: 0.08 ... 2.5 mm ² / 28 ... 16 AWG fine-stranded: 0.25 ... 1.5 mm ² / 22 ... 16 AWG
Strip length:	8 ... 9 mm / 0.33 in.



Specialty Housing for Internal Data Bus Extension End Module

Dimensions (mm) W x H x L:	24 x 65 x 100 (Height from upper-edge of DIN-rail)
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Specialty Housing for Internal Data Bus Extension Coupler Module

Dimensions (mm) W x H x L:	25 x 65 x 100 (Height from upper-edge of DIN-rail)
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Modular I/O-Systems

Supply and Segment Modules

750 Series

CAGE CLAMP®
PUSH-IN CAGE CLAMP®

Function	Description	Item No.		
		Standard	/T Operating Temperature: -20 °C ... +60 °C	Pluggable (Connector, Page 178)
Supply Modules 24 VDC	24 VDC, passive	750-602	750-602/025-000	753-602
	24 VDC, max. 6.3 A, without diagnostics, with fuse carrier	750-601		
	24 VDC, max. 6.3 A, with diagnostics, with fuse carrier	750-610		
	24 VDC, 5 ... 15 V	750-623		
24 VDC, Passive	24 VDC	750-613		
24 VAC	24 VAC, with fuse carrier	750-617		
120 VAC	120 VAC, max. 6.3 A, without diagnostics, with fuse carrier	750-615		
230 VAC	0 ... 230 V AC/DC, without diagnostics, passive	750-612		753-612
	230 VAC, max. 6.3 A, without diagnostics, with fuse carrier	750-609		
	230 VAC, max. 6.3 A, with diagnostics, with fuse carrier	750-611		
DALI Multi-Master DC/DC Converter	DALI Multi-Master DC/DC Converter			753-620
Field-Side Connection Modules	24 VDC	750-603		753-603
	0 VDC	750-604		753-604
	0 ... 230 V AC/DC	750-614		753-614
	16+, 24 VDC	750-1605		
	16-, 0 VDC	750-1606		
	8+/8-, 24/0 VDC	750-1607		
Filter Modules	Field-Side Power Supply Filter (Surge), high isolation ❶	750-624/020-000		
	Field-Side Power Supply Filter (Surge), high isolation, without power jumper contacts, also suitable as a supply module ❶	750-624/020-001		
	Field-Side Power Supply Filter (Surge) ❸ ❺	750-624		
	Field-Side Power Supply Filter (Surge), without power jumper contacts, also suitable as a supply module ❸ ❺	750-624/000-001		
	Power Supply Filter (Surge), high isolation ❷	750-626/020-000	750-626/025-001	
	Power Supply Filter (Surge) ❹ ❺	750-626	750-626/025-000	
Internal Data Bus Extension	End Module	750-627		
	Coupler Module	750-628		
Spacer Modules	Binary Spacer Module	750-622		
	Spacer Module, active			753-1629
	Spacer Module, active, without power jumper contacts			753-1629/000-001
	Spacer Module, passive			753-629/020-000
Separation Modules	Separation Module	750-616		
	Separation Module, labeled	750-616/030-000		
	Separation Module with Power Jumper Contacts	750-621		
End Modules	End Module for internal data bus completion	750-600	750-600/025-000	
Ex i		See page 175		

- ❶ Required for marine-certified operation with 750 Series I/O Modules
- ❷ Required for marine-certified operation with both 750 Series Couplers and Programmable Controllers
- ❸ Required for marine-certified operation with an Ex i Supply Module
- ❹ Required for marine-certified operation with both 758 Series IPCs and 750-625 Ex i Supply Module
- ❺ Required when using the 750 Series PROFIsafe Modules

Modular I/O-Systems

Functional safety

750 Series

CAGE CLAMP®

Function	Description	Item No.	
		Standard	Pluggable (Connector, Page 178)
PROFIsafe Digital Input Modules	PROFIsafe V1.3, 8 FDI 24 V	750-660/000-001	
	PROFIsafe V2 iPar, 4 FDI 24 V	750-661/000-003	753-661/000-003
	PROFIsafe V2 iPar, 8 FDI 24 V	750-662/000-003	753-662/000-003
PROFIsafe Digital Input/Output Modules	PROFIsafe V1.3, 4 FDO 0.5 A, 4 FDI 24 V	750-665/000-001	
	PROFIsafe V2 iPar, 4 FDI/2 FDO 24 V/2 A	750-666/000-003	753-666/000-003
	PROFIsafe V2 iPar, 4 FDI/4 FDO 24 V/2 A	750-667/000-003	753-667/000-003
Intrinsically Safe Digital Input Module with Inputs for Functional Safety	PROFIsafe V2 iPar, 4 F Ex i DI 24V	750-663/000-003	
Ex i Supply Modules	The intrinsically safe digital input module with inputs for functional safety (750-663/000-003) shall only be operated using an Ex i 24 VDC power supply (e.g., 750-606, 750-625/000-001)! General information (e.g., installation regulations) on explosion protection is available in the WAGO-I/O-SYSTEM 750 manuals!		
	24 VDC 1.0 A Ex i Supply Module, with diagnostics	750-606	
	24 VDC 1.0 A Ex i Supply Module	750-625/000-001	
Filter Modules	The mixed operation of safe and conventional modules streamlines system configuration. For increased electromagnetic immunity (EMC standard), WAGO offers compact power supply filter modules (Section 4.10). Specific power supply features must be considered, which are described in detail in the corresponding manuals.		
	24 VDC Field-Side Power Supply Filter (Surge), high isolation	750-624/020-000	
	24 VDC Power Supply Filter (Surge), high isolation	750-626/020-000	



Modular I/O-Systems

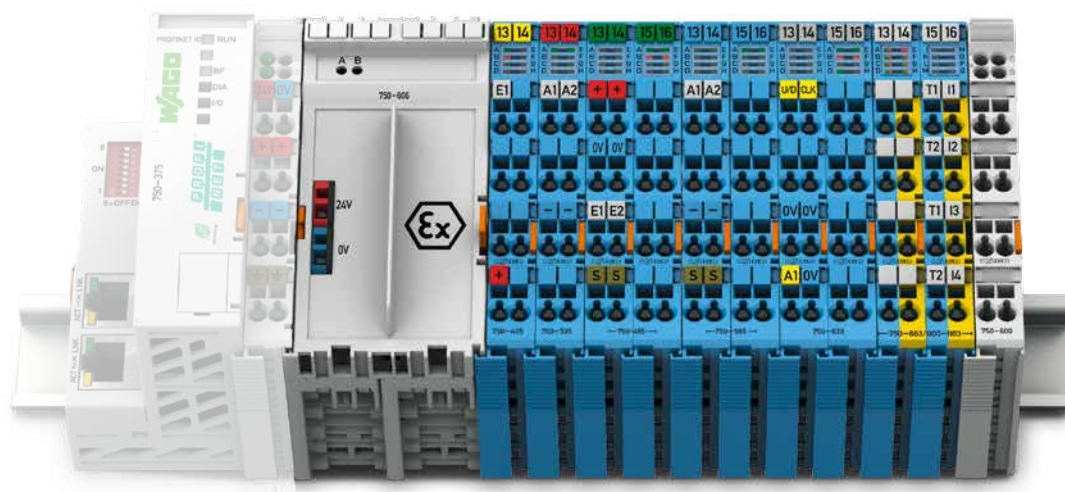
Intrinsically Safe Ex i Modules

750 Series

CAGE CLAMP®

Function	Description	Item No.
Ex i Supply Modules	24 VDC 1.0 A Ex i Supply Module, with diagnostics	750-606
	24 VDC 1.0 A Ex i Supply Module	750-625/000-001
Digital Input Ex i Modules for Proximity Switches per EN 60947-5-6	1 DI NAMUR, Ex i	750-435
	2 DI NAMUR, Ex i	750-438
	8 DI NAMUR, Ex i	750-439
Intrinsically Safe Digital Input Module with Inputs for Functional Safety	PROFIsafe V2 iPar, 4 F Ex i DI 24V	750-663/000-003
Digital Output Ex i Modules	2 DO Ex i, short-circuit-protected, high-side switching	750-535
	2 DO Relay Output Ex i Module, isolated outputs, 2 changeover contacts	750-538
Analog Input Ex i Modules	2 AI Ex i 4 ... 20 mA, single-ended	750-485
	2 AI Ex i 4 ... 20 mA, single-ended, HART	750-484
	2 AI Ex i RTD	750-481/003-000
	2 AI Ex i TC	750-487/003-000
Analog Output Ex i Modules	2 AO Ex i 0 ... 20 mA	750-585
	2 AO Ex i 4 ... 20 mA	750-586
Ex i Function Module	Ex i Up/Down Counter NAMUR, 50 kHz	750-633

6



WAGO-I/O-SYSTEM – 750 XTR Series

General Product Information



Taking it to the eXTReme – The standard for 750 XTR

Instantly recognizable by its dark gray modules, the WAGO-I/O-SYSTEM 750 XTR's unique features make it ideal for extreme environments or applications.

The WAGO-I/O-SYSTEM 750 XTR features outstanding characteristics: It is extremely temperature-resistant, immune to interferences, as well as insensitive to vibrations and impulse voltages. This is what makes 750 XTR the first choice for demanding applications including:

- Marine systems and onshore/offshore installations
- Renewable energy systems (wind, photovoltaic and biogas plants)
- Transformer stations and power distribution
- Petrochemical Industry
- Water and wastewater treatment systems
- Custom machine engineering
- Railway applications



eXTReme temperatures

-40 °C ... +70 °C

eXTReme isolation

up to 5 kV of impulse voltage

DIN EN 60870-2-1

eXTReme vibrations

up to 5g acceleration

DIN EN 60068-2-6

General Specifications

Operating voltage	24 VDC Under laboratory conditions +15 °C ... +35 °C: 18 ... 31.2 V (17.4 ... 31.2 V) ¹⁾ -40 °C ... +55 °C: 18 ... 28.8 V (17.4 ... 28.8 V) ¹⁾ +55 °C ... +70 °C: 18 ... 26.4 V (17.4 ... 26.4 V) ¹⁾ ¹⁾ including residual ripple of 15 %
Operating temperature	-40 °C ... +70 °C
Storage temperature	-40 °C ... +85 °C
Relative humidity	Max. 95 % short-term condensation per IEC EN 60721-3-3, Class 3K7 (excluding wind-driven precipitation, water and ice formation)
Operating altitude	without temperature derating: 0 ... 2,000 m; with temperature derating: 2,000 ... 5,000 m (0.5 K/100 m); max.: 5,000 m
Pollution degree	2 per IEC 61131-2
Immunity to impulse voltages	Per EN 60870-2-1 Modules ≤ 50 V: 510 VAC / 775 VDC; Modules > 50 V: 2.5 kVAC / 3.5 VDC Isolation: Rated impulse voltage Modules ≤ 50 V: 1 kV (Class VW1 per EN 60870-2-1) Modules > 50 V: 5 kV (Class VW3 per EN 60870-2-1) Surge: Modules ≤ 50 V: 1 kV (L - L) / 2 kV (L - E) Modules > 50 V: 2 kV (L - L) / 4 kV (L - E) Overvoltage category: III
Vibration resistance	5g per IEC 60068-2-6, EN 60870-2-2, IEC 60721-3-1, IEC 60721-3-3, EN 61131-2
Shock resistance	15g/11 ms/halfsine/1,000 shocks per IEC 60068-2-27 25g/6 ms/1,000 shocks per IEC 60068-2-27
EMC immunity to interference	EN 61000-6-1, EN 61000-6-2, EN 61131-2 marine applications, EN 50121-3-2, EN 50121-4 EN 50121-5, EN 60255-26, EN 60870-2-1 EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994
EMC emission of interference	EN 61000-6-3 and EN 61000-6-4, EN 61131-2 EN 60255-26, marine applications EN 60870-2-1 (industrial and residential areas) EN 61850-3 (industrial and residential areas) EN 50121-3-2, EN 50121-4, EN 50121-5
Protection type	IP20
Mounting position	Horizontal (standing/lying) or vertical
Mounting type	on DIN-35 rail
Housing material	polycarbonate, polyamide 6.6
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Maximum pollutant concentration with a relative humidity < 75 %	SO ₂ ≤ 25 ppm; H ₂ S ≤ 10 ppm
Connection technology	CAGE CLAMP® (for standard I/O modules and fieldbus couplers)
Conductor size; strip length for standard I/O modules and fieldbus couplers: ECO Fieldbus Couplers:	0.25 ... 2.5 mm ² /24 ... 14 AWG; 8 ... 9 mm/0.33 in. 0.25 ... 1.5 mm ² /24 ... 16 AWG; 5 ... 6 mm/0.22 in.
Connection technology	Push-in CAGE CLAMP® (for I/O modules with 16 connection points)
Conductor size; strip length for I/O modules with 16 connection points:	0.25 ... 1.5 mm ² /24 ... 16 AWG; 8 ... 9 mm/0.33 in.
Current via power jumper contacts	10 A (max.)

- No air conditioning required
 - Compact footprint
 - Lower energy and maintenance costs
- Can be used in unshielded areas
- Maximum system uptime
- Install close to vibrating and shock-generating system components
- CAGE CLAMP® connection technology for vibration-proof, fast and maintenance-free connections

Modular I/O-Systems

750 XTR Series




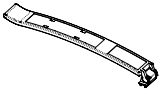
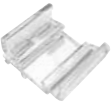






CAGE CLAMP®
PUSH-IN CAGE CLAMP®

	Description	Item No.
	PFC200 CS 2ETH RS CAN DPS / XTR	750-8206/040-000
	PFC200 CS 2ETH RS CAN DPS TELE / XTR	750-8206/040-001
	PFC200 CS 2ETH RS / XTR	750-8202/040-000
	PFC200 CS 2 ETH RS TELE / XTR	750-8202/040-001
	ETHERNET Controller / XTR	750-880/040-000
	ETHERNET Controller TELE / XTR	750-880/040-001
	CANopen Controller / XTR	750-838/040-000
	PROFIBUS DP/V1 12 Mbd / XTR	750-333/040-000
	ETHERNET / XTR	750-352/040-000
	CANopen D-Sub / XTR	750-338/040-000
	8 DI 24 VDC 3.0 ms, 2-wire connection / XTR	750-1415/040-000
	8 DI 24 VDC 0.2 ms, 2-wire connection / XTR	750-1416/040-000
	16 DI 24 VDC 3.0 ms / XTR	750-1405/040-000
	2 DI 220 VDC 3.0 ms / XTR	750-407/040-000
	2 DI 60 VDC 3.0 ms / XTR	750-429/040-001
	2 DI 110 VDC 3.0 ms / XTR	750-427/040-000
	2 DO 24 VDC 2.0 A, diagnostics / XTR	750-508/040-000
	8 DO 24 VDC 0.5 A, 2-wire connection / XTR	750-1515/040-000
	2 DO 230 VAC 1.0 A, relay 2 CO, potential-free / XTR	750-517/040-000
	4 AI 0 ... 20 mA, single-ended / XTR	750-453/040-000
	4 AI 4 ... 20 mA, single-ended / XTR	750-455/040-000
	2 AI 4 ... 20 mA, differential input NE43 / XTR	750-492/040-001
	4 AI 0 ... 10 VDC, single-ended / XTR	750-468/040-000
	4 AI ±10 VDC, single-ended / XTR	750-457/040-000
	2/4 AI RTD, configurable / XTR	750-464/040-000
	2 AI Thermocouple, configurable / XTR	750-469/040-000
	3-Phase Power Measurement Module, 690 V, 1 A / XTR	750-495/040-000
	3-Phase Power Measurement Module, 690 V, 5 A / XTR	750-495/040-001
	3-Phase Power Measurement Module, 690 V, Rogowski coil / XTR	750-495/040-002
	2 AO 0/4 ... 20 mA / 6 ... 18 VDC, configurable / XTR	750-563/040-000
	4 AO ±10 VDC / XTR	750-557/040-000
	4 AO 0 ... 10 VDC / XTR	750-559/040-000
	RS-232/RS-485, configurable / XTR	750-652/040-000
	24 VDC Power Supply / XTR	750-602/040-000
	AC/DC Power Supply, 0 ... 230 V / XTR	750-612/040-000
	24 VDC Bus Power Supply	750-613/040-000
	24 VDC Field-Side Power Supply Filter (Surge) / XTR	750-624/040-001
	24 VDC Power Supply Filter (Surge) / XTR	750-626/040-000
	Field-Side Connection Module 16+ / XTR	750-1605/040-000
	Field-Side Connection Module 16- / XTR	750-1606/040-000
	Separation Module / XTR	750-616/040-000
	End Module / XTR	750-600/040-000

Modular I/O-Systems

Accessories

750/753 Series

	Description	Item No.	Pack. Unit
	Pluggable Connector, 753 Series, light gray	753-110	25
	Pluggable Connector, 753 Series, yellow	753-120	25
	Coding Elements, 753 Series, red	753-150	100
	Marker Carrier for 750/753 Series, transparent	750-103	50
	Marker Carrier for 750/753 Series, 4 LEDs	750-106	50
	Marker Carrier for 750/753 Series, 8 LEDs	750-107	50
	Markers for Group Marker Carrier, white	750-100	1 sheet
	Miniature WSB Quick Marking System, plain ○ white ● yellow ● red ● blue ● gray ● orange ● light green ● green ● violet	248-501 248-501/000-002 248-501/000-005 248-501/000-006 248-501/000-007 248-501/000-012 248-501/000-017 248-501/000-023 248-501/000-024	5 cards
	Interface modules for system wiring, relay modules with miniature switching relay, with flat cable connector per DIN 41651 8 channels/10 poles 16 channels/20 poles	See pages 232-234	1
	WAGO Ribbon Cables, connect I/O modules to interface modules 20/20 20/2 x 10	706-3057/300-100 706-7753/302-000	1
	Operating Tools		
	with a partially insulated shaft, type 1, (2.5 x 0.4) mm blade	210-719	1
	with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade	210-720	1

Modular I/O-Systems

Accessories

750/753 Series

	Description	Item No.	Pack. Unit	
	PROFIBUS Fieldbus Connector with D-sub connector, 9-pole, suitable for an S7 PLC	750-971	1	
	PROFIBUS Fieldbus Connector with D-sub male and female connectors, 9-pole	750-972	1	
	ETHERNET RJ-45 Fieldbus Connector, IP20, CAT 5e	750-975	1	
	PROFINET RJ-45 Fieldbus Connector, IP20	750-976	1	
	PROFIBUS Fieldbus Connector with D-sub male connector, 9-pole	750-960	1	
	CANopen Fieldbus Connector with D-sub female connector, 9-pole	750-963	1	
	INTERBUS Fieldbus Connector (IN) with D-sub female connector, 9-pole	750-961	1	
	INTERBUS Fieldbus Connector (OUT) with D-sub male connector, 9-pole	750-962	1	
	CC-Link Fieldbus Connector with D-sub male connector, 9-pole	750-965	1	
	<i>Bluetooth</i> [®] Adapter, radio connection between PC and coupler/controller	750-921	1	
	WAGO USB Communication Cable, connection between PC and coupler/controller (suitable for <i>JUMPFLEX</i> [®])	2.5 m 5 m	750-923 750-923/000-001	1
	<i>Bluetooth</i> [®] ETHERNET Gateway		758-915	1
	WLAN ETHERNET Gateway	2.4 GHz 5 GHz	758-916 758-917	1
	Magnetic-Mount Antenna, GSM 900/1800		758-910	1
	Magnetic-Mount Antenna, WLAN/ <i>Bluetooth</i> [®] 2.4 Ghz		758-912	1

WAGO SPEEDWAY 767

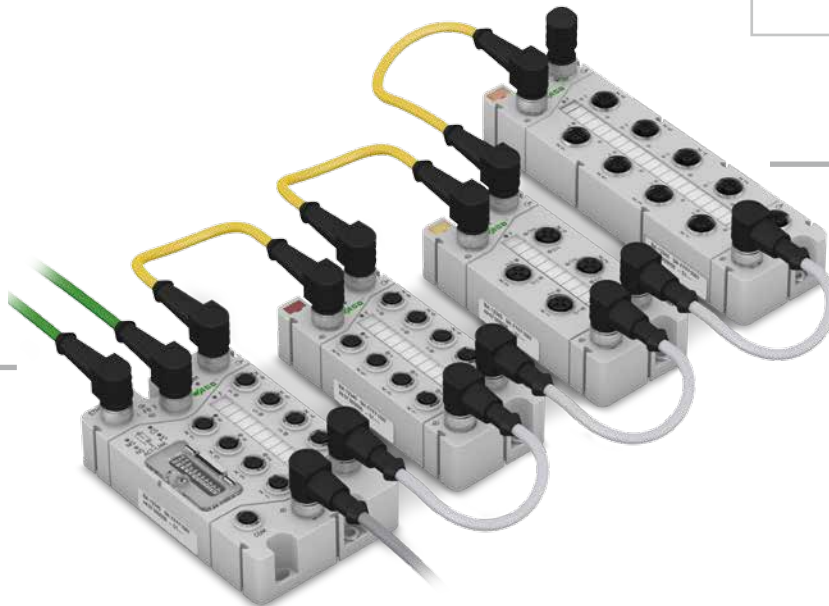
For Cabinet-Free Data Acquisition

Where previously discrete wiring was once required, fieldbuses now communicate between the control and field levels. Depending on the application, cabinet-free automation systems help minimize costs for planning, start-up and maintenance.

In addition to requiring a high degree of protection, a robust design and standardized connection technology, there is an increasing demand for advanced IP67 features that were once reserved only for IP20 systems, including:

- Real-time capable (isochronous data acquisition/output)
- Parameterizable
- Diagnostic capable
- Upgradable

Connect the cabinet directly to the field level without sacrificing functionality – *SPEEDWAY* perfectly tailors machines to meet specific, decentralized needs. Configuration is both easy and flexible, with changes being made safely and quickly (plug & play).





- Fully encapsulated for harsh environmental conditions
- Fieldbus-independent – Support all standard fieldbus protocols and ETHERNET standards
- Real-time capability up to isochronous mode for selected ETHERNET-based fieldbuses
- Exclusive use of standard pluggable connectors
- Flexible mounting options
- ATEX/IEC Ex certificate for Zone 2/22







General Specifications

Operating voltage	24 VDC (-25 % ... +30 %)
Operating temperature	-25 °C ... +60 °C; temperature change 3 K/s
Storage temperature	-40 °C ... +85 °C
Relative humidity (without condensation)	5 ... 95 %
Operating altitude	-1000 ... 2000 m; Air pressure: 1080 ... 795 hPa
Altitude at storage/transport	-1000 ... 3500 m; Air pressure: 1080 ... 660 hPa
Free fall	≤ 1 m per EN 61131-2
Pollution degree	3 per IEC 60664 (IEC 61131)
Protection class	III per IEC 60536 (VDE 0106, Part 1)
Vibration resistance	5g per IEC 60068-2-6
Shock resistance	Short-term: 50g/11 ms/half-sine per IEC 60068-2-27 Long-term: 30g/6 ms/half-sine per IEC 60068-2-29
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-4
Protection type	IP67 (NEMA 6&6P) per DIN 40050 (EN 60529)
Mounting position	any
Housing material	Polyamide (PA), light gray (RAL7035); Makrolon (address switch cover), transparent; Flammability per UL94-V0; halogen, silicon-free; Potting: Polyurethane (PUR), halogen/silicon-free
UV resistance	1,000 h UV continuous light per DIN EN ISO 4892-2B
Maximum contaminant concentration	SO ₂ < 0.5 ppm; H ₂ S < 0.1 ppm
Current carrying capacity (supply connections)	Max. 8 A (U _{IS} : 4 A; U _A : 4 A)

WAGO SPEEDWAY 767

	Function	Description	Item No.	
			Standard	Interference-Free
	Fieldbus Couplers	FC PROFIBUS DP, 8 DI, 24 VDC	767-1101	
		FC PROFINET IO, 8 DI, 24 VDC	767-1201	
		FC ETHERNET, 8 DI, 24 VDC	767-1301	
		FC sercos 8 DI, 24 VDC, high-speed	767-1311	
		FC DeviceNet, 8 DI, 24 VDC	767-1401	
		FC CANopen, 8 DI, 24 VDC	767-1501	
	Digital Input Modules (DI)	8 DI, 24 VDC (8 x M8)	767-3801	
		8 DI, 24 VDC (4 x M12)	767-3802	
		8 DI, 24 VDC, low-side switching (8 x M8)	767-3803	
		8 DI, 24 VDC, low-side switching (4 x M12)	767-3804	
		8 DI, 24 VDC (8 x M12)	767-3805	
		8 DI, 24 VDC, high-speed (4 x M12)	767-3806	
	Digital Output Modules (DO)	8 DO, 24 VDC, 0.5 A (8 x M8)	767-4801	767-4801/000-800
		8 DO, 24 VDC, 0.5 A (4 x M12)	767-4802	767-4802/000-800
		8 DO, 24 VDC, 2.0 A (8 x M8)	767-4803	767-4803/000-800
		8 DO, 24 VDC, 2.0 A (4 x M12)	767-4804	767-4804/000-800
		8 DO, 24 VDC, 0.5 A, low-side switching (8 x M8)	767-4805	
		8 DO, 24 VDC, 0.5 A, low-side switching (4 x M12)	767-4806	
		8 DO, 24 VDC, 0.5 A (8 x M12)	767-4807	767-4807/000-800
		8 DO, 24 VDC, 0.1 A, high-speed (4 x M12)	767-4808	
	Digital Input/Output Modules (DIO)	8 DIO, 24 VDC, 0.5 A (8 x M8)	767-5801	767-5801/000-800
		8 DIO, 24 VDC, 0.5 A (4 x M12)	767-5802	767-5802/000-800
		8 DIO, 24 VDC, 0.5 A (8 x M12)	767-5803	767-5803/000-800
		4 DIO, 24 VDC, 0.2 A, high-speed (4 x M12)	767-5401	
	Analog Input Modules (AI)	4 AI U/I (4 x M12)	767-6401	
		4 AI RTD (4 x M12)	767-6402	
		4 AI TC (4 x M12)	767-6403	
	Analog Output Modules (AO)	4 AO U/I (4 x M12)	767-7401	
	Function and Technology Modules	TTL Incremental Encoder/SSI Encoder (4 x M12)	767-5201	
		HTL Incremental Encoder/Counter (4 x M12)	767-5202	
	Communication Modules	Serial Interface RS-232, RS-422/-485 (4 x M12)	767-5203	
		MOVILINK® Interface (RS-232, RS-485) (4 x M12)	767-5204	
	Supply Modules	Power Divider (1 x M23 + 6 x M12)	767-9101	



Accessories

	Spacer Module, with fixing lugs for cable ties		767-111	
	Protective Caps, for unused sockets	M8	756-8101	
		M12	756-8102	
	Protective Caps, for unused plugs	M12	755-8103	
		M23	755-8104	
	Carrier Rail Adapter	for couplers	767-121	
		for I/O modules	767-122	
			767-125	
	USB Communication Cable	3 m	756-4101/042-030	
	Profile Adapter	for couplers	767-123	
		for I/O modules and power dividers	767-124	
			767-126	



WAGO SPEEDWAY 767

Connection Cables for 767 Series



System Bus Cables, B-Coded

	Description	Item No.
	Socket, straight, 2 ... 20 m	756-1301/060-020 ... 756-1301/060-200
	Plug, straight, 2 ... 20 m	756-1303/060-020 ... 756-1303/060-200
	Socket/plug, straight, 0.2 ... 50 m	756-1305/060-002 ... 756-1305/060-500
	Socket, angled, 2 ... 20 m	756-1302/060-020 ... 756-1302/060-200
	Plug, angled, 2 ... 20 m	756-1304/060-020 ... 756-1304/060-200
	Socket/plug, angled, 0.2 ... 50 m	756-1306/060-002 ... 756-1306/060-500

Power Supply Cables, A-Coded

	Description	Item No.
	Socket, straight, 2 ... 20 m	756-3101/040-020 ... 756-3101/040-200
	Plug, straight, 2 ... 20 m	756-3103/040-020 ... 756-3103/040-200
	Socket/plug, straight, 0.2 ... 20 m	756-3105/040-002 ... 756-3105/040-200
	Socket, angled, 2 ... 20 m	756-3102/040-020 ... 756-3102/040-200
	Plug, angled, 2 ... 20 m	756-3104/040-020 ... 756-3104/040-200
	Socket/plug, angled, 0.2 ... 20 m	756-3106/040-002 ... 756-3106/040-200

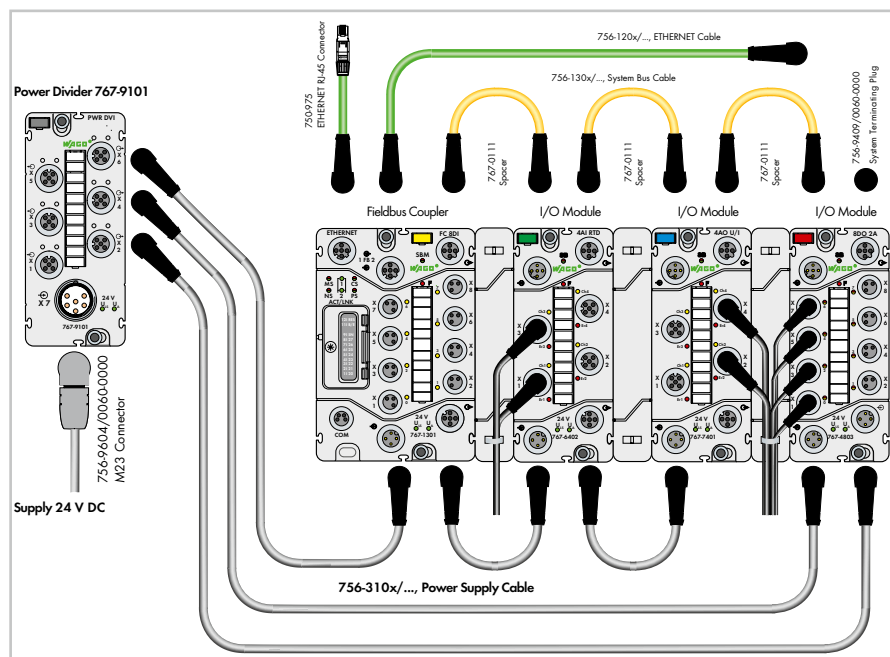
ETHERNET, PROFINET Cables, D-Coded

	Description	Item No.
	Plug, straight, 2 ... 20 m	756-1201/060-020 ... 756-1201/060-200
	Plug/plug, straight, 2 ... 20 m	756-1203/060-020 ... 756-1203/060-200
	Plug, angled, 2 ... 20 m	756-1202/060-020 ... 756-1202/060-200
	Plug/plug, angled, 2 ... 20 m	756-1204/060-020 ... 756-1204/060-200

Power Supply

The WAGO SPEEDWAY system's modular structure allows both individual I/O modules and groups of modules to be supplied (e.g., emergency stop groups). Thus, different power supplies can be used at the same potential to operate each individual module and group of modules. Two supply lines are routed within the supply cables (gray). The logic and sensor supply (U_{IS}) is always electrically isolated from the actuator supply (U_A).

Additional I/O modules can be connected until the highest permissible current load of 4 A for one supply line (U_{IS} and/or U_A) is reached. The power supply must be re-established to connect additional SPEEDWAY Modules. However, using 2 A output modules, power supply will not be transmitted in the event of an increased power demand.



WAGO's SPEEDWAY Power Divider permits U_{IS} and U_A power supply distribution via six M12 connectors. The combination of point-to-point and linear power distribution/distribution routing offers the greatest flexibility to optimize the supply lines for the respective application and to supply power over large distances.

Sensor/Actuator Boxes, IP67 757 Series

	Function	Description	Item No.
	M12 Sensor/Actuator Boxes, with connection cable	4-port, 4-pole, 5 m cable	757-244/000-005
		4-port, 4-pole, 10 m cable	757-244/000-010
		6-port, 4-pole, 5 m cable	757-264/000-005
		6-port, 4-pole, 10 m cable	757-264/000-010
		8-port, 4-pole, 5 m cable	757-284/000-005
		8-port, 4-pole, 10 m cable	757-284/000-010
		8-port, 4-pole, 25 m cable	757-284/000-025
		4-port, 5-pole, 5 m cable	757-245/000-005
		4-port, 5-pole, 10 m cable	757-245/000-010
		6-port, 5-pole, 5 m cable	757-265/000-005
		6-port, 5-pole, 10 m cable	757-265/000-010
		8-port, 5-pole, 5 m cable	757-285/000-005
		8-port, 5-pole, 10 m cable	757-285/000-010
		8-port, 5-pole, 25 m cable	757-285/000-025
	M12 Sensor/Actuator Boxes, with M23 connector	4-port, 4-pole, M23 connector	757-144
		6-port, 4-pole, M23 connector	757-164
		8-port, 4-pole, M23 connector	757-184
		4-port, 5-pole, M23 connector	757-145
		6-port, 5-pole, M23 connector	757-165
		8-port, 5-pole, M23 connector	757-185
		8-port, 5-pole, without LED, M23 connector	757-185/100-000
	M8 Sensor/Actuator Boxes, with connection cable	4-port, 3-pole, 2 m cable	757-443/000-002
		4-port, 3-pole, 5 m cable	757-443/000-005
		4-port, 3-pole, 10 m cable	757-443/000-010
		6-port, 3-pole, 5 m cable	757-463/000-005
		6-port, 3-pole, 10 m cable	757-463/000-010
		8-port, 3-pole, 5 m cable	757-483/000-005
		8-port, 3-pole, 10 m cable	757-483/000-010
		10-port, 3-pole, 5 m cable	757-403/000-005
10-port, 3-pole, 10 m cable	757-403/000-010		
	M8 Sensor/Actuator Boxes, with M16 connector	4-port, 3-pole, M16 connector	757-343
		6-port, 3-pole, M16 connector	757-363
		8-port, 3-pole, M16 connector	757-383
		10-port, 3-pole, M16 connector	757-303
Accessories			
	Connection Cables	M16 socket, straight, 14-pole, 5 ... 15 m	756-3205/140-050 ... 756-3205/140-150
		M16 socket, angled, 14-pole, 5 ... 15 m	756-3206/140-050 ... 756-3206/140-150
		M23 socket, straight, 12-pole, 5 ... 15 m	756-3201/120-050 ... 756-3201/120-150
		M23 socket, straight, 19-pole, 5 ... 15 m	756-3203/190-050 ... 756-3203/190-150
		M23 socket, angled, 12-pole, 5 ... 15 m	756-3202/120-050 ... 756-3202/120-150
		M23 socket, angled, 19-pole, 5 ... 15 m	756-3204/190-050 ... 756-3204/190-150
	Spacer Modules for sensor/actuator boxes	4-port	757-040
		6-port	757-060
		8-port	757-080
		10-port	757-000
	Marker Cards for M12 sensor/actuator boxes, 40 markers/card		757-011

ETHERNET Industrial Switches

852 Series

Industrial Switch, 5 Ports*
Supply voltage: 9 ... 48 VDC
Ports: 5 x 10/100Base-TX (RJ-45)

Dimensions (W x H x L): 50 x 120 x 105 mm



Industrial Switches, 8 Ports*
Supply voltage: 9 ... 48 VDC
Ports: 8 x 10/100Base-TX (RJ-45)
2 x SFP 100Base-FX Fiber
8 x 1000Base-T

Dimensions (W x H x L): 50 x 162 x 120 mm



Industrial Managed Switch, 8 Ports*
Supply voltage: 12 ... 60 VDC
Ports: 8 x 10/100Base-TX (RJ-45)
2 x SFP 1000Base-SX/LX Fiber

Dimensions (W x H x L): 50 x 162 x 120 mm



Designation	Item No.	Designation	Item No.	Designation	Item No.
Industrial Switch, 5 Ports 100Base-TX	852-101	Industrial Switch, 8 Ports 100Base-TX	852-102	Industrial Managed Switch, 8 Ports 100Base-TX,	
		8 Ports 1000Base-T	852-1102	2 Slots 1000Base-SX/LX	852-303
		Industrial Switch, 8 Ports 100Base-TX,			
		2 Slots 100Base-FX	852-103		
		Extended temperature range: -40 °C ... +70 °C	852-103/040-000		

Accessories, 852 Series

DNV Mounting Adapter,

for ETHERNET Switches, stainless
steel

852-9101



SFP Modules, 1,310 nm, 100Base-FX Multi-Mode LC

2 km 852-201/107-002
30 km 852-201/107-030
2 km (Operating temp.: -40 °C ...
+70 °C) 852-201/040-002



SFP Modules, 1000Base, operating temperature:

-40 °C ... +85 °C
1000Base-SX, 0.5 km 852-1200
1000Base-LX, 10 km 852-1210
1000Base-ZX, 80 km 852-1280



Industrial Managed Switch, 8 Ports*
Supply voltage: 12 ... 60 VDC
Ports: 8 x 10/100/1000Base-TX (RJ-45)
4 x SFP 1000Base-SX/LX Fiber

Dimensions (W x H x L): 50 x 162 x 120 mm



Industrial ECO Switches, 5 Ports*
Supply voltage: 18 ... 30 VDC
Ports: 5 (RJ-45)

Dimensions (W x H x L):
23.4 x 73.8 x 109.2 mm



Industrial ECO Switch, 8 Ports*
Supply voltage: 18 ... 30 VDC
Ports: 8 x 10/100Base-TX (RJ-45)
8 x 1000Base-T

Dimensions (W x H x L):
109.2 x 23.4 x 73.8 mm



Designation	Item No.	Designation	Item No.	Designation	Item No.
Industrial Managed Switch, 8 Ports 1000Base-TX, 4 Slots 1000Base-SX/LX	852-1305	Industrial ECO Switch, 5 Ports 100Base-TX	852-111	Industrial ECO Switch, 8 Ports 100Base-TX	852-112
		Industrial ECO Switch, 5 Ports 1000Base-T	852-1111	Industrial ECO Switch, 8 Ports 1000Base-T	852-1112

* Approvals and technical data are available online at www.wago.com.

For technical explanations and abbreviations, see technical section.

Shield Connecting System

790 Series



Direct installation on metal plate (max. 3 mm thick)



Installation on specialty slotted carrier rail



Installation on busbar with insulated mounting feet



Installation on U-shaped copper busbar



790 Series



790 Series



Mounting the shield clamping saddle onto the busbar.

Shield Clamping Saddles

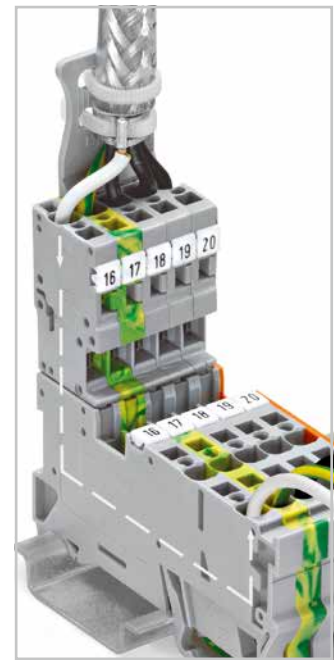
Saddle Width	Cable Diameter	Item No.	Pack. Unit	Saddle Width	Cable Diameter	Item No.	Pack. Unit
11 mm	0 ... 8	790-108	50	12.4 mm	3 ... 8	790-208	50
19 mm	7 ... 16	790-116	50	21.8 mm	6 ... 16	790-216	25
27 mm	6 ... 24	790-124	50	30 mm	6 ... 20	790-220	25
43 mm	22 ... 40	790-140	50				



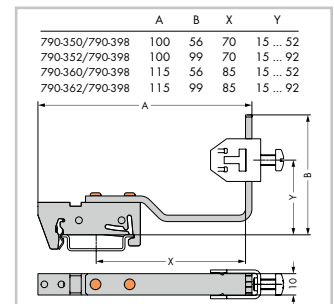
Removing the busbar carrier.

Accessories, 790 Series

	Carrier with grounding foot, 45 mm bar 90° to the rail, copper (10 x 3) mm	790-113	25
	Carrier with grounding foot, bar parallel to the rail, copper (10 x 3) mm, 25 mm	790-112	25
	copper (10 x 3) mm, 45 mm	790-114	25
	Carrier with 2 grounding feet, 125 mm bar parallel to the rail, copper (10 x 3) mm	790-115	25
	Carrier rail, specialty slotted, 1,000 mm long, tin-plated (special lengths upon request)	790-145	1
	Spacer sleeve, for specialty slotted carrier rail, for M5-size screw	790-144	200 (2x100)
	Straight busbar, tin-plated, 1,000 mm copper (10 x 3) mm	210-133	20 (20x1)
	30 mm	790-133	20 (20x1)
	50 mm	790-134	20 (20x1)
	Insulated mounting foot, for busbar with M4 x 8 mm screw	790-100	50 (2x25)
	with (3.5 x 9) mm sheet metal screw	790-101	50 (2x25)
	U-shaped busbar, for 750 Series I/O Modules, copper (10 x 3) mm for 5 I/O	790-190	25 (5x5)
	for 8 I/O	790-191	25 (1x25)
	Busbar carrier, for (10 x 3) mm copper busbars, straight	790-300	10
	angled	790-301	10
	Busbar carrier with T-connector, flexible, for (10 x 3) mm copper busbars from center of DIN-rail from upper-edge of DIN-rail		
	70 mm	15 ... 52 mm	790-350/790-398 12
	70 mm	15 ... 92 mm	790-352/790-398 12
	85 mm	15 ... 52 mm	790-360/790-398 12
	85 mm	15 ... 92 mm	790-362/790-398 12
	T-connector, connects two (10 x 3) mm copper busbars	790-398	10
	Shield termination, includes cable tie for 5 ... 10 mm Ø, 55 mm long	709-350	100 (4x25)
	150 mm long	709-352	100 (4x25)

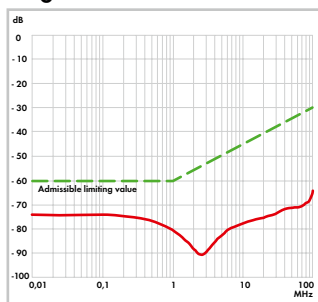


Shield termination



Overview: Dimensions of flexible busbar carriers

Negative Shield Attenuation



WAGO's shield connecting system is highly effective because the clamping unit can be brought very close to the unshielded part of the cable. Additionally, the spring material is part of the clamping saddle, providing a good electrical connection (the system also acts as partial strain relief).

The spring element integrated in the shield clamping saddle compensates for deformation and settling that results from a connected shield.

Please find the entire product range in our full line catalog. For additional information, visit www.wago.com.

EPSITRON® – ADVANCED POWER SUPPLY SYSTEM

EPSITRON® POWER SUPPLIES



ECO Power

EPSITRON® ECO POWER

Single- and three-phase power supplies with a wide input voltage range and 24 V nominal output



COMPACT Power

EPSITRON® COMPACT POWER

Low-profile, single-phase power supplies with a wide input voltage range, as well as nominal output voltages of 5 V, 12 V, 18 V and 24 V



CLASSIC Power

EPSITRON® CLASSIC POWER

Single-phase power supplies with a wide input voltage range and 12 V, 24 V or 48 V nominal output



PRO Power

EPSITRON® PRO POWER

Single- and three-phase power supplies with a wide input voltage range, 12 V, 24 V or 48 V nominal output, PowerBoost, TopBoost and optional LineMonitor

EPSITRON® SYSTEM MODULES



ECBs

EPSITRON® ELECTRONIC CIRCUIT BREAKERS (ECBs)

Configurable, 2-, 4- or 8-channel ECBs feature integrated current and voltage monitoring.



UPS

EPSITRON® UNINTERRUPTIBLE POWER SUPPLIES (UPS)

UPS charger, controller and connected battery modules reliably endure longer power failures and feature integrated battery control technology.



Capacitive Buffer Modules

EPSITRON® CAPACITIVE BUFFER MODULES

Maintenance-free, capacitive buffer modules ensure seamless operation during short voltage fluctuations.



Redundancy Modules

EPSITRON® REDUNDANCY MODULES

Redundancy modules safeguard two power supplies that are parallel-connected, providing system redundancy or additional power.

EPSITRON® Power Supplies

ECO Power, Single- and Three-Phase

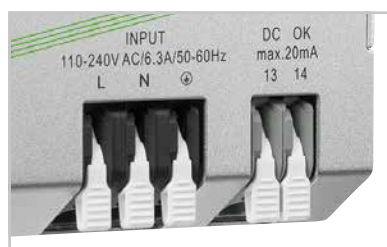
787 Series

	Input Nominal Voltage	Output Nominal Voltage	Output Current	Efficiency (230 VAC, Nominal Load)	Dimensions (W x H x L in mm)*	Item No.
	1 x 100 ... 240 VAC	24 VDC	1.25 A	88 % (typ.)	30 x 99 x 90	787-1702
			2.5 A	89 % (typ.)	40 x 99 x 90	787-1712
			5 A	89 % (typ.)	60 x 99 x 130	787-1722
			10 A	89 % (typ.)	70 x 99 x 165	787-1732
	1 x 110 ... 240 VAC	24 VDC	2.5 A	86 % (typ.)	50 x 92 x 136	787-712
			5 A	86 % (typ.)	75 x 92 x 136	787-722
			10 A	86 % (typ.)	110 x 92 x 136	787-732
			20 A	90 % (typ.)	115 x 144 x 136	787-734
			40 A	90 % (typ.)	170 x 153 x 136	787-736
	3 x (2 x) 400 ... 500 VAC	24 VDC	6.25 A	87 % (typ.)	50 x 92 x 136	787-738
			10 A	89 % (typ.)	65 x 130 x 136	787-740
			20 A	90 % (typ.)	110 x 153 x 136	787-742



Clear Indication

- Green LED indicates output voltage availability
- Red LED indicates an overcurrent or short circuit
- Easy commissioning and maintenance



Fast Wiring

- Lever-actuated terminal strips (2706 or 2716 Series)
- Convenient, tool-free wiring
- Integrated test slot simplifies testing by eliminating conductor removal



Easy Grounding

- Integrated, third negative terminal on the output side**
- Direct connection to the reference ground, which is frequently used in machines and equipment

*Height (H) from upper-edge of DIN-35 rail

**only 787-734 ... -742

EPSITRON® Power Supplies

COMPACT Power, Single-Phase

787 Series

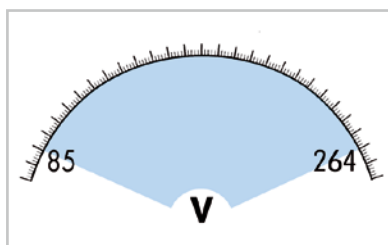
	Input Nominal Voltage	Output Nominal Voltage	Output Current	Efficiency	Dimensions (W x H x L in mm)*	Item No.
	1 x 100 ... 240 VAC	5 VDC	5.5 A at 5 VDC	75 % (typ.)	72 x 55 x 89	787-1020
	1 x 100 ... 240 VAC	12 VDC	2 A at 12 VDC / 0.75 A at 18 VDC	80 % (typ.)	54 x 55 x 89	787-1001
			4 A at 12 VDC	85 % (typ.)	72 x 55 x 89	787-1011
			6.5 A at 12 VDC	87 % (typ.)	90 x 55 x 89	787-1021
	1 x 100 ... 240 VAC	18 VDC	2.5 A at 18 VDC / 2.3 A at 24 VDC; 55 W (max.)	83 % (typ.) at 18 VDC / 2.5 A; 85 % (typ.) at 24 VDC / 2.3 A	72 x 55 x 89	787-1017
	1 x 100 ... 240 VAC	24 VDC	1.3 A at 24 VDC	82 % (typ.)	54 x 55 x 89	787-1002
			2.5 A at 24 VDC	88 % (typ.)	72 x 55 x 89	787-1012
			4 A at 24 VDC	88 % (typ.)	90 x 55 x 89	787-1022

7



Clear Indication

- Status indication via green LED
- Current operating status can be displayed quickly



Supply Tolerance

- Single-phase, wide input voltage range
- High tolerance to voltage fluctuations within a power grid ensures a high level of operational reliability







Overhead Mounting

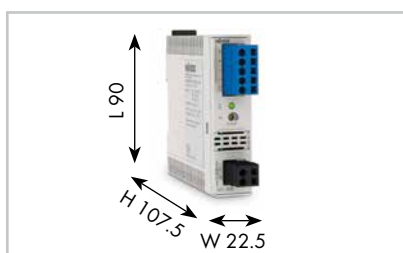
- Any type of mounting position is possible with reduced output power
- Units can even be mounted overhead (e.g., in ceiling-mounted distribution boxes)

EPSITRON® Power Supplies

CLASSIC Power, Single-Phase

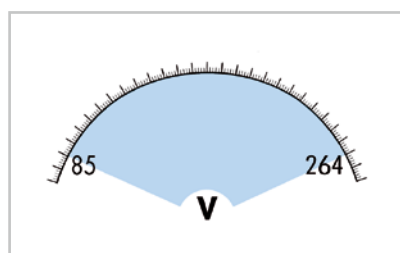
787 Series

	Input Nominal Voltage	Output Nominal Voltage	Output Current	Efficiency	Dimensions (W x H x L in mm)*	Item No.
	1 x 100 ... 240 VAC	12 VDC	2 A	82 % (typ.)	22.5 x 107.5 x 90	787-1601
			4 A	86 % (typ.)	45 x 107.5 x 90	787-1611
			7 A	86 % (typ.)	52 x 119 x 90	787-1621
			15 A	90 % (typ.)	55 x 172 x 127	787-1631
  	1 x 100 ... 240 VAC	24 VDC	1 A	86 % (typ.)	22.5 x 107.5 x 90	787-1602
			2 A	89 % (typ.)	45 x 107.5 x 90	787-1606
			4 A	89 % (typ.)	52 x 119 x 90	787-1616
			5 A	89 % (typ.)	42 x 137.5 x 127	787-1622
			10 A	91 % (typ.)	55 x 172 x 127	787-1632



Slim Design

- Save valuable cabinet space



Universal Supply

- Wide input voltage range
- Can be operated worldwide
- High level of operational reliability



Integrated TopBoost


- Reliably trigger of the secondary-side fusing via miniature circuit breakers (≥ 120 W output power)

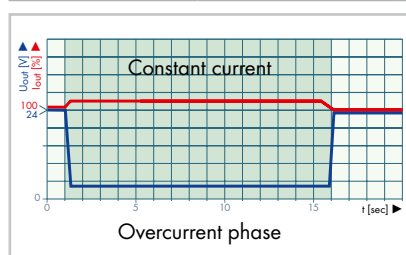
*Height (H) from upper-edge of DIN-35 rail

EPITRON® Power Supplies

CLASSIC Power, Single-, Two- and Three-Phase

787 Series

	Input Nominal Voltage	Output Nominal Voltage	Output Current	Efficiency	Dimensions (W x H x L in mm)*	Item No.
	1 x 100 ... 240 VAC	24 VDC	20 A	92 % (typ.)	95 x 170 x 127	787-1634
			3.8 A LPS / NEC Class 2	87 % (typ.)	52 x 119 x 90	787-1616/000-1000
	1 x 100 ... 240 VAC	48 VDC	2 A	86 % (typ.)	55 x 119 x 90	787-1623
			5 A	92 % (typ.)	55 x 172 x 127	787-1633
			10 A	93 % (typ.)	95 x 170 x 127	787-1635
	2 x 200 ... 500 VAC	24 VDC	5 A	89 % (typ.)	42 x 137 x 127	787-1628
	3 x 400 ... 500 VAC		10 A	90 % (typ.)	55 x 171 x 127	787-1640
			20 A	92 % (typ.)	80 x 180 x 127	787-1642
			40 A	92 % (typ.)	126 x 198 x 127	787-1644



High Load-Carrying Capacity

- Constant current characteristic under overload conditions
- 110 % output current with lowered output voltage – even during a short circuit
- High capacitive loads can be reliably started



Clear and Easy to Connect

- CAGE CLAMP® connection technology – vibration-proof, fast, maintenance-free
- Colored and marked female connectors can be pre-assembled – 100 % protected against mismatching

EPSITRON® Power Supplies

PRO Power, Single- and Two-Phase

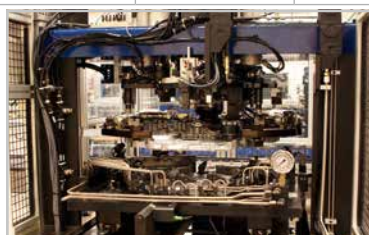
787 Series

	Input Nominal Voltage	Output Nominal Voltage	Output Current	Efficiency	PowerBoost	TopBoost	Dimensions (W x H x L in mm)*	Item No.
	1/2 x 100 ... 240 VAC	12 VDC	6 A at 12 VDC	83 % (typ.)	12 ADC (for 4 s), 9 ADC (for 8 s)	21 ADC (for 25 ms)	40 x 163 x 163	787-819
			10 A at 12 VDC	87.8 % (typ.)	20 ADC (for 4 s), 15 ADC (for 8 s)	60 ADC (for 25 ms), 40 ADC at $U_{IN} < 110$ VAC (for 25 ms)	57 x 163 x 163	787-821
			15 A at 12 VDC	87 % (typ.)	30 ADC (for 4 s), 22.5 ADC (for 8 s)	55 ADC (for 25 ms)	57 x 179 x 163	787-831
	1/2 x 100 ... 240 VAC	24 VDC	3 A at 24 VDC	87.8 % (typ.)	6 ADC (for 4 s), 4.5 ADC (for 8 s)	14 ADC (for 25 ms)	40 x 163 x 163	787-818
			5 A at 24 VDC	87.8 % (typ.)	10 ADC (for 4 s), 7.5 ADC (for 8 s)	21 ADC (for 25 ms)	57 x 163 x 163	787-822
			10 A at 24 VDC	90 % (typ.)	20 ADC (for 4 s), 15 ADC (for 8 s)	60 ADC (for 25 ms)	57 x 179 x 163	787-832
	1/2 x 110 ... 240 VAC		20 A at 24 VDC	91 % (typ.)	30 ADC (for 4 s), 25 ADC (for 8 s)	80 ADC (for 25 ms)	97 x 187 x 171	787-834
	1/2 x 110 ... 240 VAC	48 VDC	5 A at 48 VDC	91 % (typ.)	10 ADC (for 4 s), 7.5 ADC (for 8 s)	30 ADC (for 25 ms)	57 x 179 x 163	787-833
			10 A at 48 VDC	91 % (typ.)	17.5 ADC (for 4 s), 15 ADC (for 8 s)	60 ADC (for 25 ms)	97 x 187 x 171	787-835



TopBoost

- Multiplies the nominal current for up to 50 ms
- Fast and reliable triggering of the secondary-side fusing via miniature circuit breakers or melting fuses in the event of a short circuit or overload
- Fulfills EN 60204-1 grounding requirements in control circuits



PowerBoost

- Provides 200 % of output power for four seconds
- Provides 150 % of output power for up to 16 seconds
- Advantageous during start-up or switching of capacitive loads (e.g., valve clusters, motors)
- Power reserve eliminates expensive oversizing

*Height (H) from upper-edge of DIN-35 rail

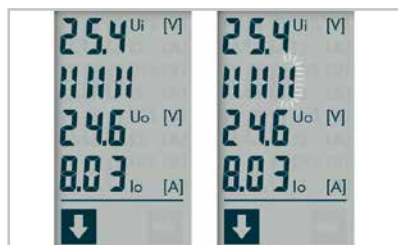
EPSITRON® Power Supplies

PRO Power, Two- and Three-Phase

787 Series

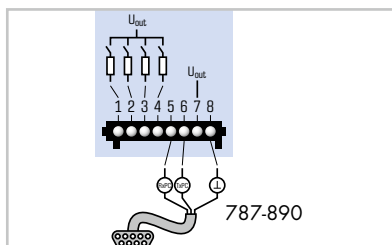
	Input Nominal Voltage	Output Nominal Voltage	Output Current	Efficiency	PowerBoost	TopBoost	Dimensions (W x H x L in mm)*	Item No.
	2/3 x 400 ... 500 VAC	24 VDC	10 A at 24 VDC	91.7 % (typ.)	20 ADC (for 4 s), 15 ADC (for 16 s)	70 ADC (for 50 ms)	57 x 179 x 163	787-840
			20 A at 24 VDC	92.9 % (typ.)	20 ADC (for 4 s), 15 ADC (for 16 s)	80 ADC (for 50 ms)	77 x 179 x 171	787-842
			40 A at 24 VDC	93.6 % (typ.)	60 ADC (for 4 s), 50 ADC (for 16 s)	100 ADC (for 50 ms)	128 x 205 x 171	787-844
	2/3 x 400 ... 500 VAC	48 VDC	10 A at 48 VDC	93 % (typ.)	15 ADC (for 4 s), 12.5 ADC (for 16 s)	55 ADC (for 50 ms)	77 x 179 x 171	787-845
			20 A at 48 VDC	94.4 % (typ.)	30 ADC (for 4 s), 25 ADC (for 16 s)	80 ADC (for 50 ms)	128 x 205 x 171	787-847
	2/3 x 400 ... 500 VAC	24 VDC	10 A at 24 VDC	91.7 % (typ.)	20 ADC (for 4 s), 15 ADC (for 16 s)	70 ADC (for 50 ms)	57 x 179 x 163	787-850*
			20 A at 24 VDC	92.9 % (typ.)	40 ADC (for 4 s), 30 ADC (for 16 s)	80 ADC (for 50 ms)	77 x 179 x 171	787-852*
			40 A at 24 VDC	93.6 % (typ.)	60 ADC (for 4 s), 50 ADC (for 16 s)	100 ADC (for 50 ms)	128 x 205 x 171	787-854*

*Device features LineMonitor capability for parameter setting and monitoring, as well as active signal outputs and serial interface.



Innovative Communication

- LineMonitor with display and function keys
- Variable monitoring, e.g., current, voltage, phase position, operating hours and more
- Output voltage and overload behavior can be parameterized
- Integrated fault memory



Active Signal Contacts

- Four active signal outputs for watchdog functions
- Each unit features a separate collective message for warning/fault
- Features two individually configurable signal outputs
- Free 759-850 Configuration Software can be downloaded at: www.wago.com





RS-232 Serial Interface

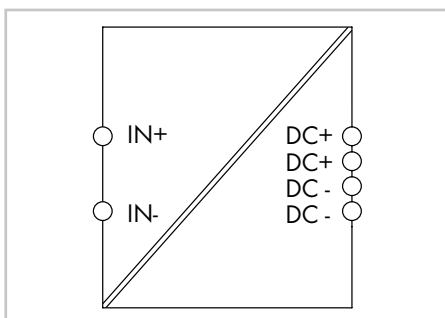
- Front-side integrated interface communicates with a PC or PLC
- Free 759-850 Configuration Software and 759-851 Visualization Software can be downloaded at www.wago.com
- Free function blocks are available for various PLC systems
- Optional serial 787-890 Communication Cable is available

EPSITRON® Power Supplies

DC/DC Converters

787 Series

	Input Nominal Voltage	Output Nominal Voltage	Output Current	Efficiency	Dimensions (W x H x L in mm)*	Item No.
	24 VDC	5 VDC	0.5 A	78 % (typ.)	6 x 96 x 94	787-2801
	24 VDC	10 VDC	0.5 A	86.5 % (typ.)	6 x 96 x 94	787-2802
	48 VDC	24 VDC	0.25 A	87 % (typ.)	6 x 96 x 94	787-2803
	24 VDC	12 VDC	0.5 A	88 % (typ.)	6 x 96 x 94	787-2805
	24 VDC	5/10/12 VDC	0.5 A	78 % (typ.)	6 x 96 x 94	787-2810
	72 VDC	24 VDC	2.5 A at 24 VDC, 1.6 A (max.) in any mounting position	84 % (typ.)	72 x 55 x 89	787-1014/072-000
	110 VDC	24 VDC	2.0 A at 24 VDC	85 % (typ.)	72 x 55 x 89	787-1014



Electrical isolation up to 4.2 kV

*Height (H) from upper-edge of DIN-35 rail

EPSITRON® Power Supplies

Electronic Circuit Breakers (ECBs)



787 Series

	Description	Input Nominal Voltage	Nominal Current (adjustable channel-by-channel via rotary switch)	LED Indication	Dimensions (W x H x L in mm)*	Item No.
	ECB	24 VDC	2 x 2, 3, 4, 6, 8, 10 A	2 x LED (green/red/orange), 2 x signal output	45 x 115.5 x 90	787-1662
	ECB with Active Current Limitation		2 x 0.5, 1, 2, 3, 4, 6 A	2 x LED (green/red/orange), 2 x signal output		787-1662/006-1000
	ECB		2 x 1, 2, 3, 4, 5, 6 A	2 x LED (green/red/orange), 2 x signal output		787-1662/106-000
	ECB with Active Current Limitation		2 x 2, 4, 6, 8, 10, 12 A	2 x LED (green/red/orange), 2 x signal output		787-1662/212-1000
	ECB	24 VDC	4 x 2, 3, 4, 6, 8, 10 A	4 x LED (green/red/orange), 2 x signal output	45 x 115.5 x 90	787-1664
	ECB (Default setting: 2 ADC, switched off, modified group signal)		4 x 2, 3, 4, 6, 8, 10 A	4 x LED (green/red/orange), 2 x signal output		787-1664/000-004
	ECB with Active Current Limitation		4 x 0.5, 1, 2, 3, 4, 6 A	4 x LED (green/red/orange), 2 x signal output		787-1664/006-1000
	ECB		4 x 1, 2, 3, 4, 5, 6 A	4 x LED (green/red/orange), 2 x signal output		787-1664/106-000
	ECB with Active Current Limitation		4 x 2, 4, 6, 8, 10, 12 A	4 x LED (green/red/orange), 2 x signal output		787-1664/212-1000

EPSITRON® Power Supplies

Electronic Circuit Breakers (ECBs)

787 Series

	Description	Input Nominal Voltage	Nominal Current (adjustable channel-by-channel via rotary switch)	LED Indication	Dimensions (W x H x L in mm)*	Item No.
	ECB	24 VDC	8 x 2, 3, 4, 6, 8, 10 A	8 x LED (green/red/orange)	42 x 142.5 x 127	787-1668
	ECB (Default setting: 2 ADC, switched off, modified group signal)		8 x 2, 3, 4, 6, 8, 10 A	8 x LED (green/red/orange)	42 x 142.5 x 127	787-1668/000-004
	ECB with Active Current Limitation		8 x 0.5, 1, 2, 3, 4, 6 A	8 x LED (green/red/orange)	42 x 142.5 x 127	787-1668/006-1000
	ECB		8 x 1, 2, 3, 4, 5, 6 A	8 x LED (green/red/orange)	42 x 142.5 x 127	787-1668/106-0000
	ECB	24 VDC	4 x 1 ... 6 A (adjustable for each channel in 1 A steps)	LCD, 4 x signal output	40 x 163 x 171	787-860
	ECB with Active Current Limitation		4 x 1 ... 8 A (adjustable for each channel in 1 A steps)	LCD, 4 x signal output	40 x 163 x 171	787-861
	ECB		4 x 1 ... 10 A (adjustable for each channel in 1 A steps)	LCD, 4 x signal output	40 x 163 x 171	787-862



Intuitive Communication






- Each output channel has backlit buttons for switching on/off, as well as acknowledgement
- Nominal current can be individually adjusted for each channel
- Integrated, multi-color LEDs indicate the operating status of each channel
- The setting is always visible – even when no voltage is applied
- Transparent cover can be sealed and marked

*Height (H) from upper-edge of DIN-35 rail

EP SITRON® Power Supplies

Electronic Circuit Breakers (ECBs)

787 Series

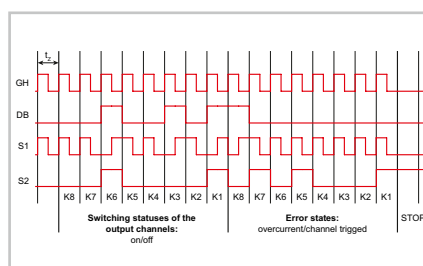
	Description	Input Nominal Voltage	Nominal Current	LED Indication	Dimensions (W x H x L in mm)*	Item No.
	ECB	12 VDC	2 x 2, 3, 4, 6, 8, 10 A (adjustable channel-by-channel via rotary switch)	2 x LED (green/red/orange), 2 x signal output	45 x 115.5 x 90	787-1662/000-100
	ECB		4 x 2, 3, 4, 6, 8, 10 A (adjustable channel-by-channel via rotary switch)	4 x LED (green/red/orange), 2 x signal output	45 x 115.5 x 90	787-1664/000-100
	ECB	48 VDC	2 x 2, 3, 4, 6, 8, 10 A (adjustable channel-by-channel via rotary switch)	2 x LED (green/red/orange), 2 x signal output	45 x 115.5 x 90	787-1662/000-200
	ECB		4 x 2, 3, 4, 6, 8, 10 A (adjustable channel-by-channel via rotary switch)	4 x LED (green/red/orange), 2 x signal output	45 x 115.5 x 90	787-1664/000-200
	ECB		8 x 2, 3, 4, 6, 8, 10 A (adjustable channel-by-channel via rotary switch)	8 x LED (green/red/orange), 2 x signal output	42 x 142.5 x 127	787-1668/000-200

7



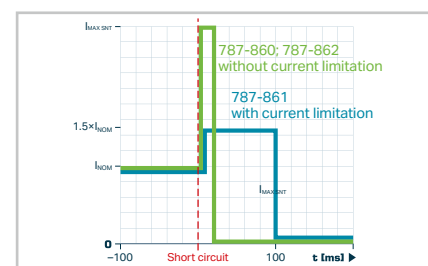
Communication 1.0

- Remote digital input S1 resets all tripped channels
- Digital output S3 transmits a simple group message indicating if one of the channels was triggered by an overcurrent
- Optional isolated signal contact** as a group signal (instead of S2 and S3 digital outputs)



Communication 2.0

- Remote digital input (S1) switches on and off certain channels via pulse sequence
- Digital output (S2) transmits the current status (on/off/tripped/overcurrent) of each individual channel
- Optional transmission of input voltage and output/nominal current value for each channel



Trip Characteristics

- Reliable and precise disconnection in case of an overcurrent or short circuit
- Nominal currents can be set separately for each channel
- Tripping time can be optionally configured in defined increments
- Optional, active short circuit current limitation to 1.5 times the nominal current prevents a voltage drop in other current paths

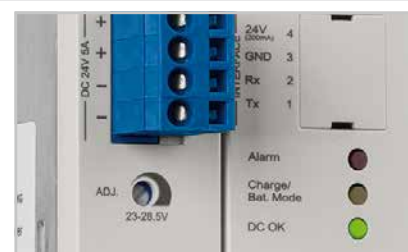
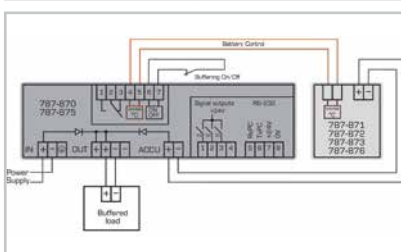
**e.g. 787-166x/000-054 and 787-166x/000-250

EPSITRON® Power Supplies

Uninterruptible Power Supplies (UPS)

787 Series

	Description	Input Nominal Voltage	Output Current	Buffer Time	Dimensions (W x H x L in mm)*	Item No.
	Power Supply, 24 VDC, 1-phase, with integrated UPS charger and controller	100 ... 240 VAC	5 A	0.5 s ... 20 min, IPC mode or constant (adjustable)	60 x 135.5 x 127	787-1675
	UPS Chargers and Controllers	24 VDC	10 A	10 s ... 600 s, IPC mode or constant (adjustable)	40 x 163 x 163	787-870
			20 A	10 s ... 600 s, IPC mode or constant (adjustable)	57 x 163 x 171	787-875
	Lead-Acid AGM Battery Modules	24 VDC	7.5 A (max.)	1.2 Ah	55 x 136.5 x 153	787-876
			20 A (max.)	3.2 Ah	76.2 x 175.5 x 168	787-871
			40 A (max.)	7 Ah	86 x 217.5 x 239	787-872
			40 A (max.)	12 Ah	120.5 x 217.5 x 239	787-873



EPSITRON® Battery Control Technology

- Continuous data exchange between intelligent battery modules (787-87x) and UPS charger/controller prevents the gas generation in the battery
- Automatic detection of 787-87x Battery Modules
- Maximized battery life via temperature-controlled battery management
- Reliable, early warning of decreasing battery life
- Displays current charging status on site (787-870 and 787-875)

Diagnostics, Monitoring, Configuration

- LEDs display operating status, warnings and errors
- Signal outputs can be processed as a digital signal in a PLC
- Potential-free signal contacts
- Parameter setting via on-unit buttons or rotary switch
- Visualization or configuration via RS-232 serial interface
- Communication cables 787-890/-892 for 787-1675
- UPS software 759-870

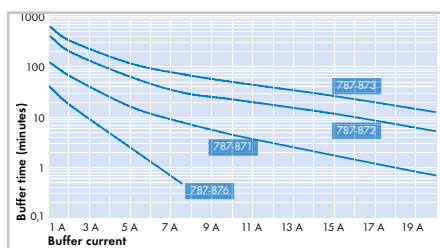
*Height (H) from upper-edge of DIN-35 rail

EP SITRON® Power Supplies

Capacitive Buffer and Redundancy Modules

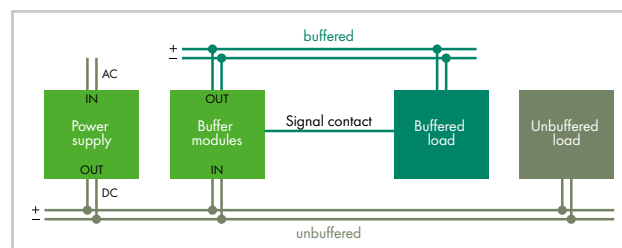
787 Series

	Description	Input Nominal Voltage	Output Nominal Voltage	Output Current	Buffer Time	Efficiency	Dimensions (W x H x L in mm)*	Item No.
	Capacitive Buffer Modules	24 VDC		10 A	0.06 ... 7.2 s (depends on load current and switching threshold)	-	57 x 179 x 163	787-880
				20 A	0.17 ... 16.5 s (depends on load current and switching threshold)	-	57 x 179 x 181	787-881
	Diode Redundancy Module	2 x 24 VDC	24 VDC	20 A, 40 A (max.)	-	97 % (typ.)	40 x 163 x 181	787-885
	Diode Redundancy Module	2 x 48 VDC	48 VDC	20 A, 40 A (max.)	-	96 % (typ.)	40 x 163 x 181	787-886
	Diode Redundancy Module	2 x 24 VDC (9 ... 54 VDC)	24 VDC (1 x 9 ... 54 VDC)	12.5 A (max.) as redundancy module, 25 A (max.) in parallel operation	-	96 % (typ.)	50 x 92 x 130	787-783
	Diode Redundancy Module	2 x 24 VDC (9 ... 54 VDC)	24 VDC (1 x 9 ... 54 VDC)	40 A (max.) as redundancy module, 76 A (max.) in parallel operation	-	97 % (typ.)	83 x 153 x 130	787-785
	MOSFET Redundancy Module	2 x 24 VDC (10 ... 36 VDC)	24 VDC (1 x 10 ... 36 VDC)	20 A, 40 A (max.)	-	99.5 % (typ.)	42 x 139.5 x 127	787-1685



Buffer Time vs. Load Current

Different buffer times/currents can be achieved depending on the battery module selected. The example below shows a 7 A load current provided for approximately 30 seconds by a 787-870 UPS Charger/Controller (10 A) and 787-876 Battery Module.




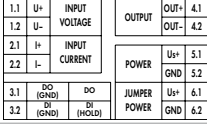

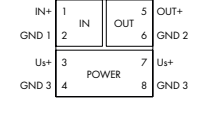

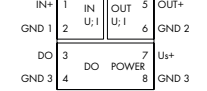

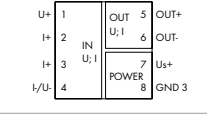

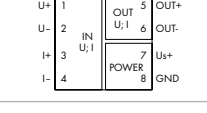

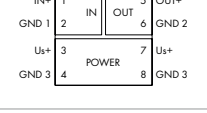

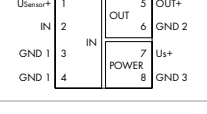

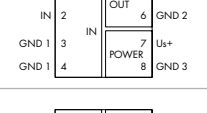

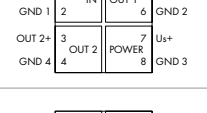

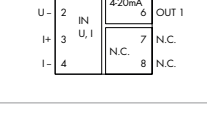

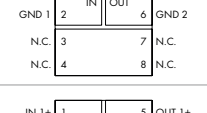

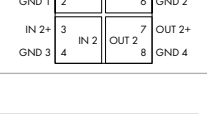
Decoupled Output

- Integrated diode
- Buffered and unbuffered loads can be decoupled
- Multiple buffer modules can be parallel-connected to increase buffer time or load current

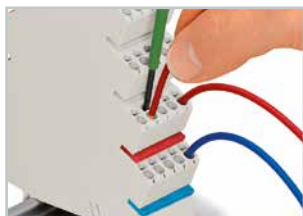
JUMPFLEX® Signal Conditioning System

Isolation Amplifiers

857/2857 Series

	Description	Input Signal			Item No.
		Current	Voltage	Bipolar Signals (I/U)	
	Universal Isolation Amplifier 	0 ... 1 mA 0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA 0 ... 100 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V 0 ... 220 V	±1 mA, ±10 mA, ±20 mA, ±100 mA ±1 V, ±10 V, ±30 V, ±100 V, ±200 V	857-401
	Isolation Amplifier, configurable, with zero/span adjustment 	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		857-400
	Isolation Amplifier, configurable, with digital output (DO) 	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V	±20 mA ±10 V	857-401
	Universal Isolation Amplifier 	0 ... 0.3 mA to 0 ... 100 mA	0 ... 60 mV to 0 ... 200 V	±0.3 mA to ±100 mA ±60 mV to ±200 mV	857-402
	Bipolar Isolation Amplifier 	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V	±10 mA ±20 mA ±5 V ±10 V	857-409
	Isolation Amplifiers, fixed for current or voltage signals 	0 (4) ... 20 mA	0 (2) ... 10 V 0 ... 10 V 0 ... 10 V		857-411 857-412 857-413 857-414 857-415 857-416
	Repeater Power Supply, configurable, with current and voltage output 	0 ... 20 mA 4 ... 20 mA			857-420
	HART Repeater Power Supply 	4 ... 20 mA			857-421
	Signal Splitter, with two configurable current outputs 	0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		857-423
	Loop-Powered Isolation Amplifier 	0 ... 5 mA 0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 1 V 0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V	±5 mA ±10 mA ±20 mA ±1 V, ±5 V ±10 V ±20 V	857-450
	Passive Isolator, 1-channel 	0(4) ... 20 mA			857-451
	Passive Isolator, 2-channel 	2 x 0(4) ... 20 mA			857-452

Conductor termination



Commoning



Ambient operating temperature range:

857 Series: -25 °C ... +70 °C

2857 Series: -40 °C ... +70 °C

Conductor range:

857 Series - solid: 0.08 ... 2.5 mm² / 28 ... 14 AWG

fine-stranded: 0.34 ... 2.5 mm² / 22 ... 14 AWG

2857 Series - solid/fine-stranded: 0.2 ... 2.5 mm² / 24 ... 12 AWG

For jumpers, see page 204.

	Isolation Voltage	Output Signal			Nominal Supply Voltage U_s	Configuration	Specialty Functions
		Current	Voltage	Bipolar Signals (I/U)			
	4 kV	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V	± 10 mA ± 20 mA ± 5 V ± 10 V	24 VDC	DIP switches, interface configuration software/app/display	Digital output (DO), clipping
	2.5 kV	0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		24 VDC	DIP switches	Zero/span adjustment
	2.5 kV	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		24 VDC	DIP switches, interface configuration software/app	Digital output (DO), clipping
	2.5 kV	0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V	± 10 mA ± 20 mA ± 5 V ± 10 V	24 VDC	DIP switches, push/slide switch	Clipping, zero/span adjustment
	2.5 kV	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V	± 10 mA ± 20 mA ± 5 V ± 10 V	24 VDC	DIP switches	Zero/span adjustment
	2.5 kV	0 (4) ... 20 mA	0 (4) ... 20 mA 0 (2) ... 10 V		24 VDC		
		0 ... 20 mA					
		4 ... 20 mA					
			0 ... 10 V 0 ... 10 V				
	2.5 kV	0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		24 VDC	DIP switches	
	2.5 kV	4 ... 20 mA			24 VDC		
	2.5 kV	2 x 0(4) ... 20 mA			24 VDC	DIP switches	
	2.5 kV	4 ... 20 mA			Power via output	DIP switches	Zero/span adjustment
	2.5 kV	0(4) ... 20 mA			Power via input		
	2.5 kV	2 x 0(4) ... 20 mA			Power via input		

Marking



WMB marking system



Micro-WSB marking system


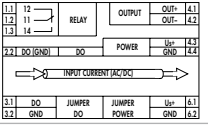

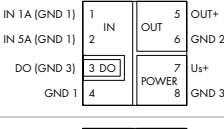
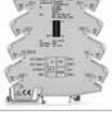
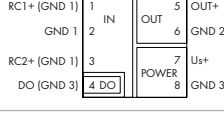


Marking strips


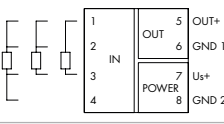

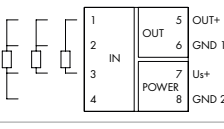

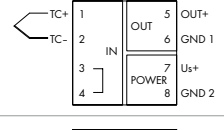

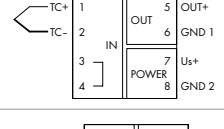

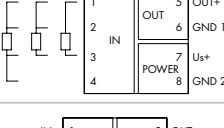

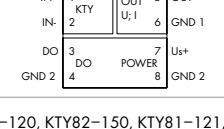
JUMPFLEX® Signal Conditioning System

Current and Temperature Signal Conditioners

857/2857 Series

	Description	Input Signal		Item No.
		Current		
	Through-Hole Current Signal Conditioner		100 A AC/DC	2857-550
	Current Signal Conditioner, with digital output (DO)		1 A AC/DC 5 A AC/DC	857-550
	Current Signal Conditioner for Rogowski Coils, with digital output (DO)		Rogowski coils 500 AAC 2,000 AAC	857-552

Temperature Signal Conditioners

	Description	Input Signal	Sensor Connection	Isolation Voltage	Item No.
	Temperature Signal Conditioner for Pt sensors and resistance sensors		Pt sensors: Pt100, Pt200, Pt500, Pt1000 Resistance sensors: 0 ... 1 kΩ; 0 ... 4.5 kΩ	2.5 kV	857-800
	Temperature Signal Conditioner for Pt sensors and resistance sensors		Pt sensors: Pt100, Pt200, Pt500, Pt1000 Resistance sensors: 0 ... 1 kΩ; 0 ... 4.5 kΩ	2.5 kV	857-801
	Temperature Signal Conditioner for thermocouples		Thermocouples: Type J, K	2.5 kV	857-810
	Temperature Signal Conditioner for thermocouples		Thermocouples: Type J, K, E, R, N, S, T, B, S	2.5 kV	857-811
	Temperature Signal Conditioner for Ni sensors		Ni sensors: Ni100, Ni120, Ni200, Ni500, Ni1000	2.5 kV	857-818
	KTY Signal Conditioner with digital output (DO)		KTY sensors*	2.5 kV	857-820

*KTY81-110, KTY81-120, KTY81-150, KTY82-110, KTY82-120, KTY82-150, KTY81-121, KTY82-121, KTY81-122, KTY82-122, KTY81-210, KTY81-220, KTY82-210, KTY82-220, KTY81-221, KTY82-221, KTY81-222, KTY82-222, KTY81-250, KTY82-250, KTY83-110, KTY83-120, KTY83-150, KTY83-121, KTY83-122, KTY83-151, KTY84-130, KTY84-150, KTY84-151, KTY16, KTY19, ST13, ST20

Configuration Options:



DIP switches



Bluetooth® Adapter 750-921

Push/slide switch
(857 Series only)

	Isolation Voltage	Output Signal			Nominal Supply Voltage U_s	Configuration	Specialty Functions
		Current	Voltage	Bipolar Signals (I/U)			
	4 kV	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V	± 10 mA ± 20 mA ± 5 V ± 10 V	24 VDC	DIP switches, interface configuration software/app/display	Digital output (DO), clipping, relay (1 changeover contact)
	2.5 kV	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		24 VDC	DIP switches, interface configuration software/app	Digital output (DO), clipping
	2.5 kV	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		24 VDC	DIP switches, interface configuration software/app	Digital output (DO), clipping

	Sensor Temperature Range	Output Signal			Nominal Supply Voltage U_s	Configuration	Specialty Functions
		Current	Voltage				
	-200 °C ... +850 °C	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		24 VDC	DIP switches	Clipping
	-200 °C ... +850 °C	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		24 VDC	DIP switches, interface configuration software/app	Clipping
	Type J: -150 °C ... +1,200 °C Type K: -150 °C ... +1,350 °C	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		24 VDC	DIP switches	Clipping
	Type J: -150 °C ... +1,200 °C Type K: -150 °C ... +1,350 °C	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		24 VDC	DIP switches, interface configuration software/app	Clipping
		0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		24 VDC	DIP switches	Clipping
		0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V		24 VDC	DIP switches	Digital output (DO), clipping

Ambient operating temperature range:

857 Series: -25 °C ... +70 °C

2857 Series: -40 °C ... +70 °C



2857-900 Configuration Display
(2857 Series only)



JUMPFLEX®-ToGo Smartphone App


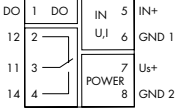

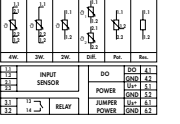

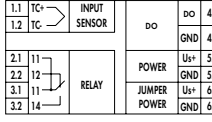


Interface Configuration Software with
WAGO USB Communication cable
750-923

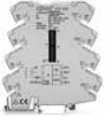
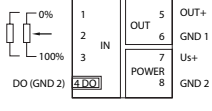

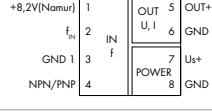

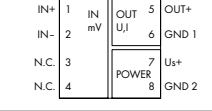
JUMPFLEX® Signal Conditioning System

Threshold Value Switches

857/2857 Series


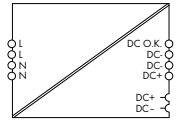

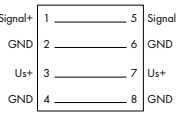



	Description		Input Signal			Item No.
			Current	Voltage	Bipolar Signals (I/U)	
	Threshold Value Switch with digital output (DO), analog input and changeover relay output		0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V, 1 ... 5 V, 0 ... 10 V, 2 ... 10 V 0 ... 15 V, 0 ... 30 V	±10 mA ±20 mA ±5 V ±10 V	857-531
	RTD Threshold Value Switch			0 ... 100 kΩ, Pt100, Pt200, Pt500, Pt1000, Pt5000, Pt10,000, Pt10 ... 20,000		2857-533
	Thermocouple Threshold Value Switch			Type J, K, E, N, R, S, T, B, C		2857-534

Signal Conditioners with Specialty Functions

	Description		Input Signal	Item No.
	Potentiometer Signal Conditioner with digital output (DO)		Potentiometers: 0 ... 100 kΩ Resistors: 10 ... 100 kΩ	857-809
	Frequency Signal Conditioner		Frequency signals, NAMUR, NPN or PNP sensors: 0.1 Hz ... 120 kHz	857-500
	Millivolt Signal Conditioner with ranges -100 mV ... +100 mV and 0 mV ... 1000 mV		0 mV ... 200 mV to 0 mV ... 1000 mV, ±100 mV	857-819

Ambient operating temperature for all devices: -25 °C ... +70 °C

Accessories

	Description		Item No.
	Switched-Mode Power Supply in 2857 Series housing		787-2852
	Supply and Through Module		857-979
	Configuration Display	Easy mounting on 2857 Series modules	2857-900
	Push-In Type Jumper Bars, insulated, 18 A, light gray	○ 2-way ○ 3-way ⋮ ○ 10-way ● yellow ● red ● blue	859-402 859-403 ⋮ 859-410 .../000-029 .../000-005 .../000-006
	Comb-Style Jumper Bar for clamping unit	○ 2-way	281-482





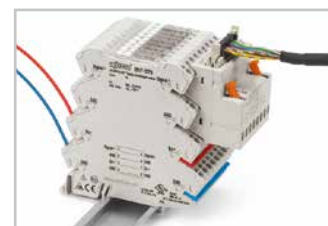
Application example for 281-482 Comb-Style Jumper Bar

	Isolation Voltage	Output Signal		Nominal Supply Voltage U_s	Configuration	Specialty Functions
		Relay (1 Changeover Contact)	Relay (1 Make Contact)			
	2.5 kV	250 VAC 6 A		24 VDC	DIP switches, push/slide switch, interface configuration software/app	Digital output (DO)
	4 kV		250 VAC 6 A	24 VDC	DIP switches, interface configuration software/app/display	Digital output (DO)
	4 kV	250 VAC 6 A		24 VDC	DIP switches, interface configuration software/app/display	Digital output (DO)

	Isolation Voltage	Output Signal		Nominal Supply Voltage U_s	Configuration	
		Current	Voltage			
	2.5 kV	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V	24 VDC	DIP switches, push/slide switch, interface configuration software/app	Clipping
	2.5 kV	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V	24 VDC	DIP switches, interface configuration software/app	Clipping
	2.5 kV	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V	24 VDC	DIP switches, interface configuration software/app	Clipping

Accessories

	Description		Item No.
	Interface Adapter	with 16-pole ribbon cable connector per DIN 41651, for signal conditioners	857-980
	Ribbon Cable*	16-pole, free end, 2 m long	706-100/1602-200
	Bluetooth® Adapter		750-921
	WAGO USB Communication Cable , connection between PC and coupler/controller (suitable for JUMPFLEX®)	2.5 m	750-923
		5 m	750-923/000-001



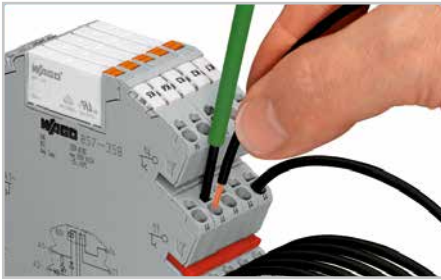
Application example for 857-980 Interface Adapter and 706-100/1602-200 Ribbon Cable

*Additional cables upon request

Relay Modules

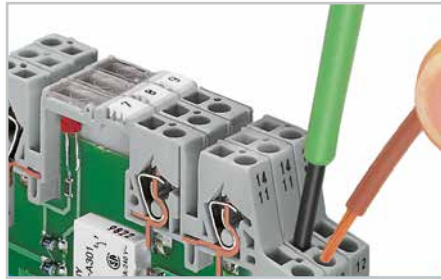
- System Overview and Installation -

857 Series Relay Sockets



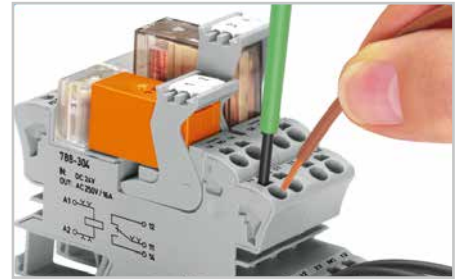
Inserting a conductor via operating tool.

859 Series Rail-Mounted Terminal Blocks with Relay and Optocoupler



Inserting a conductor via operating tool.

788 Series Sockets with a Miniature Switching Relay



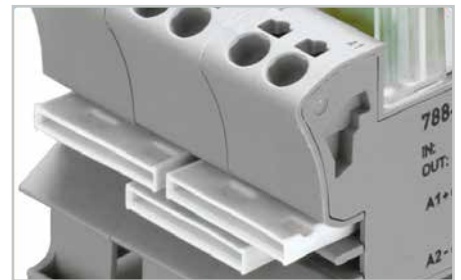
Inserting a conductor via operating tool.



Easy commoning via adjacent jumpers.



Easy commoning via adjacent jumpers.



Easy commoning via adjacent jumpers.



Marking via WMB Multi Marking System.



Marking via Miniature WSB Quick Marking System.



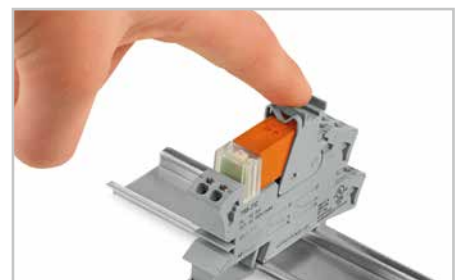
Marking via WMB Multi Marking System and group marker carriers.



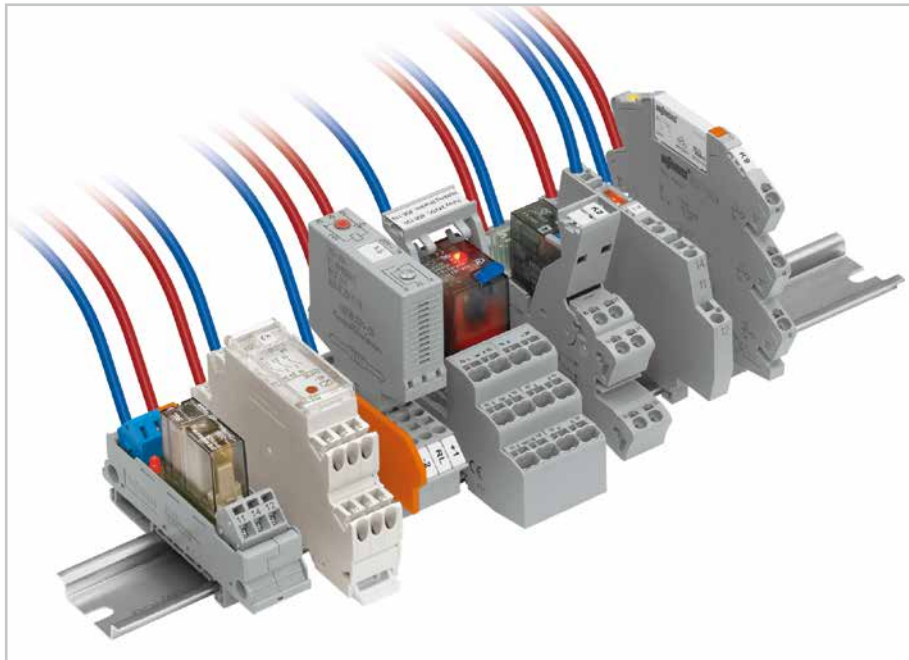
Removing a relay via ejector.



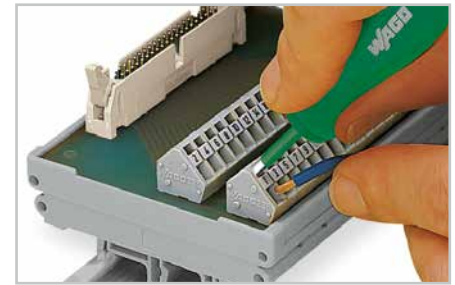
LED status indication



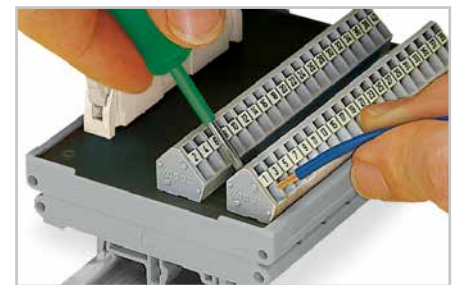
Relay socket with ejector



288 Series DIN-Rail-Mount Relay Modules

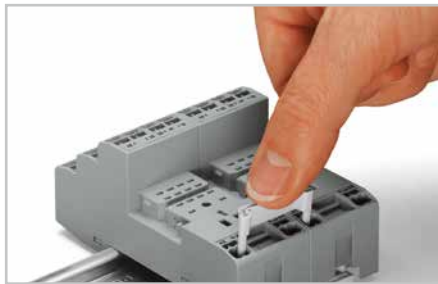


"Front-entry" conductor termination



"Side-entry" conductor termination

858 Series Sockets with an Industrial Relay



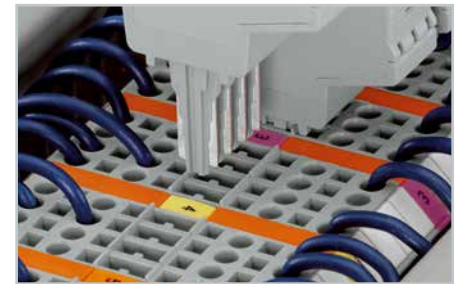
Commoning by simply pushing an adjacent jumper into conductor entry holes.

789 Series Relay Modules in a DIN-Rail-Mount Enclosure



Inserting a conductor via operating tool.

286/786 Series Pluggable Function Modules for Carrier Terminal Blocks



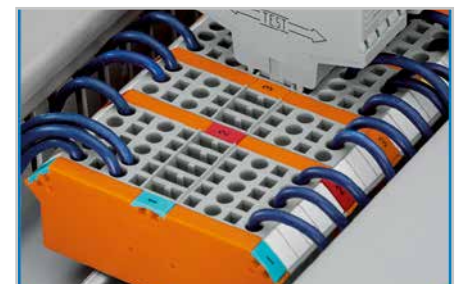
Coding ensures correct polarity.



Removing jumper via operating tool.



Easy commoning via adjacent jumpers.



Marking via WMB Multi Marking System.



Inserting/ejecting a relay.


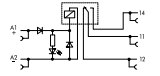
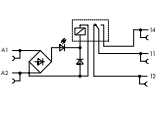

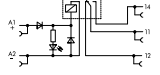
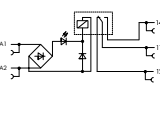

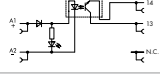
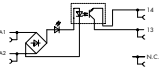
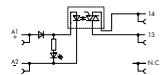

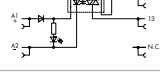
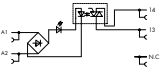
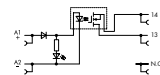

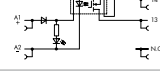
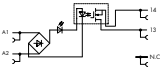
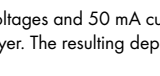


Function testing via touch-proof test slots.

Relay Modules

Miniature Switching and Solid-State Relay Sockets

857 Series

	Description	Input Nominal Voltage U_N	Max. Switching Voltage	Limiting Continuous Current	Item No.
	Relay modules with 1 changeover contact	 12 VDC 24 VDC 48 VDC 60 VDC	250 VAC	6 A	857-303 857-304 857-305 857-306
		 AC/DC 24 V 115 V 230 V 24 ... 230 V	250 VAC	6 A	857-354 857-357 857-358 857-359
	Relay modules with 1 changeover contact and gold contacts	 24 VDC	250 VAC*	6 A*	857-314
		 AC/DC 24 V 115 V 230 V 24 ... 230 V	250 VAC*	6 A*	857-364 857-367 857-368 857-369
	Solid-state relay modules	 24 VDC	0 ... 48 VDC	100 mA	857-704
		 115 VAC/DC	0 ... 48 VDC	100 mA	857-707
		 230 VAC/DC	0 ... 48 VDC	100 mA	857-708
	Solid-state relay modules	 24 VDC	24 ... 240 VAC	1 A	857-714
		 115 VAC/DC	24 ... 240 VAC	1 A	857-717
		 230 VAC/DC	24 ... 240 VAC	1 A	857-718
	Solid-state relay modules	 24 VDC	0 ... 24 VDC	2 A	857-724
		 115 VAC/DC	0 ... 24 VDC	2 A	857-727
		 230 VAC/DC	0 ... 24 VDC	2 A	857-728

*To prevent damaging the gold layer, 30 VDC switching voltages and 50 mA currents shall not be exceeded.
Higher switching power eventually evaporates the gold layer. The resulting deposits in the housing may reduce the service life.

Conductor range (857 Series): 0.34 ... 2.5 mm² / 22 ... 14 AWG
Connection technology (857 Series): Push-in CAGE CLAMP® (see page 14)


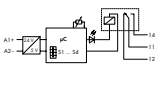

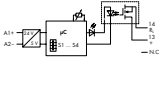

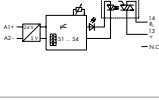

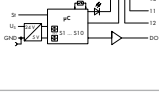

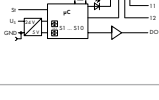
Marking using WMB Multi markers

For jumpers, see page 213.


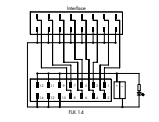

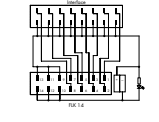

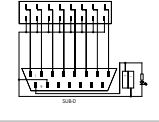
Relay Modules

Multifunction Timer Relay Modules

857 Series


	Description		Input Nominal Voltage U_N	Output Nominal Voltage	Limiting Continuous Current	Item No.
	Timer relay module with 1 changeover contact , 4 functions, 4 time ranges		16.8 ... 31.2 VDC	250 VAC	6 A	857-604
	Solid-state relay module with 1 make contact , 4 functions, 4 time ranges		20.4 ... 31.2 VDC	0 ... 24 VDC	2 A	857-624
	Solid-state relay module with 1 make contact , 4 functions, 4 time ranges		20.4 ... 31.2 VDC	24 ... 230 VAC	1 A	857-634
	Timer relay module with 1 changeover contact , 14 functions, 8 time ranges		16.8 ... 31.2 VDC	250 VAC	6 A	857-640
	Timer relay module with 1 changeover contact , 7 functions, 2 x 8 time ranges		16.8 ... 31.2 VDC	250 VAC	6 A	857-642

8-Channel Interface Adapter for System Wiring

	Description		Nominal Voltage	Current Carrying Capacity per Channel	Limiting Continuous Current	Item No.
	8-channel adapter , with 14-pole interface cable connector, high-side switching input**		24 VDC	1 A	2.5 A	857-981
	8-channel adapter , with 14-pole interface cable connector, high-side switching output***		24 VDC	1 A	2.5 A	857-982
	8-channel adapter , with D-sub male connector, with 15-pole interface cable connector, high-side switching input**		24 VDC	1 A	2.5 A	857-986

**For use on the 857 Series Relay Module's coil side

***For use on the 857 Series Relay Module's contact side

	Assignment of I/O-Modules to Interface Adapters
	750-1500 (16 DO) compatible with 857-981 (DO)
	750-1502 (8 DO / 8 DI) compatible with 857-981 (DO) and 857-982 (DI)


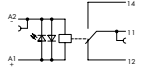

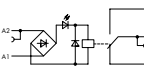

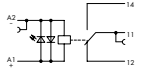

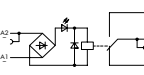

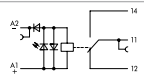

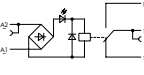

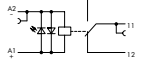

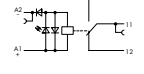


Application example

Relay Modules

Rail-Mounted Terminal Blocks with a Miniature Switching Relay

859 Series

	Description		Input Nominal Voltage U_N	Max. Switching Voltage	Limiting Continuous Current	Item No.
	Relay modules with 1 changeover contact		5 VDC 12 VDC 24 VDC 48 VDC 60 VDC	250 VAC	5 A	859-302 859-303 859-304 859-305 859-306
	Relay modules with 1 changeover contact		12 VAC/DC 24 VAC/DC 48 VAC/DC 115 VAC/DC 230 VAC/DC	250 VAC	5 A	859-353 859-354 859-355 859-357 859-358
	Relay module with 1 changeover contact and gold contacts		24 VDC	250 VAC*	5 A*	859-314
	Relay modules with 1 changeover contact , gold contacts and extended input voltage/temperature range		24 VDC 36 VDC 48 VDC 115 VDC	250 VAC*	3 A*	859-392 859-386 859-384 859-317
	Relay module with 1 changeover contact and gold contacts		230 VAC	250 VAC*	5 A*	859-359
	Relay module with 1 changeover contact and gold contacts		115 VAC	250 VAC*	5 A*	859-360
	Relay module with 1 changeover contact and gold contacts		250 VAC*	250 VAC*	5 A*	859-318
	Relay module with 1 changeover contact		115 VAC	250 VAC	5 A	859-367
	Relay module with 1 changeover contact and defined turn-on/off threshold		230 VAC	250 VAC	5 A	859-368
	Relay module with 1 changeover contact and extended input voltage/temperature range		24 VDC	250 VAC	3 A	859-390
	Relay module with 1 changeover contact and extended input voltage/temperature range		110 VDC	250 VAC	3 A	859-391
	Relay modules with 1 changeover contact and extended input voltage/temperature range		24 VDC 36 VDC 48 VDC 72 VDC 110 VDC	250 VAC	3 A	859-398 859-394 859-397 859-393 859-399

*To prevent damaging the gold layer, 30 VDC switching voltages and 50 mA currents shall not be exceeded. Higher switching power eventually evaporates the gold layer. The resulting deposits in the housing may reduce the service life.

Conductor range (859 Series): 0.08 ... 2.5 mm² / 28 ... 14 AWG
Connection technology (859 Series): CAGE CLAMP® (see page 14)

Marking via Miniature WSB Quick Marking System

For jumpers, see page 204.


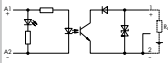

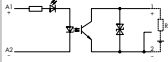

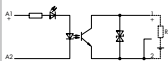
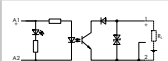

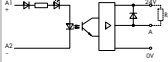

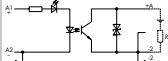
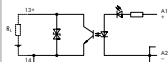
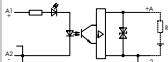

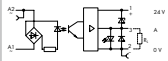

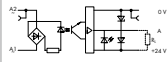

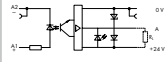



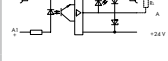


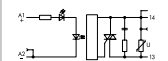
Note:

For rail-mounted terminal blocks with overvoltage protection (792 Series), see Full Line Catalog.


Optocoupler Modules

Rail-Mounted Terminal Blocks with an Optocoupler

859 Series

	Description		Input Nominal Voltage U_N	Output Nominal Voltage	Limiting Continuous Current	Item No.
	Optocoupler module with an extended output voltage/temperature range, for railway applications		5 VDC	3 ... 60 VDC	100 mA	859-793
	Optocoupler modules with an extended output voltage/temperature range, for railway applications		24 VDC 24 VDC	7 ... 60 VDC 9 ... 60 VDC	100 mA 100 mA	859-791 859-794
	Optocoupler modules		24 VDC	3 ... 30 VDC	100 mA	859-796
			5 VDC	3 ... 30 VDC	100 mA	859-795
	Power optocoupler module, low-side switching		24 VDC	10 ... 30 VDC	3 A	859-720
	Power optocoupler module		24 VDC	3 ... 30 VDC	3 A	859-730
	Power optocoupler module		24 VDC	3 ... 30 VDC	3 A	859-740
	Power optocoupler module		12 ... 48 VDC	3 ... 53 VDC	4 A	859-744
	Optocoupler module, high-side switching, increased input frequency up to 100 Hz, input voltage up to 270 VAC		230 VAC	20 ... 30 VDC	500 mA	859-772
	Optocoupler modules, low-side switching		24 VDC	20 ... 30 VDC	500 mA	859-712
			5 VDC	20 ... 30 VDC	500 mA	859-702
			24 VDC	20 ... 30 VDC	500 mA	859-708
			24 VDC	4 ... 6.25 VDC	500 mA	859-706
	Optocoupler modules, high-side switching		5 VDC	20 ... 30 VDC	500 mA	859-752
			24 VDC	20 ... 30 VDC	500 mA	859-758
			24 VDC	4 ... 6.25 VDC	500 mA	859-756
	Optocoupler module		5 VDC	24 ... 260 VAC	500 mA	859-902


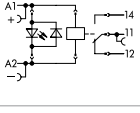
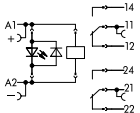

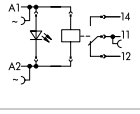
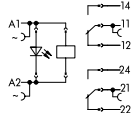

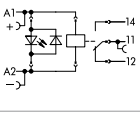
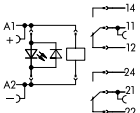

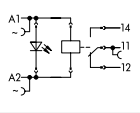
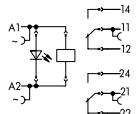

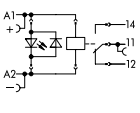

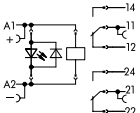

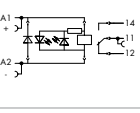

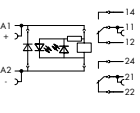
Accessories

	Description	Item No.
	End and intermediate plate, 1 mm thick, gray	859-525

Relay Modules

Sockets with a Miniature Switching Relay

788 Series

	Description		Input Nominal Voltage U_N	Max. Switching Voltage	Limiting Continuous Current	Item No.
	Relay module with 1 changeover contact and status indication (15 mm high relay)		12 VDC 24 VDC 48 VDC 60 VDC 110 VDC	250 VAC	16 A	788-303 788-304 788-305 788-306 788-307
	Relay module with 2 changeover contacts and status indication (15 mm high relay)		12 VDC 24 VDC 48 VDC 60 VDC 110 VDC	250 VAC	2 x 8 A	788-311 788-312 788-313 788-314 788-315
	Relay module with 1 changeover contact and status indication (15 mm high relay)		24 VAC 115 VAC 230 VAC	250 VAC	16 A	788-506 788-507 788-508
	Relay module with 2 changeover contacts and status indication (15 mm high relay)		24 VAC 115 VAC 230 VAC	250 VAC	2 x 8 A	788-512 788-515 788-516
	Relay module with 1 changeover contact , gold contacts and status indication (15 mm high relay)		24 VDC	250 VAC*	16 A*	788-404
	Relay module with 2 changeover contacts , gold contacts and status indication (15 mm high relay)		24 VDC	250 VAC*	2 x 8 A*	788-412
	Relay module with 1 changeover contact , gold contacts and status indication (15 mm high relay)		115 VAC 230 VAC	250 VAC*	16 A*	788-607 788-608
	Relay module with 2 changeover contacts , gold contacts and status indication (15 mm high relay)		115 VAC 230 VAC	250 VAC*	2 x 8 A*	788-615 788-616
	Relay module with 1 changeover contact and status indication (15 mm high relay)		24 VDC	250 VAC	16 A	788-354
	Safety relay module SR2M with 2 changeover contacts , force-guided contacts and status indication		24 VDC	250 VAC	6 A	788-384
	Relay module with 1 changeover contact , manual operation and status indication (25 mm high relay)		24 VDC	250 VAC	16 A	788-341
	Relay module with 2 changeover contacts , manual operation and status indication (25 mm high relay)		24 VDC	250 VAC	2 x 8 A	788-346


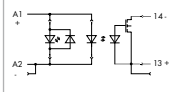

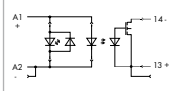

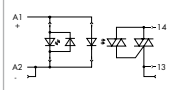

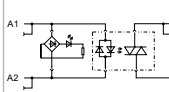
*To prevent damaging the gold layer, 30 VDC switching voltages and 50 mA currents shall not be exceeded.
Higher switching power eventually evaporates the gold layer. The resulting deposits in the housing may reduce the service life.

Conductor range (788 Series): 0.34 ... 2.5 mm² / 22 ... 14 AWG
Connection technology (788 Series): Push-in CAGE CLAMP® (see page 14)
Marking via WMB Multi Marking System and marking strips







Solid-State Relay Modules

Sockets with a Solid-State Relay

788 Series

	Description		Input Nominal Voltage U_N	Output Nominal Voltage	Limiting Continuous Current	Item No.
	Solid-state relay module		24 VDC	0 ... 24 VDC	3.5 A	788-700
	Solid-state relay module		24 VDC	0 ... 24 VDC	5 A	788-701
	Solid-state relay module		24 VDC	24 ... 240 VAC	1 A	788-720
	Solid-state relay module		24 VAC/DC	12 ... 275 VAC	4 A	788-721


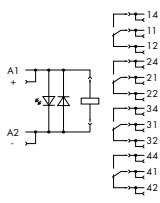

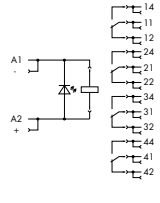

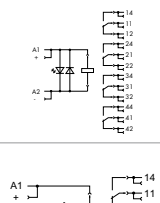

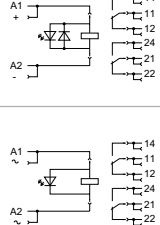
Accessories

	Description		Input Nominal Voltage U_N	Max. Switching Voltage	Limiting Continuous Current	Item No.
	Sockets for miniature switching relays	1 changeover contact, 15 mm high 2 changeover contacts, 15 mm high 1 changeover contact, 25 mm high 2 changeover contacts, 25 mm high	Depending on relay, max. 250 VAC	250 VAC	16 A / 2 x 8 A	788-100 788-102 788-101 788-103
	Status indicators	24 VDC (12 ... 24 V)				788-120
		48 VDC (48 ... 60 V)				788-121
		110 VDC				788-122
		24 VAC				788-123
		115 VAC				788-124
	Suppressor module for relay socket	Max. operating voltage: 230 VAC, 50 ... 60 Hz				788-148
	Pluggable miniature switching relays (15 mm high relay)	1 changeover contact	12 VDC 24 VDC 48 VDC 60 VDC 110 VDC 24 VAC 115 VAC 230 VAC	250 VAC	16 A	788-150 788-154 788-158 788-162 788-166 788-170 788-174 788-178
		2 changeover contacts	12 VDC 24 VDC 48 VDC 60 VDC 110 VDC 24 VAC 115 VAC 230 VAC	250 VAC	2 x 8 A	788-152 788-156 788-160 788-164 788-168 788-172 788-176 788-180
	Push-in type jumper bars, $I_{max.}$ 18 A	2-way 3-way 4-way 6-way 8-way				788-113 788-114 788-115 788-116 788-117
	Operating tool with a partially insulated shaft	Type 2, (3.5 x 0.5) mm blade				210-720

Relay Modules





Sockets with an Industrial Relay

858 Series

	Description		Input Nominal Voltage U_N	Max. Switching Voltage	Limiting Continuous Current	Item No.
	Relay module with 4 changeover contacts		24 VDC	250 VAC	4 x 5 A	858-304
	Relay module with 4 changeover contacts and gold contacts		24 VDC	250 VAC*	4 x 5 A*	858-314
	Relay modules with 4 changeover contacts		115 VAC 230 VAC	250 VAC	4 x 5 A	858-507 858-508
	Relay modules with 4 changeover contacts and gold contacts		115 VAC 230 VAC	250 VAC*	4 x 5 A*	858-517 858-518
	Relay modules with 4 changeover contacts and extended input voltage/temperature range, with standard and gold contacts		24 VDC	250 VAC	4 x 5 A	858-354
			24 VDC	250 VAC*	4 x 5 A*	858-355
	Relay modules with 2 changeover contacts		24 VDC	250 VAC	2 x 12 A	858-324
			230 VAC			858-528

*To prevent damaging the gold layer, 30 VDC switching voltages and 50 mA currents shall not be exceeded. Higher switching power eventually evaporates the gold layer. The resulting deposits in the housing may reduce the service life.

Accessories

	Description		Input Nominal Voltage U_N	Max. Switching Voltage	Limiting Continuous Current	Item No.
	Sockets for miniature switching relays	2 and 4 changeover contacts	Depending on relay, max. 250 VAC	250 VAC	4 x 6 A (4 changeover contacts); 2 x 12 A (2 changeover contacts)	858-100
	Pluggable industrial relays	4 changeover contacts	24 VDC 230 VAC 24 VAC	250 VAC	5 A	858-150 858-151 858-154
	Pluggable industrial relays with gold contacts	2 changeover contacts	12 VDC 230 VAC	250 VAC*	5 A*	858-152 858-153
	Push-in type jumper bar, I_N 1 A	Commoning one potential on both control and load side				858-402
	Mounting bracket for industrial relays	(33.5 ... 35.5 mm high)				858-110


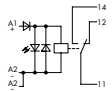
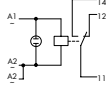
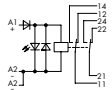
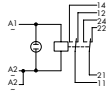

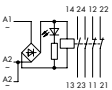

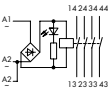

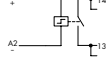
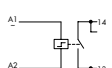


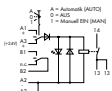

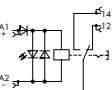
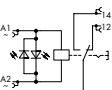
Conductor range (858 Series): 2 x 0.34 ... 2 x 1.5 mm² / 22 ... 16 AWG
Connection technology (858 Series): Push-in CAGE CLAMP® (see page 14)

Marking via WMB Multi Marking System and marking strips

Relay Modules

Relay Modules in a DIN-Rail-Mount Enclosure

789 Series


	Description	Input Nominal Voltage U_N	Max. Switching Voltage	Limiting Continuous Current	Item No.	
	Relay module with 1 changeover contact		24 VDC	250 VAC	12 A	789-304
	Relay module with 1 changeover contact		230 VAC	250 VAC	12 A	789-508
	Relay module with 2 changeover contacts		24 VDC	250 VAC	8 A	789-312
	Relay modules with 2 changeover contacts		24 VAC/DC 230 VAC	250 VAC	8 A	789-512 789-516
	Relay modules with 2 break contacts and 2 make contacts		12 VAC/DC 24 VAC/DC	250 VAC	4 AAC	789-535 789-536
	Relay modules with 4 make contacts		12 VAC/DC 24 VAC/DC	250 VAC	4 AAC	789-551 789-552
	Latching relay module with 1 make contact		24 VDC	250 VAC	16 A	789-571
	Latching relay module with 1 make contact		230 VAC	250 VAC	16 A	789-570
	Relay modules with 1 make contact and Manual/OFF/Auto switch		24 VDC	250 VAC	16 A	789-323
	Relay modules with 1 make contact and Manual/OFF/Auto switch, with control contact		24 VDC	250 VAC	16 A	789-325
	Relay module with 1 changeover contact and manual operation		24 VDC	250 VAC	12 A	789-1341
	Relay module with 1 changeover contact and manual operation		230 VAC	250 VAC	12 A	789-1544

Conductor range (789 Series): 0.08 ... 2.5 mm² / 28 ... 14 AWG

Connection technology (789 Series): CAGE CLAMP® (see page 14)

Marking via Miniature WSB Quick Marking System


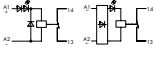
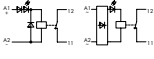

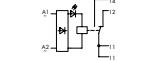

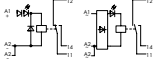

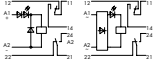

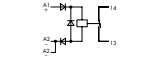

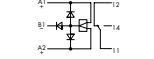
Jumper for 789 Series

	Description	Item No.
	Push-in type jumper bar, I_N 16 A, 12-way, to be cut to the required length	789-112


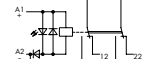

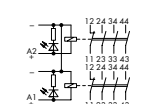

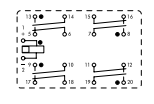
Relay Modules

Mounting Carriers with a Miniature Switching Relay

288 Series

	Description		Input Nominal Voltage U_N	Max. Switching Voltage	Limiting Continuous Current	Item No.
	Relay modules with 1 make contact , relay pre-soldered onto mounting carrier		24 VDC 24 VAC/DC 48 VAC/DC 115 VAC/DC	250 VAC	5 A	288-364 288-564 288-565 288-567
	Relay modules with 1 break contact , relay pre-soldered onto mounting carrier		24 VDC 24 VAC/DC	250 VAC	5 A	288-368 288-568
	Relay module with 1 changeover contact , relay pre-soldered onto mounting carrier, with pluggable connectors		24 VAC/DC	250 VAC	5 A	288-554
	Relay modules with 1 changeover contact , relay pre-soldered onto mounting carrier		24 VDC 24 VAC/DC 230 VAC	250 VAC	6 A	288-304 288-504 288-508
	Relay modules with 2 changeover contacts , relay pre-soldered onto mounting carrier		24 VDC 24 VAC/DC	250 VAC	6 A	288-312 288-512
	Relay module with 1 make contact , relay pre-soldered onto mounting carrier, switches high inrush current loads (e.g., filament lamp loads)		24 VDC	250 VAC	16 A	288-320
	Bistable relay module with 1 changeover contact , relay pre-soldered onto mounting carrier		24 VDC	250 VAC	6 A	288-380

Relay Modules with Force-Guided Contacts

	Description		Input Nominal Voltage U_N	Max. Switching Voltage	Limiting Continuous Current	Item No.
	Relay module with 2 changeover contacts and force-guided contacts, relay pre-soldered onto mounting carrier		24 VDC	250 VAC	5 A	288-437
	2 safety relay modules Hengstler H-462, with 3 make contacts and 1 break contact , pre-mounted on carrier		24 VDC	250 VAC	6 A	288-435
	Safety relay modules SDS SF 4, with 4 break contacts and 4 make contacts , 1 relay pre-soldered onto mounting carrier		5 VDC 12 VDC 24 VAC/DC 48 VAC/DC 230 VAC/DC	250 VAC	6 A	288-412 288-413 288-414 288-415 288-418

Conductor range (288 Series): 0.08 ... 2.5 mm² / 28 ... 14 AWG
 Connection technology (288 Series): CAGE CLAMP® (see page 14)

Marking using WMB Multi markers

Relay Modules

Technical Information

Contact Material

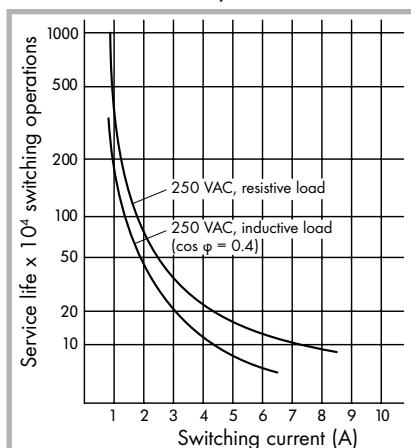
For a contact reliability, the contact resistance over the entire operating life of the relay should remain relatively low and constant. A variety of contact materials can be selected depending on the load type, switching current, switching voltage and the desired number of switching cycles. The accompanying table shows the materials with the typical features and application notes that are used for the WAGO relay modules.

Contact Protective Circuit

When switching off inductive loads, such as contactors and solenoid valves, transients occur with peak voltages up to several thousand volts. These transients often exceed the permissible EMC standard limits and must therefore be limited by external circuits. They also cause an electric arc at the switching contact, which can destroy the contact or can significantly diminish the relay's service life and reliability. The following protective circuits, which are outlined in the table, are connected directly to the source in parallel to the load and have proven to be successful.

Service Life

A distinction must be made between the mechanical life, which indicates the number of switching cycles without contact load, and the electrical service life at maximum load, which indicates the number of switching cycles with maximum switching power and resistive load. Reduced power increases the service life compared to the value of the maximum load. The following figure shows the typical curve between switching current and service life of a relay.




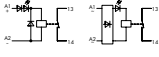
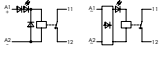

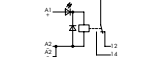

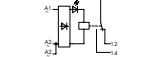

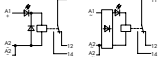

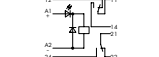

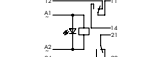
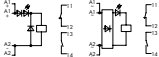

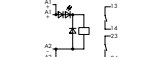
Contact material	Features and Application	Application Range
AgNi 0.15 + 5 μ Au	Excellent corrosion resistance, low and constant contact resistances at extremely low switching power, for dry circuits	μ V ... 30 V μ A ... 0.2 A
AuAg 10 via AgNi 15 + Au	Behavior as a 5 μ gold contact, but 5 times higher wear resistance, for all circuits from μ W range up to 100 W or 1 kVA	100 mV/10 μ A
AgCd O + 1 μ Au	Low welding tendency, high burn-off resistance at higher switching power, suitable for small switching loads	\geq 5 V \geq 10 mA
Ag Cd O, with gold flash	Low welding tendency, high burn-off resistance at higher switching power, Au as storage protection	\geq 12 V \geq 100 mA
Ag Ni 0.15 + HV	Good mechanical stability, low welding tendency and low contact resistance, universal use at moderate loads	\geq 12 V 5 mA ... 10 A
Ag Sn O ₂	Low welding tendency, extremely high burn-off resistance at high switching power, suitable for circuits with high switch on/off loads, DC circuits	\geq 5 V/100 mA \geq 10 V/10 mA \geq 24 V/1 mA
Ag alloy, with gold flash	Good mechanical stability, low welding tendency, large application range for small to medium switching power	10 ⁻³ W

Load Circuit	Additional Fall Delay	Defined Induction Voltage Limitation	Bipolar-Effective Attenuation	Advantages:	Disadvantages:
Diode 	Large	Yes (U_D)	No	<ul style="list-style-type: none"> Easy implementation Cost-effective, reliable Uncritical dimensioning Small induction voltages 	<ul style="list-style-type: none"> Attenuation only via load resistor
Diode/Zener Diode Series Circuit 	Medium to small	Yes (U_{ZD})	No	<ul style="list-style-type: none"> Uncritical dimensioning 	<ul style="list-style-type: none"> Attenuation only above U_{ZD}
Suppressor Diode 	Medium to small	Yes (U_{ZD})	Yes	<ul style="list-style-type: none"> Cost-effective Uncritical dimensioning Limitation of positive peaks Suitable for AC voltage 	<ul style="list-style-type: none"> Attenuation only above U_{ZD}
Varistor 	Medium to small	Yes (U_{VDR})	Yes	<ul style="list-style-type: none"> High energy absorption Uncritical dimensioning Suitable for AC voltage 	<ul style="list-style-type: none"> Attenuation only above U_{VDR}
R/C Combination 	Medium to small	No	Yes	<ul style="list-style-type: none"> RF attenuation via power storage Suitable for AC voltage Level-dependent attenuation 	<ul style="list-style-type: none"> Accurate dimensioning required High inrush current

Relay Modules

Pluggable Relay Modules for Carrier Terminal Blocks

286 Series

	Description		Input Nominal Voltage U_N	Max. Switching Voltage	Limiting Continuous Current	Item No.
	Relay module with 1 make contact ①		24 VDC	250 VAC	5 A	286-364
	Relay module with 1 break contact ①		24 VDC	250 VAC	5 A	286-368
	Relay module with 1 changeover contact ②		24 VDC	250 VAC	7 A	286-304
	Relay modules with 1 changeover contact ②		115 VAC 230 VAC	250 VAC	7 A	286-507 286-508
	Relay modules with 1 changeover contact and gold contacts ②		24 VDC 24 VAC/DC	250 VAC*	1 A*	286-394 286-594
	Relay modules with 2 changeover contacts ③		24 VDC 110 VDC 220 VDC	250 VAC	7 A	286-312 286-315 286-316
	Relay modules with 2 changeover contacts ③		24 VAC 115 VAC 230 VAC	250 VAC	7 A	286-512 286-515 286-516
	Relay module with 1 break contact and 1 make contact ③		24 VDC	250 VAC	6 A	286-320
	Relay module with 2 make contacts ④		24 VDC	250 VAC	6 A	286-328

*To prevent damaging the gold layer, 30 VDC switching voltages and 50 mA currents shall not be exceeded.

Higher switching power eventually evaporates the gold layer. The resulting deposits in the housing may reduce the service life.

Marking via 4 mm WSB marker cards


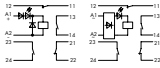

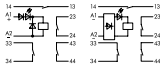





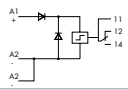
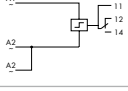
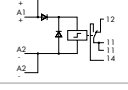

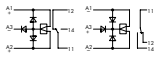
① ... ⑤: For compatible terminal blocks, see page 219.



Relay Modules

Pluggable Relay Modules for Carrier Terminal Blocks



286 Series

	Description		Input Nominal Voltage U_N	Max. Switching Voltage	Limiting Continuous Current	Item No.
	Relay module with 1 break contact and 3 make contacts ④		230 VAC	250 VAC	5 A	286-548
	Relay module with 4 make contacts ④		115 VAC	250 VAC	5 A	286-555
	Relay module with 4 changeover contacts ⑤		230 VAC	250 VAC	4 AAC	286-579
	Relay module with 1 make contact , switches higher DC loads ②		24 VDC	250 VAC	5 A	286-376
	Latching relay with 1 changeover contact ②		24 VDC	250 VAC	5 A	286-573
			230 VAC			286-574
	Latching relay with 1 changeover contact , for railway applications ②		24 VDC	250 VAC	3 A (6 A up to +50 °C)	286-575
	Bistable relay modules with 1 changeover contact , high-side/low-side switching ②		24 VDC 24 VDC	250 VAC	6 A	286-380 286-381

Terminal Blocks for Pluggable Modules

0.08 ... 2.5 mm² / 28 ... 14 AWG

CAGE CLAMP®


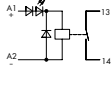

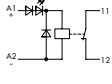

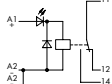

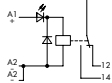

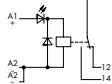

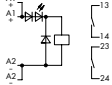

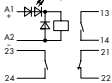

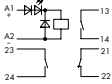

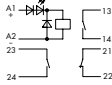

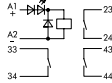
	Description	Width	Item No.	Assignment	
	Terminal blocks for pluggable modules with 2-conductor blocks	Orange separator plate	12 mm	○ 280-618	①
			17 mm	○ 280-619	②
			22 mm	○ 280-638	③
			27 mm	○ 280-639	④
	Terminal blocks for pluggable modules with 4-conductor blocks	Orange separator plate	12 mm	○ 280-608	①
		Marking plate	15 mm	○ 280-762	①
		Orange separator plate	17 mm	○ 280-609	②
		Marking plate	20 mm	○ 280-763	②
		Orange separator plate	22 mm	○ 280-628	③
		Marking plate	25 mm	○ 280-764	③
		Orange separator plate	27 mm	○ 280-629	④
		Marking plate	30 mm	○ 280-765	④
Orange separator plate	37 mm	○ 280-636	⑤		

For information on CAGE CLAMP® connection, see page 14.

Relay Modules

Pluggable Relay Modules for Carrier Terminal Blocks

286 Series

	Description		Input Nominal Voltage U_N	Max. Switching Voltage	Limiting Continuous Current	Item No.
	Relay module with 1 changeover contact and extended input voltage/temperature range 1		24 VDC	250 VAC	3 A	286-364/004-000
	Relay module with 1 break contact and extended input voltage/temperature range		24 VDC	250 VAC	3 A	286-368/004-000
	Relay module with 1 changeover contact and extended input voltage/temperature range 2		24 VDC 110 VDC	250 VAC	3 A	286-304/004-000
	Relay module with 1 changeover contact and extended input voltage/temperature range 2		24 VDC	250 VAC*	3 A*	286-307/004-000
	Relay module with 1 changeover contact and extended input voltage/temperature range 2		24 VDC	250 VAC	4 A	286-394/004-000
	Relay module with 2 break contacts and extended input voltage/temperature range 3		24 VDC	250 VAC	4 A	286-312/004-000
	Relay module with 1 break contact, 1 changeover contact and extended input voltage/temperature range 3		24 VDC	250 VAC	4 A	286-320/004-000
	Relay module with 2 make contacts and extended input voltage/temperature range 3		24 VDC	250 VAC	4 A	286-328/004-000
	Relay module with 2 break contacts, 2 make contacts and extended input voltage/temperature range 4		24 VDC	250 VAC	4 A	286-336/001-000
	Relay module with 3 make contacts, 1 break contact and extended input voltage/temperature range 4		24 VDC	250 VAC	4 A	286-344/004-000


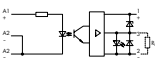

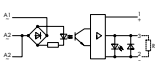

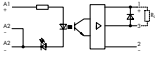

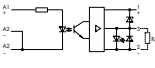

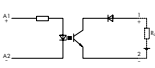

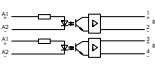

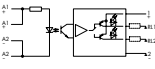
*To prevent damaging the gold layer, 30 VDC switching voltages and 50 mA currents shall not be exceeded. Higher switching power eventually evaporates the gold layer. The resulting deposits in the housing may reduce the service life.

1 ... **5**: For compatible terminal blocks, see page 219.

Optocoupler Modules

Pluggable Optocoupler Modules for Carrier Terminal Blocks



286 Series

	Description		Input Nominal Voltage U_N	Output Nominal Voltage	Limiting Continuous Current	Item No.
	Optocoupler modules, high-side switching ②		24 VDC	3 ... 6 VDC 10 ... 20 VDC 20 ... 30 VDC	500 mA	286-750 286-751 286-752
	Optocoupler modules, high-side switching ②		230 VAC	3.5 ... 7 VDC 10 ... 20 VDC	500 mA	286-754 286-756
	Optocoupler modules, low-side switching ②		24 VDC	15 ... 40 VDC	2 A	286-720
			24 VDC	15 ... 40 VDC	5 A	286-721
	Optocoupler modules, high-side switching ②		5 VDC	20 ... 30 VDC	500 mA	286-752/002-000
			24 VDC	20 ... 30 VDC	4 A	286-723
	Optocoupler module ①		24 VDC	20 ... 60 VDC	100 mA	286-791
	Dual-channel, optocoupler module ③		2 x 24 VDC	2 x 20 ... 30 VDC	2 x 250 mA	286-792
	Optocoupler module, with 2 inverted outputs ③		24 VDC	20 ... 30 VDC	500 mA	286-790

Terminal Blocks for Pluggable Modules

0.08 ... 2.5 mm² / 28 ... 14 AWG

CAGE CLAMP®


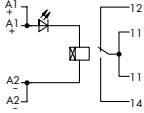

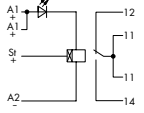
	Description	Width	Item No.	Assignment	
	Terminal blocks for pluggable modules with 2-conductor blocks	Orange separator plate	12 mm	○ 280-618	①
		Orange separator plate	17 mm	○ 280-619	②
		Orange separator plate	22 mm	○ 280-638	③
		Orange separator plate	27 mm	○ 280-639	④
	Terminal blocks for pluggable modules with 4-conductor blocks	Orange separator plate	12 mm	○ 280-608	①
		Marking plate	15 mm	○ 280-762	①
		Orange separator plate	17 mm	○ 280-609	②
		Marking plate	20 mm	○ 280-763	②
		Orange separator plate	22 mm	○ 280-628	③
		Marking plate	25 mm	○ 280-764	③
		Orange separator plate	27 mm	○ 280-629	④
		Marking plate	30 mm	○ 280-765	④
Orange separator plate	37 mm	○ 280-636	⑤		

For information on CAGE CLAMP® connection, see page 14.


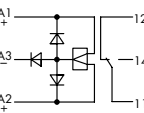
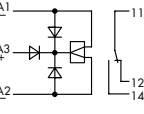

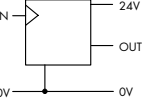
Pluggable Timer Relay Modules for Carrier Terminal Blocks, Specialty Relay Modules, Surge Suppression Modules

286 Series


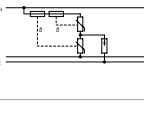

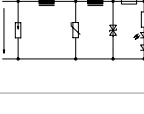

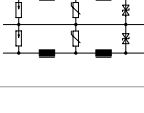

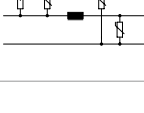

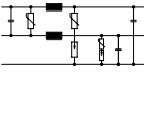
Pluggable Timer Relay Modules for Carrier Terminal Blocks

	Description		Input Nominal Voltage U_N	Max. Switching Voltage	Time Range	Item No.
	Pulse time delay relay module, 1 changeover contact ②		24 VDC	380 VAC	0.1 ... 1 s	286-460
					1 ... 10 s	286-462
					10 ... 100 s	286-464
	Multifunction timer relay module, 4 time ranges, 4 functions, 1 changeover contact ②		24 VDC	380 VAC	0.3 ... 3 s, 3 ... 12 s, 10 ... 100 s, 100 ... 800 s	286-640

Specialty Relay Modules

	Description		Input Nominal Voltage U_N	Max. Switching Voltage	Nominal Current I_N	Item No.
	Bistable relay module, high-side switching, 1 changeover contact ①		24 VDC	250 VAC	41.4 mA	286-380
	Bistable relay module, low-side switching, 1 changeover contact ①		24 VDC	250 VAC	41.4 mA	286-381
	Flip-flop module ①		24 VDC	24 VDC	500 mA	286-825

Surge Suppression Modules


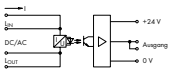

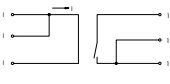

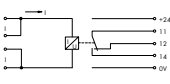
	Description		Nominal Operating Voltage U_N	Operating Voltage	Nominal Current I_N	Item No.
	Single-stage suppression for 2-pole control and power circuits ①		230 VAC	300 VAC	10 A	286-838
			115 VAC	150 VAC		286-838/115-000
	Three-stage suppression for 1-pole data, measurement and control circuits ②		24 DC	30 VDC	0.1 A	286-833
	Three-stage suppression for 2-pole data, measurement and control circuits ②		12 VDC	14 VDC	6 A	286-834
			24 VDC	30 VDC		286-834/024-000
	Two-stage suppression for 2-pole data, measurement, control and power circuits ②		24 VAC/DC	30 VAC / 38 VDC	6 A	286-831
			24 VAC/DC	30 VAC / 38 VDC		286-832
	Two-stage suppression for 2-pole data, measurement, control and power circuits, with filter ③		110 VDC	180 VDC	6 A	286-844
			115 VAC	140 VAC		286-843
			220 VDC	320 VDC		286-841
			230 VAC	250 VAC		286-842

① ... ⑤: For compatible terminal blocks, see page 219.


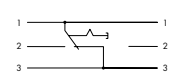

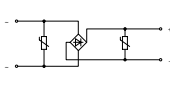

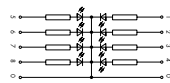

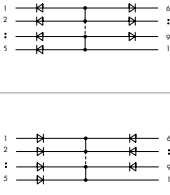

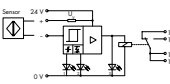

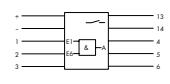
Current Flow Monitoring Modules, Specialty Modules

286 Series

Current Flow Monitoring Modules

	Description		Current Monitoring Range	Voltage Range	Item No.
	AC/DC current flow monitoring module 2		16 mADC / 35 ... 300 mAAC	10 ... 250 VAC/DC	286-659
	DC current flow monitoring module, 1 make contact 1		0.4 ... 3.5 ADC (-20 ... +40 °C) 0.4 ... 3 ADC (-20 ... +60 °C) 0.4 ... 2 ADC (-20 ... +70 °C)	12 ... 28 VDC	286-662
	AC current flow monitoring module, 1 changeover contact 3		0.2 ... 3 AAC (adjustable)		286-664

Specialty Modules

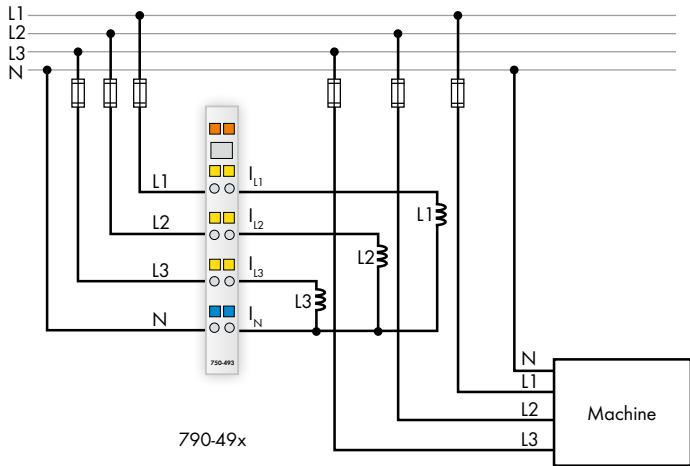
	Description		Operating Voltage	Characteristics		Item No.
	Switching modules, 1-pole, with changeover rocker switch 1		24 VDC / 250 VAC	Switching current, resistive AC 6 A	Switching current, inductive AC 4 A	286-895
			24 VDC / 250 VAC	Switching current, resistive AC 6 A	Switching current, inductive AC 4 A	286-896
	Bridge rectifiers, with varistor protection 1		24 VAC	Nominal current 1 A	Max. charging capacitator 2200 µF	286-830
			250 AC	Nominal current 1 A	Max. charging capacitator 500 µF	286-840
	LED gate module, with 8 LEDs, common cathode 3		24 VDC	Power consumption at V_N 5.1 mA each LED		286-822
	Diode gate modules		250 VAC/DC	Common anode	3 diodes 1	286-803
					5 diodes 1	286-805
					7 diodes 2	286-807
					9 diodes 3	286-809
				Common cathode	3 diodes 1	286-813
					5 diodes 1	286-815
					7 diodes 2	286-817
					9 diodes 3	286-819
	NAMUR switching amplifier 2		34 VDC	With transistor output		286-881
	AND gate module with 6 inputs, relay output with 1 make contact 3		24 VDC	Max. switching voltage 250 VAC / 120 VDC	Max. continuous current 3 A	286-826

Power and Energy Measurement ...

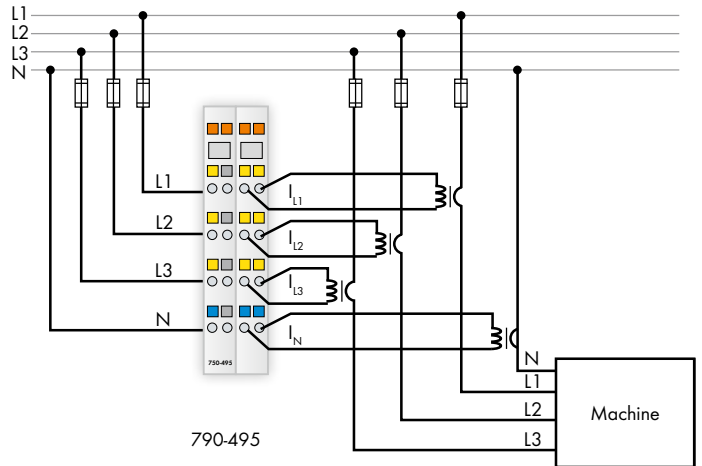
... via 3-Phase Power Measurement Modules from the WAGO-I/O-SYSTEM 750

General Configurations

Power and energy measurement of a machine in a 480 VAC mains network via 750-493 or 750-494 3-Phase Power Measurement Modules

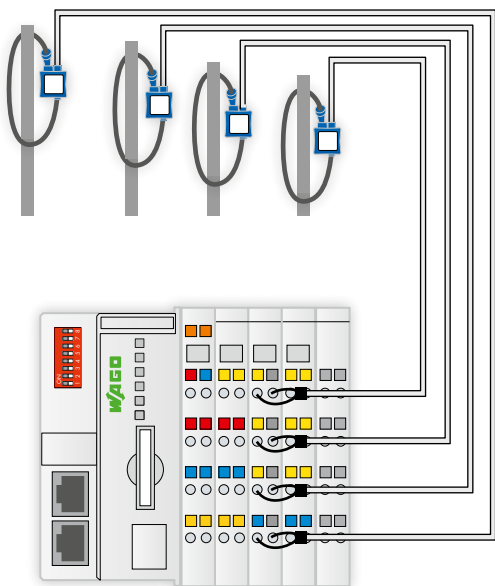


Power, energy and N-conductor measurement of a machine in a 480/690 VAC mains network via 750-495 3-Phase Power Measurement Module

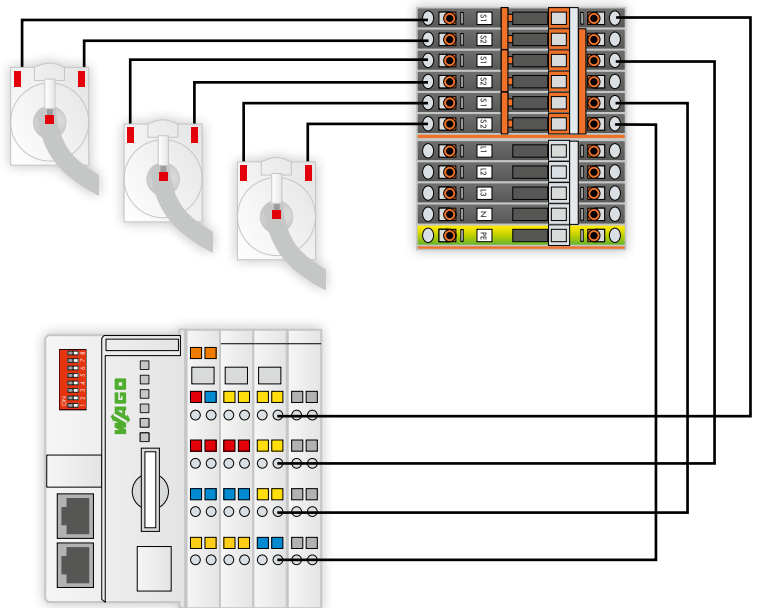


Applications

Connecting current transformers to 3-Phase Power Measurement Modules



2007-8873 Terminal Block Assembly for Current Transformers



Connecting Rogowski coils directly to the 750-495/000-002 3-Phase Power Measurement Module

Power and Energy Measurement

Comprehensive Network Analysis via WAGO-I/O-CHECK

Overview: Three Phases' Measured Values

Phase	Active Power (W)	Reactive Power (var)	Apparent Power (VA)	Power Factor PF
Phase L1	216.8	-10.1	217.03	0.707
Phase L2	330	50	680	0.99
Phase L3	62.26	-2.52	62.31	0.99

Phase	Current (A)
Phase L1	0.261
Phase L2	0.514
Phase L3	0.134

Phase	Voltage (V)
Phase L1	238.39
Phase L2	238.62
Phase L3	238.55

xEnable	xReady
enumMeasuredValue1	bFeedback
enumMeasuredValue2	rMeasuredValue1
enumMeasuredValue3	rMeasuredValue2
enumMeasuredValue4	rMeasuredValue3
abIn_750_494	rMeasuredValue4
abOut_750_494	
bToken	

Measured value configuration is also possible via function block.


Harmonic Diagram

Order	Value
2	0.005
3	0.004
4	0.003
5	0.003
6	0.003
7	0.003
8	0.003
9	0.003
10	0.003
11	0.003
12	0.001
13	0.001
14	0.001
15	0.001
16	0.001
17	0.001
18	0.001
19	0.001
20	0.001
21	0.001
22	0.001
23	0.001
24	0.001
25	0.001
26	0.001
27	0.001
28	0.001
29	0.001
30	0.001
31	0.001
32	0.001
33	0.001
34	0.001
35	0.001
36	0.001



Parameter	Value
Frequency	49.99 Hz
Current Frequency	49.99 Hz
Maximum Frequency	49.99 Hz
Minimum Frequency	49.99 Hz
Total Harmonic Distortion (THD)	
Voltage	
Current	

Measured Value Chart

Plug-In Current Transformers with CAGE CLAMP® Connection 855 Series

	Primary Rated Current	Secondary Rated Current	Rated Power	Accuracy Class	Hole for Conductor/Cable	Item No.
	50	1	1,25	3	Current bar 1: 30 x 10 mm Current bar 2: 25 x 12 mm Current bar 3: 20 x 20 mm Round cable: 26 mm	855-301/050-103
	50	5	1,25	3		855-305/050-103
	60	1	1,25	1		855-301/060-101
	60	5	1,25	1		855-305/060-101
	75	1	2,5	1		855-301/075-201
	75	5	2,5	1		855-305/075-201
	100	1	2,5	1		855-301/100-201
	100	5	2,5	1		855-305/100-201
	150	1	5	1		855-301/150-501
	150	5	5	1		855-305/150-501
	200	1	5	1		855-301/200-501
	200	5	5	1		855-305/200-501
	250	1	5	1		855-301/250-501
	250	5	5	1		855-305/250-501
	400	1	10	1		855-301/400-1001
	400	5	10	1		855-305/400-1001
	600	1	10	1		855-301/600-1001
	600	5	10	1		855-305/600-1001
	250	5	5	1		855-405/250-501
	400	1	5	1		855-401/400-501
	400	5	5	1	855-405/400-501	
	600	1	5	1	855-401/600-501	
	400	5	10	1	855-505/400-1001	
	600	5	10	1	855-505/600-1001	
	800	5	10	1	855-505/800-1001	
	1000	1	10	1	855-501/1000-1001	
	1000	5	10	1	855-505/1000-1001	
	1500	5	5	1	855-605/1500-501	
1500	1	5	1	855-601/1500-501		
2000	5	10	1	855-805/2000-1001		
2000	1	10	1	855-801/2000-1001		
2500	5	10	1	855-1005/2500-1001		
2500	1	10	1	855-1001/2500-1001		

Accessories

	Description	Item No.
	Carrier Rail Adapter for Plug-In Current Transformers (855-3xx and 855-4xx)	855-9900
	Quick-Mount Kit (2 pieces including cable tie)	855-9910



Snapping the carrier rail adapter onto the plug-in current transformer.



Securing the round cable via locking screw.



Inserting a conductor via operating tool.

Split-Core Current Transformers with a Connection Cable 855 Series



	Primary Rated Current	Secondary Rated Current	Rated Power	Accuracy Class	Cable Length	Hole for Conductor/Cable	Item No.	
	60 A	1 A	0.2 VA	3	3 m	18 mm Ø	855-3001/060-003	
	100 A	1 A	0.2 VA	3	3 m		855-3001/100-003	
	200 A	1 A	0.2 VA	1	3 m		855-3001/200-001	
	250 A	1 A	0.2 VA	1	3 m		855-3001/250-001	
	100 A	1 A	0.2 VA	1	3 m	18 mm Ø	855-4001/100-001	
	150 A	1 A	0.2 VA	1	3 m		855-4001/150-001	
	150 A	5 A	1 VA	1	0.5 m		855-4005/150-101	
	200 A	1 A	0.2 VA	0.5	3 m		855-4001/200-001	
	200 A	1 A	0.2 VA	1	3 m	28 mm Ø	855-4101/200-001	
	250 A	1 A	0.2 VA	1	3 m		855-4101/250-001	
	250 A	5 A	1 VA	1	0.5 m		855-4105/250-101	
	400 A	1 A	0.2 VA	1	3 m		855-4101/400-001	
	400 A	5 A	1 VA	1	0.5 m		855-4105/400-101	
	250 A	1 A	0.5 VA	1	5 m	42 mm Ø	855-5001/250-001	
	400 A	1 A	0.5 VA	0.5	5 m		855-5001/400-000	
	400 A	5 A	0.5 VA	1	3 m		855-5005/400-001	
	600 A	1 A	0.5 VA	0.5	5 m		855-5001/600-000	
	600 A	5 A	0.5 VA	0.5	3 m		855-5005/600-000	
	1000 A	1 A	0.5 VA	0.5	5 m		855-5001/1000-000	
	1000 A	5 A	0.5 VA	0.5	3 m		855-5005/1000-000	
	1000 A	1 A	0.5 VA	0.5	5 m	2 x 42 mm Ø	855-5101/1000-000	
	1000 A	5 A	0.5 VA	0.5	3 m		855-5105/1000-000	

WAGO's compact 855 Series Split-Core Current Transformers are ideal for retrofitting existing systems. They are perfect for applications in which the current path must not be disrupted. The transformer's accuracy permits extremely precise current measurements.



The split-core current transformers are capable of supplying the specified rated power at the end of the secondary cable. All transformers are supplied with color-coded cables. Two UV-resistant cable ties are also included for secure and easy mounting.



Plug-In Current Transformers with a *picoMAX*[®] Pluggable Connector 855 Series

	Primary Rated Current	Secondary Rated Current	Rated Power	Accuracy Class	Conductor Hole	Item No.
	32 A*	0.32 A	0.01 VA (0.1 Ω)	0.5**	5.0 mm ∅	855-1700/032-000
	35 A	1 A	0.2 VA	1	7.5 mm ∅	855-2701/035-001
	64 A	1 A	0.2 VA	1	7.5 mm ∅	855-2701/064-001

Accessories

	Description		Item No.
	Carrier Rail Adapter	for 855-2701/xxx	855-9927
	Operating Tool	Type 2, (3.5 x 0.5) mm blade	210-720

*Measurement range: 0.8 ... 32 A in combination with 750-493/494/495 3-Phase Power Measurement Modules

**Testing adheres to EN 61869-2 with a conversion ratio of 16 A/0.16 A (accuracy class: 0.5) and an extended primary current of 200 %.



Snapping a transformer onto DIN-rail.



Staggered arrangement for 17.5 mm spacing



Inserting a conductor via push-in termination.



Removing the conductor via push-button.






Low power output



1A output


Intelligent Current Sensors with Bus Connection 789 Series

WAGO's intelligent current sensors monitor solar plants or inverters for DC measurements within a large current measurement range.

	Measurement Range	Transmission Error	Power Supply	Hole	Interface	Protocol	Addressing	Max. Bus Length	Item No.
	0 ... 80 ADC	≤ 0.5 % of upper-range value	12 ... 34 V (via RJ-45)	15 mm (for power cable)	RS-485	MODBUS over serial line	1 ... 32	≤ 1,200 m	789-620
	0 ... 140 ADC								789-621
	0 ... 50 A _{rms} (AC)								789-622

Rogowski Coils


855 Series

	Primary Rated Current	Output Signal	Description	Item No.
	500 A	10.05 mV	RT 500, 1.5 m cable	855-9100/500-000
			RT 500, 3 m cable	855-9300/500-000
	2000 A	40.2 mV	RT 2000, 1.5 m cable	855-9100/2000-000
			RT 2000, 3 m cable	855-9300/2000-000





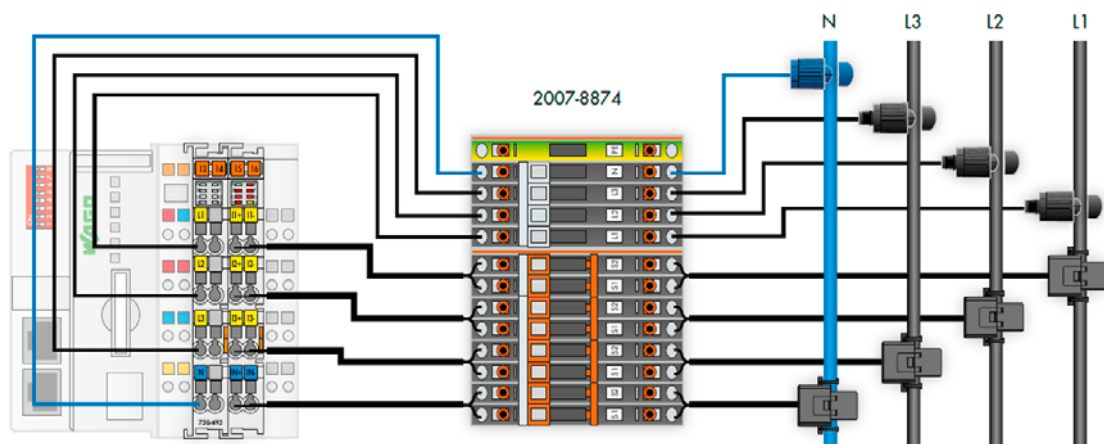
Function: The Rogowski coil is a closed-air coil with a non-magnetic split core. The coil is placed around a cable or current bar. The magnetic field produced by the AC current flowing through the conductor induces an output voltage in the coil. This measurement procedure galvanically isolates the primary circuit (power) and secondary circuit (measurement).

Accessories: Signal Conditioners for Rogowski Coils

	Input Signal	Output Signal	Overcurrent	Sensitivity	Item No.
	3 x RT 500 (500 A)	3 x 100 mAAC	750 A	10.05 mV; 50 Hz, sinusoidal	789-652
	3 x RT 2000 (2,000 A)		3000 A	40.2 mV; 50 Hz, sinusoidal	789-654

Voltage Taps

	Color	Hole for Measurement Conductor	Fuse	Item No.
	Black	3 ... 5 mm Ø	2 A, 450 V, F, 70 kA, 5 x 25 mm	855-8001
	Blue		-	855-8002
	Black	5 ... 7 mm Ø	2 A, 450 V, F, 70 kA, 5 x 25 mm	855-8003
	Blue		-	855-8004



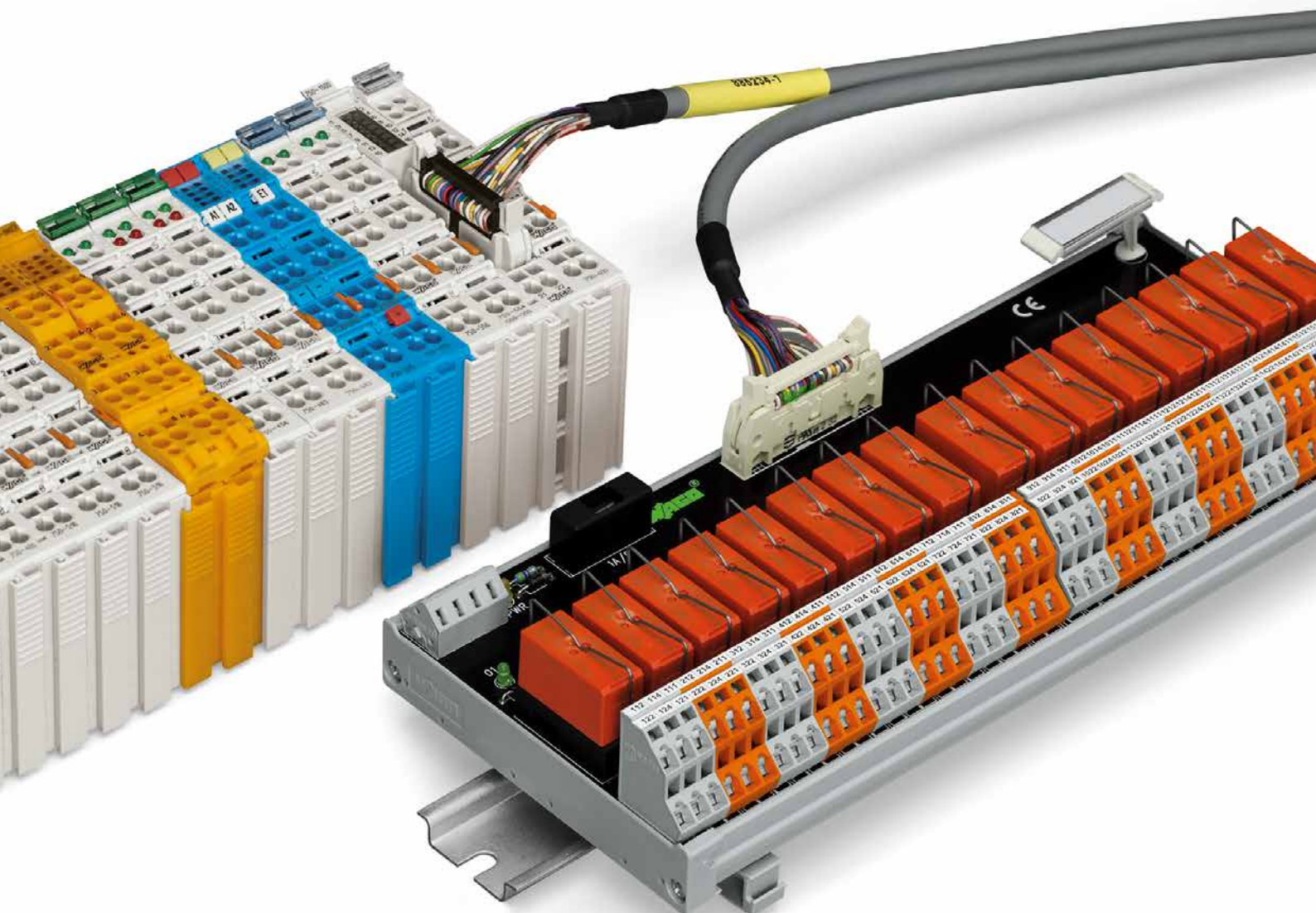
WAGO System Wiring and Interface Modules - Overview and Application Examples -

16-Channel Module with Interface Module

The new 750-14xx and 750-15xx Series Bus Modules with a pluggable connector per DIN 41 651 offer 16 digital channels in a module less than 1/2 inch (12 mm) wide. Offering quick connections and a space-efficient design, the DIN-rail-mount interface modules simplify installation in confined areas and conveniently relocate the termination point. When combined with WAGO interface modules (e.g., item no. 289-614, 289-611), a switch cabinet can be pre-wired before installation to minimize wiring time and errors. This is beneficial as wiring can be performed independently of construction.

Pre-wired electronics can be installed right before start, saving valuable time during the final stages of project completion. The modules are also ideal for connecting series machines or relay modules tasked with the higher loads common to buildings and industrial applications. The interface module also combines the advantages of relays (e.g., manual operation or rapid replacement via socket-mounted versions) with the benefits of a modern I/O system. Another ideal application would be the integration of pneumatic controllers into a fieldbus network.

Most pneumatic modules have an appropriate connector and can be controlled by the WAGO I/O-SYSTEM. Five variants are available: two 16-channel input or output modules (one high-side and one low-side switching variant), as well as a version combining 8 inputs and 8 outputs.





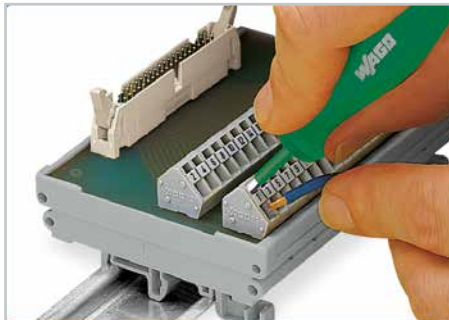
WAGO Interface Cable,
706-7753/302-100



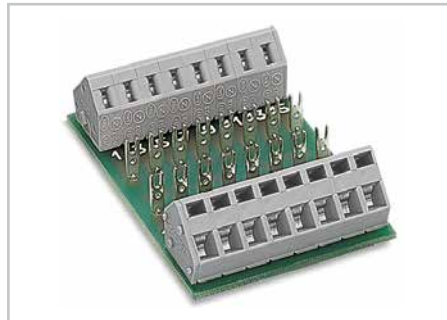
WAGO Interface Cable,
706-7753/300-100

288/289 Series DIN-Rail-Mount Relay Modules

Examples:



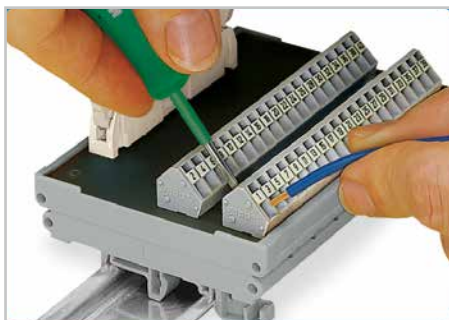
"Front-entry" conductor termination



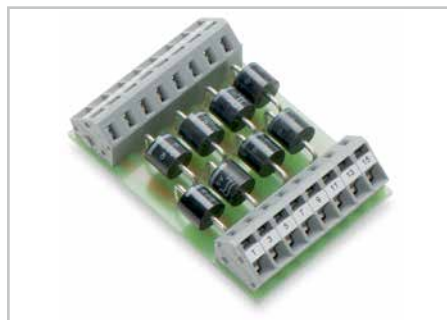
Solder pins for self-assembly



Relay module, 8 channels



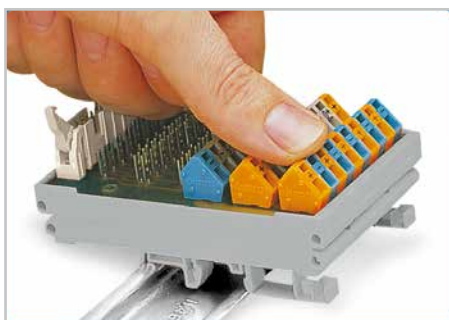
"Side-entry" conductor termination



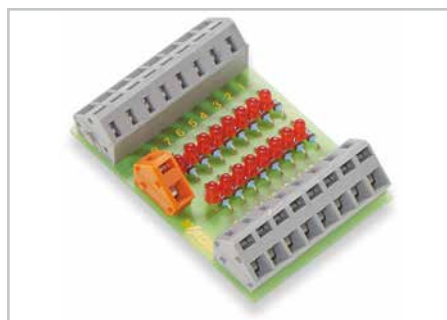
Diode module



Relay module, 16 channels



Snapping a module onto DIN-rail.



LED module



Relay module with fuse, 16 channels

WAGO System Wiring

- Overview and Application Examples -

SIEMENS S7-300			WAGO Interface Cables		WAGO Interface Modules	
			Item No.	Qty.	Type	Qty.
CPU	6ES7 313-5BE01-0AB0	16 DI/16 DO	706-2300/301-XXX	1	T16ES/T16S	1/1
	6ES7 313-5BF03-0AB0	16 DI/16 DO	706-2300/301-XXX	1	T16ES/T16S	1/1
	6ES7 313-6BE01-0AB0	16 DI/16 DO	706-2300/301-XXX	1	T16ES/T16S	1/1
	6ES7 313-6BF03-0AB0	16 DI/16 DO	706-2300/301-XXX	1	T16ES/T16S	1/1
	6ES7 313-6CE01-0AB0	16 DI/16 DO	706-2300/301-XXX	1	T16ES/T16S	1/1
	6ES7 313-6CF03-0AB0	16 DI/16 DO	706-2300/301-XXX	1	T16ES/T16S	1/1
	6ES7 314-6BF01-0AB0	16 DI/16 DO	706-2300/301-XXX	1	T16ES/T16S	1/1
	6ES7 314-6BG03-0AB0	16 DI/16 DO	706-2300/301-XXX	1	T16ES/T16S	1/1
	6ES7 314-6CF01-0AB0	16 DI/16 DO	706-2300/301-XXX	1	T16ES/T16S	1/1
6ES7 314-6CG03-0AB0	16 DI/16 DO	706-2300/301-XXX	1	T16ES/T16S	1/1	
DI	6ES7 321-1BH02-0AA0	16 DI	706-2300/300-XXX	1	T16ES	1
	6ES7 321-1BH10-0AA0	16 DI	706-2300/300-XXX	1	T16ES	1
	6ES7 321-1BH80-0AA0	16 DI	706-2300/300-XXX	1	T16ES	1
	6ES7 321-1BL00-0AA0	32 DI	706-2300/301-XXX	1	T16ES	2
	6ES7 321-1BL80-0AA0	32 DI	706-2300/301-XXX	1	T16ES	2
	6ES7 321-1BP00-0AA0	64 DI	706-2300/100-XXX	2	T16ES	4
	6ES7 321-7BH01-0AA0	16 DI	706-2300/101-XXX	1	T16ES	1
6ES7 321-7BH80-0AA0	16 DI	706-2300/101-XXX	1	T16ES	1	
DO	6ES7 322-1BH01-0AA0	16 DO	706-2300/300-XXX	1	T16ES/T16S	1
	6ES7 322-1BH10-0AA0	16 DO	706-2300/300-XXX	1	T16ES/T16S	1
	6ES7 322-1BH80-0AA0	16 DO	706-2300/300-XXX	1	T16ES/T16S	1
	6ES7 322-1BL00-0AA0	32 DO	706-2300/301-XXX	1	T16ES/T16S	2
	6ES7 322-1BP00-0AA0	64 DO	706-2300/200-XXX	2	T16ES/T16S	4
	6ES7 322-1EH01-0AA0	16 DO	706-2300/300-XXX	1	T16ES/T16S	1
	6ES7 322-8BF00-0AB0	8 DO	706-2300/201-XXX	1	T8ES/T8S	1
AI	6ES7 331-7HF01-0AB0	8 AI	706-2300/400-XXX	1	A8ES	1
	6ES7 331-7KF02-0AB0	8 AI	706-2300/400-XXX	1	A8ES	1
	6ES7 331-7NF00-0AB0	8 AI	706-2300/404-XXX	1	A8ES	1
	6ES7 331-7NF10-0AB0	8 AI	706-2300/406-XXX	1	A8ES	1
	6ES7 331-7SF00-0AB0	8 AI	706-2300/400-XXX	1	A8ES	1
	6ES7 331-7TF00-0AB0	8 AI	706-2300/400-XXX	1	A8ES	1
AO	6ES7 332-5HB01-0AB0	2 AO	706-2300/400-XXX	1	A4ES	1
	6ES7 332-5HB81-0AB0	2 AO	706-2300/400-XXX	1	A4ES	1
	6ES7 332-5HD01-0AB0	4 AO	706-2300/404-XXX	1	A4ES	1
	6ES7 332-5HF00-0AB0	8 AO	706-2300/406-XXX	1	A8ES	1
	6ES7 332-7ND02-0AB0	4 AO	706-2300/400-XXX	1	A4ES	1
	6ES7 332-8TF00-0AB0	8 AO	706-2300/400-XXX	1	A8ES	1

WAGO-I/O-SYSTEM 753			WAGO Interface Cables		WAGO Interface Modules	
	I/O Modules		Item No.	Qty.	Type	Qty.
DI	753-430 (x1)	8 DI	706-7753/300-XXX	1	T8ES	1
	753-430 (x2)	16 DI	706-7753/301-XXX	1	T16ES	1
	753-431 (x1)	8 DI	706-7753/300-XXX	1	T8ES	1
	753-431 (x2)	16 DI	706-7753/301-XXX	1	T16ES	1
DO	753-530 (x1)	8 DO	706-7753/300-XXX	1	T8ES/T8S	1
	753-530 (x2)	16 DO	706-7753/301-XXX	1	T16ES/T16S	1

For an overview of interface modules, see page 234.

WAGO-I/O-SYSTEM 750			WAGO Interface Cables		WAGO Interface Modules	
	I/O Modules		Item No.	Qty.	Type	Qty.
DI	750-1400	16 DI	706-3057/300-XXX	1	T16ES	1
DO	750-1500	16 DO	706-3057/300-XXX	1	T16ES	1
DI/DO	750-1502	8 DI/8 DO	706-7753/302-XXX	1	T8ES/T8S	1/1
	750-1502	8 DI/8 DO	706-3057/300-XXX	1	T16ES	1

For an overview of interface modules, see page 234.

WAGO Interface Modules				
	Type	Short Description	Dimensions (mm) W x H x D	Item No.
DI/DO	T8ES	10-pole, without supply	35 x 48 x 85	289-611
		10-pole, with LEDs, 3 conductors	56 x 63 x 85	704-2003
	T8S	10-pole, with LEDs, 5 A relay	70 x 65 x 105	704-5003
		10-pole, with LEDs, 5 A relay, manual operation	75 x 65 x 105	704-5013
	T16ES	20-pole, without supply	47 x 62 x 85	289-614
		20-pole, with LEDs, 1 conductor	55 x 50 x 85	704-2004
		20-pole, with LEDs, 2 conductors	85 x 50 x 85	704-2024
		20-pole, with LEDs, 2 conductors, disconnection	99 x 50 x 85	704-2044
		20-pole, with LEDs, 3 conductors	85 x 63 x 85	704-2054
		20-pole, with LEDs, 5 A relay	180 x 50 x 105	704-5004
	T16S	20-pole, with LEDs, relay socket without relay	180 x 50 x 105	704-5014
		20-pole, with LEDs, 5 A relay	111 x 65 x 105	704-5024
		20-pole, with LEDs, 5 A relay, fuse	247 x 55 x 105	704-5034
		20-pole, with LEDs, 5 A relay, manual operation	121 x 65 x 105	704-5044
20-pole, with LEDs, 5 A relay, disconnection, fuse		240 x 55 x 105	704-5054	
20-pole, with LEDs, 5 A (2 u) relay		247 x 50 x 105	704-5064	
20-pole, with LEDs, 5 A (1 a) relay, disconnection, fuse		240 x 55 x 105	704-5074	
AI/AO		A4ES	15-pole D-sub, 2/4 conductors, disconnection	66 x 50 x 105
	A8ES	25-pole D-sub, 2/4 conductors, disconnection	92 x 50 x 105	704-8013

WAGO Interface Cables				
	Type	Item No.		
DI/DO	WAGO-753 T8ES	706-7753/300-XXX	See www.wago.com	
	WAGO-753 T16ES	706-7753/301-XXX	See www.wago.com	
	WAGO-750 HE T8E8S	706-7753/302-XXX		
	TSX T16ES	706-3057/300-XXX		
	S7-300 T16E	706-2300/101-XXX		
	S7-300 2 x T16E	706-2300/100-XXX		
	S7-300 T8S	706-2300/201-XXX		
	S7-300 2 x T16S	706-2300/200-XXX		
	S7-300 T16ES	706-2300/300-XXX		
	S7-300 2 x T16ES	706-2300/301-XXX		
AI/AO	S7-300 A8E	706-2300/400-XXX		
	S7-300 A8E11	706-2300/404-XXX		
	S7-300 A8E12	706-2300/406-XXX		
	S7-300 A4SI	706-2300/500-XXX		
	S7-300 A8SI	706-2300/502-XXX		

Cable Length Overview				
Item No.	-XXX	Length	Example	
706-2300/201-XXX	-100	1 m	706-2300/201-100	
	-200	2 m	706-2300/201-200	
	-300	3 m	706-2300/201-300	

System cables upon request:

- SCHNEIDER M340
- SCHNEIDER QUANTUM
- SCHNEIDER TSX 37 (Micro)
- SCHNEIDER TSX 57 (Premium)
- GEFANUC 90-30 / ALSPA 80-35
- ROCKWELL COMPACT LOGIX (1769)
- ROCKWELL CONTROL LOGIX (1756)

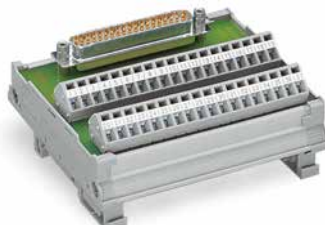
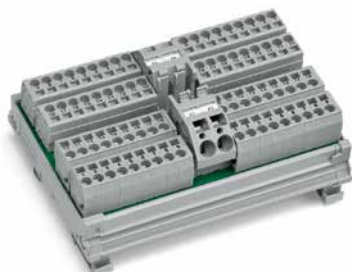


DIN-Rail-Mount Potential Multiplication Modules, Interface Modules

288/289 Series



DIN-rail-mount potential multiplication modules	Interface modules Terminal strips with CAGE CLAMP® (236 Series) Mounting carrier for DIN-35 rail 0.08 ... 2.5 mm ² 28 ... 12 AWG 5 ... 6 mm / 0.22 in.	Interface modules Terminal strips with CAGE CLAMP® (736/737 Series) Mounting carrier for DIN-35 rail 0.08 ... 2.5 mm ² 28 ... 12 AWG 5 ... 6 mm / 0.22 in.
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Item No.	Pack. Unit		Item No.	Pack. Unit		Item No.	Pack. Unit	
		Potential multiplication module, 4 potentials, each with 18 connection points 288-825 1 250 VAC/DC / 12 A			Interface modules with D-subminiature male connector, for mating connectors with solder connection 9-pole 289-545 1 15-pole 289-546 1 25-pole 289-547 1 37-pole 289-548 1 50-pole 289-549 1 for mating connectors with IDC 9-pole 289-540 1 15-pole 289-541 1 25-pole 289-542 1 37-pole 289-543 1 50-pole 289-544 1			Interface modules with male connector per DIN 41651 and multilevel PCB terminal strip 10-pole 289-611 1 14-pole 289-612 1 16-pole 289-613 1 20-pole 289-614 1 26-pole 289-615 1 34-pole 289-616 1 40-pole 289-617 1 50-pole 289-618 1 64-pole 289-619 1
		Potential multiplication module, 4 potentials, each with one supply and 18 connection points 288-837 1 250 VAC/DC / 12 A			Interface modules with D-subminiature female connector, for mating connectors with solder connection 9-pole 289-555 1 15-pole 289-556 1 25-pole 289-557 1 37-pole 289-558 1 50-pole 289-559 1 for mating connectors with IDC 9-pole 289-550 1 15-pole 289-551 1 25-pole 289-552 1 37-pole 289-553 1 50-pole 289-554 1			Interface modules with male connector per DIN 41651 and single-deck PCB terminal strips 10-pole 289-501 1 14-pole 289-502 1 16-pole 289-503 1 20-pole 289-504 1 26-pole 289-505 1 34-pole 289-506 1 40-pole 289-507 1 50-pole 289-508 1 64-pole 289-509 1
		Potential multiplication module, 4 potential groups, each with 6 connection points for positive and negative potentials 288-867 1 24 VDC / 10 A			Interface modules with D-subminiature male connector for mating connectors with solder connection 9-pole 289-720 1 15-pole 289-721 1 25-pole 289-722 1 37-pole 289-723 1			Also available for connectors complying with: DIN 41612 (types E, F) and DIN 41651 RJ-45 interface modules Cat. 5 RJ to 4-pole + S 289-174 RJ to 4-pole + S + P 289-178 RJ to 8-pole + S 289-175 RJ to 8-pole + S + P 289-179 RJ + S to RJ + S 289-172 RJ + S + P to RJ + S + P 289-176 RJ + S + P x RJ + S + P 289-177 RJ-45 interface module Cat. 6 RJ to 8-pole + S 289-195
		Potential multiplication module, 4 potentials, each with 24 VDC with 5 connection points of 24 V and 5 connection points of 0 V 288-870/000-030 1 24 VDC / 10 A			Interface modules with D-subminiature female connector for mating connectors with IDC 9-pole 289-725 1 15-pole 289-726 1 25-pole 289-727 1 37-pole 289-728 1			
		Potential multiplication module, 8 potentials, each with 24 VDC with 5 connection points of 24 V and 5 connection points of 0 V 288-870/000-040 1 24 VDC / 10 A						

Please find the entire product range in our Full Line Catalog. For additional information, visit www.wago.com.

S: Shield; P: Power jumper contacts

DIN-Rail-Mount PCB Carriers

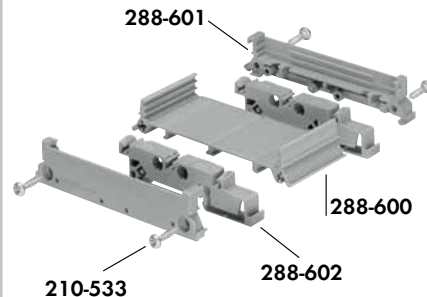
288 Series

Mounting carrier, size 1, 85 mm wide, for DIN-rail mounting of 71.2 mm wide PCBs

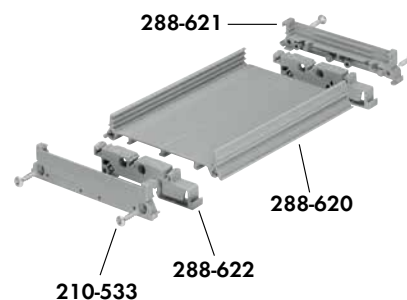
Mounting carrier, size 2, 106 mm wide, for DIN-rail mounting of 100 mm wide PCBs



Mounting Carrier, Size 1, Low-Profile



Mounting Carrier, Size 2, Low-Profile



Mounting Carrier, Size 2, High-Profile, with Cover



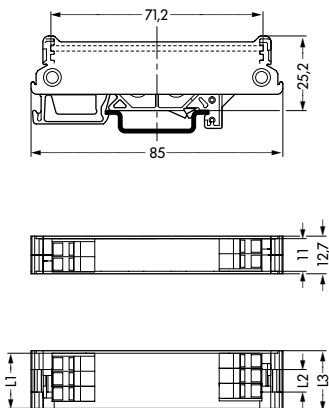
Item No.	Pack. Unit	Item No.	Pack. Unit
Lateral cover, size 1, low-profile, 6.35 mm thick	288-601 1	Lateral cover, size 2, low-profile, 8.75 mm thick	288-621 1
Mounting foot for DIN-35 rail	288-602 1	Mounting foot for DIN-35 rail	288-622 1
Carrier base, size 2, 1 m long	288-600 1	Carrier base, size 2, 1 m long	288-620 1
		Lateral cover, size 2, high-profile, 8.75 mm thick	288-626 1
		Cover, size 2, 1 mm long	288-627 1
Phillips screw, 2.9 x 13	210-533 25	Phillips screw, 2.9 x 13	210-533 25
2 pcs per lateral cover; for a module length of 39 mm or higher; lateral covers must be riveted for smaller modules.		2 pcs per lateral cover; for a module length of 39 mm or higher; lateral covers must be riveted for smaller modules.	
Rivet length depends on module length; rivets are not offered by WAGO.		Rivet length depends on module length; rivets are not offered by WAGO.	

Accessories, 288 Series

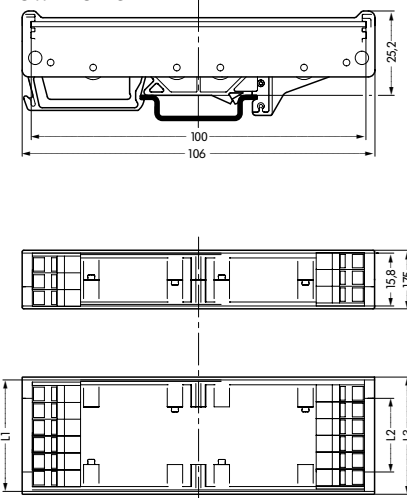
PCB length: L1
 Base length: L2 = L1 - 11 mm
 Mounting carrier length: L3 = L1 + 2 mm
 Lateral cover, type 1: 6.35 mm thick
 Free space between profile and PCB: 5 mm (when using upper groove)

PCB length: L1
 Base length: L2 = L1 - 15.8 mm
 Mounting carrier length: L3 = L1 + 2 mm
 Cover length: L4 = L1
 Lateral cover, size 2: 8.75 mm thick
 Free space between profile and PCB: 5 mm

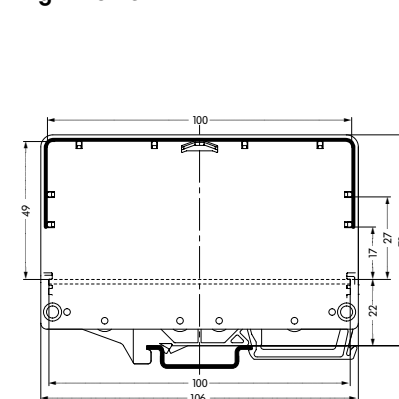
Mounting Carrier, Size 1, Low-Profile



Mounting Carrier, Size 2, Low-Profile



Mounting Carrier, Size 2, High-Profile



For technical explanations and abbreviations, see technical section.

Empty Component Plug Housings for Building Custom Circuits

280/286/2002 Series

Plug width: 5.2 mm/0.205 in. 10.4 mm/0.409 in.	Plug width: 5 mm/0.197 in. 10 mm/0.394 in. 250 V/4 kV/3 6 A (max.)	Plug width: 10 mm/0.394 in. 15 mm/0.591 in. 20 mm/0.787 in. 25 mm/0.984 in. 250 V/4 kV/3 6 A (max.)
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Type 1





































2

Type 6 5 4 3

Type 10 9 8 7

Type	Item No.	Pack. Unit	Type	Item No.	Pack. Unit	Type	Item No.	Pack. Unit
Empty component plugs for carrier terminal blocks, 2002 Series			Empty component plugs for carrier terminal blocks			Empty component plug housings for terminal blocks for pluggable modules		
Type 1	2002-800	100	Type 3	280-801	100	Type 7	286-110	1
2-pole, 5.2 mm/0.205 in. wide			2-pole, 5 mm/0.197 in. wide, Plug inside dimensions: W/H/D (3.2/15/15) mm			4-pole, 10 mm/0.394 in. wide		
Type 1	2002-810	50	Type 4	280-802	50	Type 8	286-111	1
2-pole, 10.4 mm/0.409 in. wide			2-pole, 10 mm/0.394 in. wide, Plug inside dimensions: W/H/D (8.2/15/15) mm			6-pole, 15 mm/0.591 in. wide		
Type 1	2002-820	50	Type 5	280-804	50	Type 9	286-112	1
4-pole, 10.4 mm/0.409 in. wide			4-pole, 10 mm/0.394 in. wide, Plug inside dimensions: W/H/D (8.2/15/15) mm			8-pole, 20 mm/0.787 in. wide		
Empty component plug for through terminal blocks, 2001, 2002, 2004 and 2006 Series			Empty component plug for through terminal blocks			Type 10		
Type 2	2002-880	50	Type 6	280-803	50	286-113		
2-pole, 10.4 mm/0.409 in. wide			2-pole, 10 mm/0.394 in. wide, Plug inside dimensions: W/H/D (8.2/15/15) mm			10-pole, 25 mm/0.984 in. wide		

Accessories, 280, 286 and 2002 Series

2-cond. carrier terminal block, 5.2 mm wide  0.25 ... 2.5 (4) mm ² /22 ... 12 AWG  10 ... 12 mm / 0.43 in. gray 2002-1661 50	2-cond. carrier terminal block, 5 mm wide  0.08 ... 2.5 mm ² /28 ... 14 AWG  8 ... 9 mm / 0.33 in. gray 280-916 100	Terminal blocks for pluggable modules, with 2-cond. blocks, polarized, with orange separator  0.08 ... 2.5 mm ² /28 ... 14 AWG  8 ... 9 mm / 0.33 in.
4-cond. carrier terminal block, 5.2 mm wide  0.25 ... 2.5 (4) mm ² /22 ... 12 AWG  10 ... 12 mm / 0.43 in. gray 2002-1861 50	3-cond. carrier terminal block, 5 mm wide  0.08 ... 2.5 mm ² /28 ... 14 AWG  8 ... 9 mm / 0.33 in. gray 280-610 100	4-pole, 12 mm/0.472 in. wide 280-618 1 6-pole, 17 mm/0.669 in. wide 280-619 1 8-pole, 22 mm/0.866 in. wide 280-638 1 10-pole, 27 mm/1.063 in. wide 280-639 1
2-cond. through terminal block, 5.2 mm wide  0.25 ... 2.5 (4) mm ² /22 ... 12 AWG  10 ... 12 mm / 0.43 in. gray 2002-1201 100	4-cond. carrier terminal block, 5 mm wide  0.08 ... 2.5 mm ² /28 ... 14 AWG  8 ... 9 mm / 0.33 in. gray 280-686 100	Terminal blocks for pluggable modules, with 4-cond. blocks, polarized, with orange separator  0.08 ... 2.5 mm ² /28 ... 14 AWG  8 ... 9 mm / 0.33 in.
3-cond. through terminal block, 5.2 mm wide  0.25 ... 2.5 (4) mm ² /22 ... 12 AWG  10 ... 12 mm / 0.43 in. gray 2002-1301 100	2-cond. through terminal block, 5 mm wide  0.08 ... 2.5 mm ² /28 ... 14 AWG  8 ... 9 mm / 0.33 in. gray 280-901 100	4-pole, 12 mm/0.472 in. wide 280-608 1 6-pole, 17 mm/0.669 in. wide 280-609 1 8-pole, 22 mm/0.866 in. wide 280-628 1 10-pole, 27 mm/1.063 in. wide 280-629 1
4-cond. through terminal block, 5.2 mm wide  0.25 ... 2.5 (4) mm ² /22 ... 12 AWG  10 ... 12 mm / 0.43 in. gray 2002-1401 100	3-cond. through terminal block, 5 mm wide  0.08 ... 2.5 mm ² /28 ... 14 AWG  8 ... 9 mm / 0.33 in. gray 280-681 100	1-cond./1-cond. terminal blocks for pluggable modules, with orange separator  0.08 ... 4 mm ² /28 ... 12 AWG  8 ... 9 mm / 0.33 in.
2-cond. through terminal block, 6.2 mm wide  0.5 ... 4 (6) mm ² /20 ... 10 AWG  11 ... 13 mm / 0.47 in. gray 2004-1201 50	4-cond. through terminal block, 5 mm wide  0.08 ... 2.5 mm ² /28 ... 14 AWG  8 ... 9 mm / 0.33 in. gray 280-833 100	4-pole, 11.1 mm/0.437 in. wide 769-192/769-319 10 6-pole, 16.1 mm/0.634 in. wide 769-193/769-319 5 8-pole, 21.1 mm/0.831 in. wide 769-194/769-319 5 10-pole, 26.1 mm/1.028 in. wide 769-195/769-319 5
2-cond. through terminal block, 7.5 mm wide  0.5 ... 6 (10) mm ² /20 ... 8 AWG  13 ... 15 mm / 0.55 in. gray 2006-1201 50	2-cond. through terminal block, 5 mm wide side-entry wiring,  0.08 ... 2.5 mm ² /28 ... 14 AWG  8 ... 9 mm / 0.33 in. gray 280-101 100	Unlocking pliers, for removing empty component plug housing covers 
Multi-purpose operating tool, for component plugs  2002-116 5		210-492 1

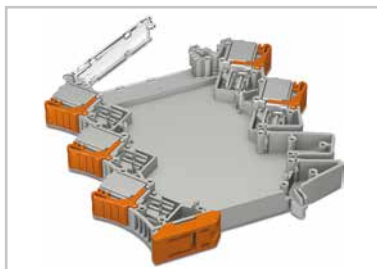
Please find the entire product range in our Full Line Catalog. For additional information, visit www.wago.com.

Modular Empty Housings

2857 Series

- Overview and Configuration -

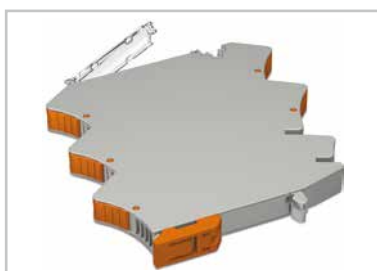
Supplied as a pre-assembled unit



1. Pre-assembled unit



2. Inserting and soldering the PCB



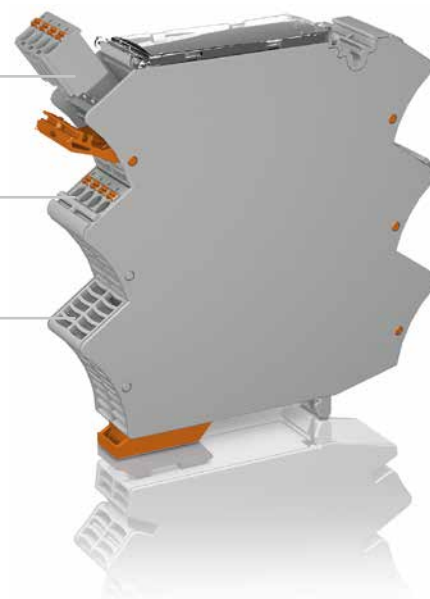
3. Snapping on side wall

Pluggable **picoMAX®** connections








Fixed **picoMAX®** connections

Empty slot

... freely selectable for each connection point

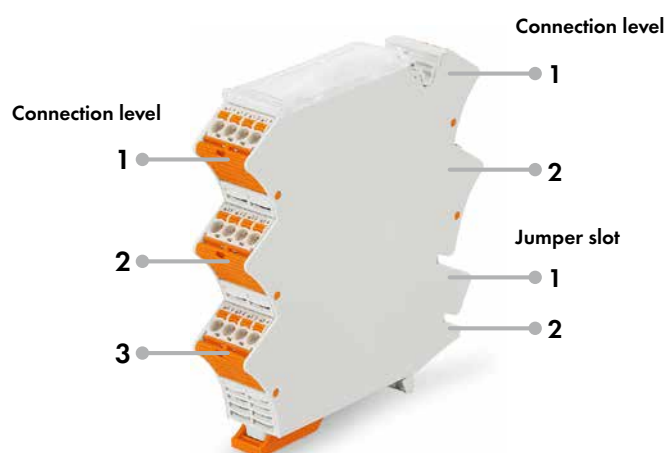


Housing configuration:

Housing width: 12.5 mm/0.49 in.	 2857-101	 2857-102	 2857-103	-
Housing width: 22.5 mm/0.89 in.	 2857-121	 2857-122	 2857-123	 2857-124
Connection levels	2-2	3-2	3-3	1-1
Jumper slots	2-2	0-2	0-0	2-2


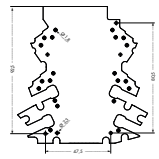
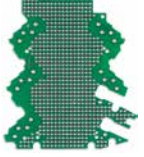
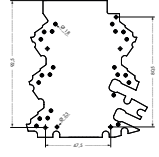
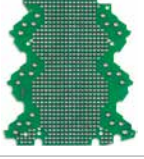
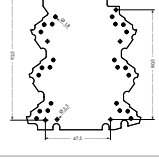

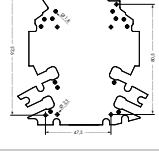
Mixed configuration (fixed/removable/empty slot) upon request.

Example of connection level and jumper slot assignment:



Connection levels	3-2
Jumper slots	0-2

Stripboards for installation in 12.5 mm and 22.5 mm empty housings:

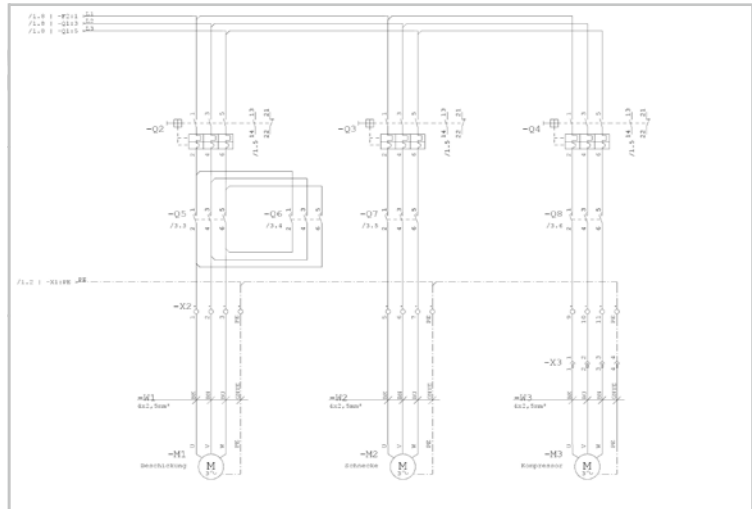
		2-2 connection levels, 2-2 jumper slots 2857-191/3140-000
		3-2 connection levels, 0-2 jumper slots 2857-192/3140-000
		3-3 connection levels, 0-0 jumper slots 2857-193/3140-000
		1-1 connection levels, 2-2 jumper slots 2857-194/3140-000

Smart Data Engineering

Supports Workflow from Control Cabinet Planning to Installation

Electrical Engineering

Directly import data from the CAE circuit diagram into the **smartDESIGNER** engineering software



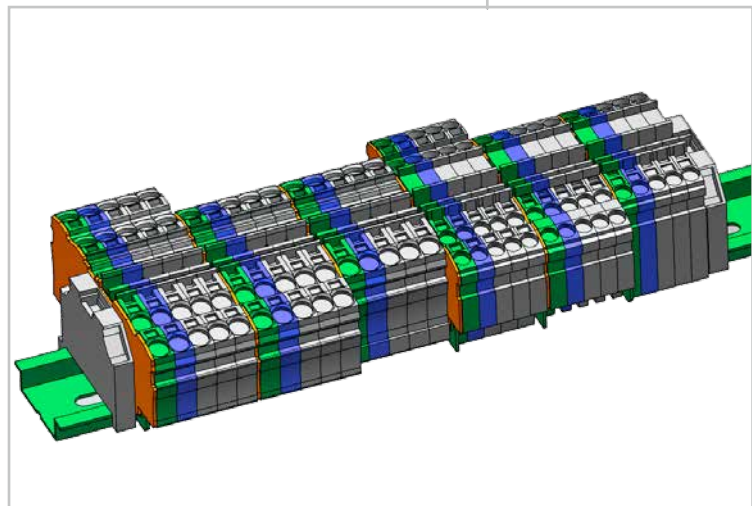
CLASSIFICATION AND PRODUCT DESCRIPTION

- 27 Elektr., Automaten- und Präzisionsbau
- 27-01 unterteilt
- 27-02 Schaltkasten-Modul
- 27-03 Transformator, Wandl., Drossel
- 27-04 Stromversorgungsgeräte
- 27-05 Lichtanlage, Leuchte
- 27-06 Motor- und Antrieb
- 27-07 Mess-, Prüf-, und Meßtechnik
- 27-08 Mess-, Prüf-, und Meßtechnik
- 27-09 Mess-, Prüf-, und Meßtechnik
- 27-10 Mess-, Prüf-, und Meßtechnik
- 27-11 Mess-, Prüf-, und Meßtechnik
- 27-12 Mess-, Prüf-, und Meßtechnik
- 27-13 Mess-, Prüf-, und Meßtechnik
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- 27-97 Mess-, Prüf-, und Meßtechnik
- 27-98 Mess-, Prüf-, und Meßtechnik
- 27-99 Mess-, Prüf-, und Meßtechnik
- 27-100 Mess-, Prüf-, und Meßtechnik

Technical and Commercial Item Data:
Classified by ETIM and ecl@ss – also in Advanced Format

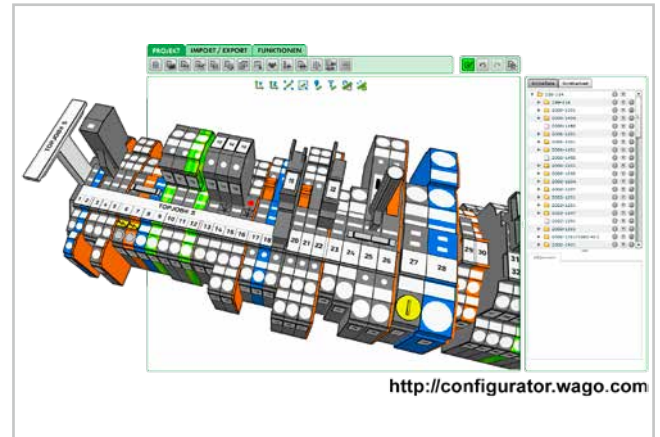
Mechanical Engineering

CAD export into all standard CAD formats and in different granularities



smartDESIGNER

- Free online configuration and ordering software for all electrical interconnect and automation components
- No installation
- Available worldwide 24 hours a day
- Current item data
- Edit via WAGO expert knowledge
- Design in full 3D

**smartSCRIPT**

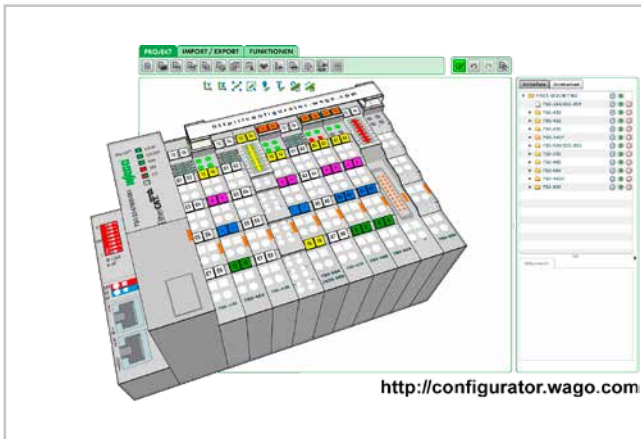
- XML-based software for all WAGO marking materials
- Data import from CAE systems
- Font size check
- Material selection wizard



Configuration made easy – <http://configurator.wago.com>

Smart Data Engineering

Fast and Easy Control Cabinet Marking



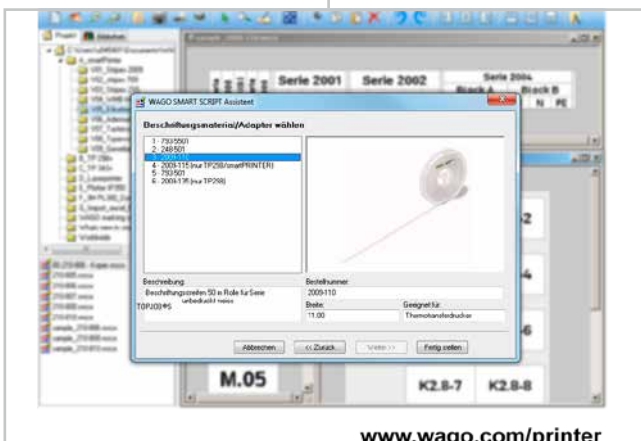
smartDESIGNER

After designing, print labeling materials directly out of the project via **smartPRINTER**

smartPRINTER

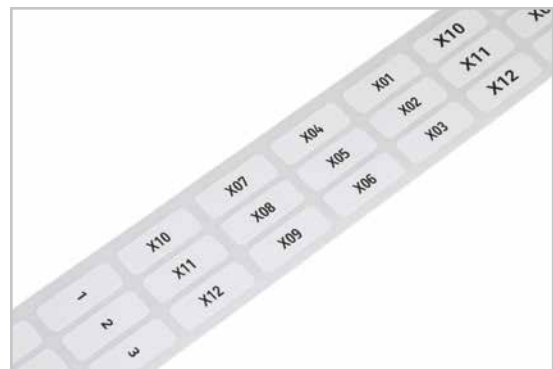
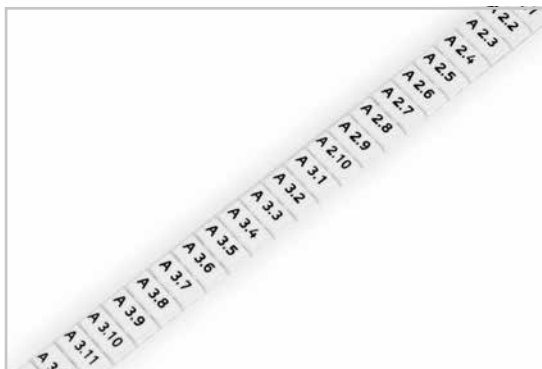
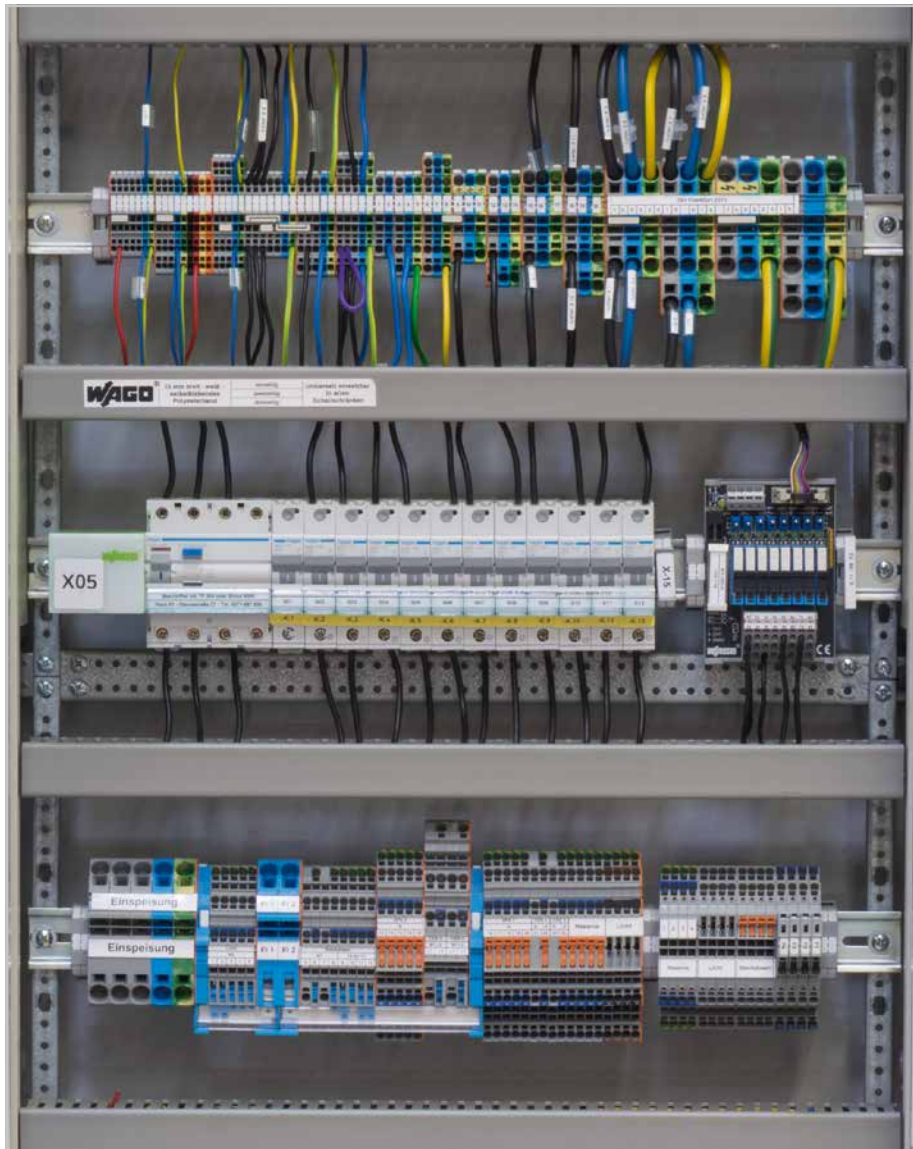
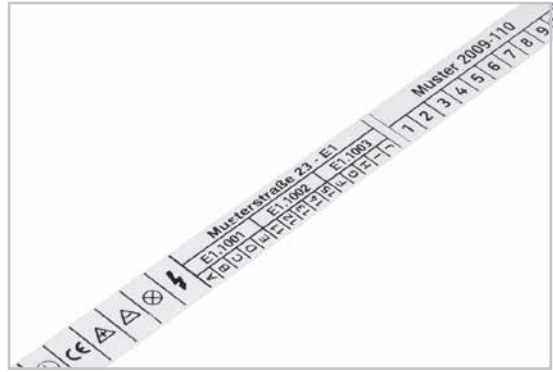
Thermal transfer printer quickly and easily labels the entire control cabinet:

- WAGO marking strips and markers
- Type plates
- Push-button markers
- Labels
- Cable and wire markers



smartSCRIPT

- Import from CAE systems or create customized marking
- Print directly on **smartPRINTER**



For more information, visit www.wago.com/smartprinter

smartPRINTER - Installation -



Printer upon delivery



Accessories for material unwinding



Open the printer.



Insert the ink ribbon.



Prepare the marking material.



Printing 2009-110 **markingSTRIP** on TOPJOB® S Terminal Blocks via **smartPRINTER**.



Insert and secure the suitable roller into the printer.



Printer has several interfaces:
USB, ETHERNET, serial COM port



Fast, cost-effective and easy to use - printing WMB Inline markers via **smartPRINTER**

Also visit www.wago.com/smartprinter

Thermal Transfer Printer, Plotter, Engraver 258 Series

smartPRINTER 300 dpi resolution Dimensions (W x H x D): 135 x 175 x 245 mm	IP 200 Plotter, including software Dimensions (W x H x D): 125 x 660 x 440 mm	EG 450 Engraver Dimensions (W x H x D): 240 x 290 x 315 mm (control unit + vacuum cleaner on top of each other)
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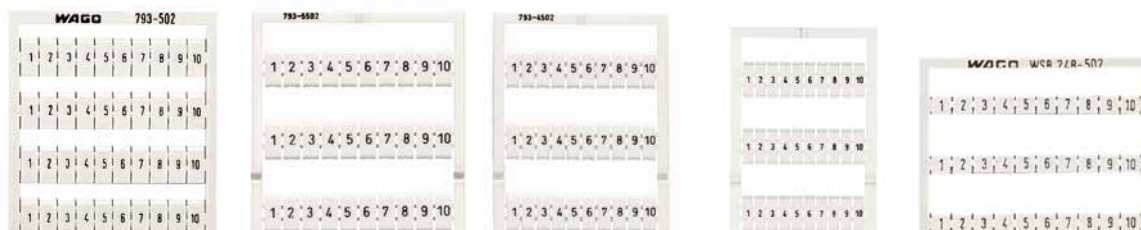
Description	Item No.	Description	Item No.	Description	Item No.
smartPRINTER	258-5000	IP 200 Plotter, A4	258-200	EG 450 Engraver	258-450
includes power supply unit and cable, USB cable, 1 x marking strip roll and WMB Inline markers, 2 x roller, 1 x roll holder, 1 x ink ribbon, smartSCRIPT marking software and driver		Maximum plot area	440 x 305 mm (A3) 220 x 305 mm (A4)	Technical data (engraving spindle):	
Printing method	Thermal transfer	Interfaces	Parallel Centronics (LPT), USB 1.1	Rotational speed	min. 5000 rpm, max. 50000 rpm
Print head	Glass layer, spring-mounted	Control language	Based on HP-GL 7475A	Torque	6 Ncm
Print resolution	300 dpi	Data buffer	16 MB	Frequency	83 ... 830 Hz
Print speed	127 mm/s (max.) (recommended: 50.8 mm/s)	Speed	400 mm/s (max.)	Power consumption	60 W (max.)
Print width	47 mm (max.)	Drive system	Two-phase stepper motor	Collets	Shaft diameter: 3 mm
Print length	762 mm (max.)	Pen storage unit	Max. 4 pens (optimum seal)	Clamping mechanism	Head clamping
Operating display	Color TFT-LCD with navigation button	Plotter pen	Special plotter pens with HP receptacle	Run-out with collet	0.03 mm
Memory	8 MB Flash, 16 MB SDRAM	Addressable resolution	0.01 mm	Housing	Aluminum
Interfaces	ETHERNET 10/100, USB, RS-232	Repeat accuracy	0.05 mm	Clamping diameter	25 mm
Sensors	Transmissive/reflective sensor (centrally mounted)	Power supply	Via separate desktop power supply unit, equipped with exchangeable supply line	Ball bearing type	Steel, lifetime lubricated, 2-times
Operating voltage	100 ... 240 VAC 50 ... 60 Hz	Operating voltage	120 ... 240 VAC, 50 ... 60 Hz	Cooling	Automatic via built-in fan
Dimensions (W x H x D)	135 x 175 x 245 mm	Voltage range	90 ... 264 VAC	Application area	Engraving only
Weight	2,000 g (without printing material)	Current consumption (internal)	0.3 A (max.) at 220 VAC	Guaranteed bearing operation	Min. 1,000 hours if used properly
Operating temperature	5 °C ... 40 °C (41 °F ... 104 °F)	Weight	approx. 8,000 g	Technical data (VEB 500 Control Unit)	
Storage temperature	-20 °C ... 50 °C (-4 °F ... 122 °F)	WAGO disposable plotter pen		Operating voltage	100 ... 240 VAC / 50 ... 60 Hz
Safety approvals	CE (EMC)	0.18 mm line width	258-326	Weight	Engraving spindle + control unit + vacuum cleaner + accessories: 8,000 g
Ink ribbon	Reel diameter: 40 mm; Internal core diameter: 0.5" (12.7 mm); Length (max.): 110 m; Width (max.): 58 mm	0.25 mm line width	258-327	Engraver set (sizes: 0.2/0.3/0.4/0.5/ 0.7/1 mm) 258-452	
Ink ribbon for smartPRINTER	258-5005	0.35 mm line width	258-328	Engraver	
Roller for markingSTRIP	258-5006	Carrier plate for:		Engraver size: 0.2 mm	258-452/000-002
Roller for WMB Inline	258-5007	WSB 5 mm	258-361	Engraver size: 0.3 mm	258-452/000-003
Roller for Miniature WSB Inline	258-5008	WSB 4 mm	258-362	Engraver size: 0.4 mm	258-452/000-004
Roller for Phoenix products	258-5009	Miniature WSB	258-363	Engraver size: 0.5 mm	258-452/000-005
Roller for Weidmüller products	258-5010	Group marker carrier (209-112)	258-364	Engraver size: 0.7 mm	258-452/000-007
Carrying case for smartPRINTER	258-5015	WMB (3.5 mm/4 mm/5 mm)	258-368	Engraver size: 1 mm	258-452/000-010
Light gray, with foam padding for printer		Marker tags (210-199/200)	258-369	Engraver (stainless steel)	
Dimensions (W x H x D): 50 x 26 x 33 cm		WAGO marker cards (210-110/120)	258-370	Engraver size: 0.2 mm	258-458/000-002
		Other receptacles available upon request		Engraver size: 0.4 mm	258-458/000-004
		Software for Printer and Plotter		Vacuum cleaner bag (type Y98) 258-457	
		WAGO smartDESIGNER		Engraver carrier plates	
		WAGO smartSCRIPT		90 mm x 100 mm x 3	258-454
		VarioSign		60 mm x 100 mm x 4	258-455
				30 mm x 100 mm x 9	258-456
For additional information, visit www.wago.com/smartprinter		Visit www.wago.com/printer		DIN A4	258-383

Marker Cards

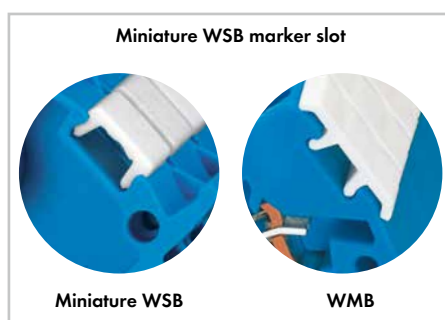
WMB Multi Marking System

793 / 794 / 248 Series

WAGO WMB Multi Marking System for terminal blocks featuring Miniature WSB and WSB marker slots, 10 strips with 10 markers for each card, 5 cards per packing unit	WAGO WMB Multi Marking System for terminal blocks featuring Miniature WSB and WSB marker slots, 10 strips with 10 markers for each card, 5 cards per packing unit	WAGO WMB Multi Marking System and WAGO Miniature WSB Quick Marking System 10 strips with 10 markers for each card, 5 cards per packing unit
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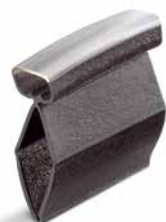
Marking	Item No.	Item No.	Item No.	Item No.	Item No.
		WMB Multi Marking System			Miniature WSB
		for terminal block width:			for 264, 750, 769 Series
	5 mm	5 ... 5.2 mm	4 ... 4.2 mm	3.5 mm	
		stretchable	stretchable		
plain	793-501	793-5501	793-4501	793-3501	248-501
1 ... 10 (10x)	793-502	793-5502	793-4502	793-3502	248-502
11 ... 20 (10x)	793-503	793-5503	793-4503	793-3503	248-503
21 ... 30 (10x)	793-504	793-5504	793-4504	793-3504	248-504
31 ... 40 (10x)	793-505	793-5505	793-4505	793-3505	248-505
41 ... 50 (10x)	793-506	793-5506	793-4506	793-3506	248-506
1 ... 9 (10x)	793-565	793-5565	793-4565	793-3565	248-565
1 ... 50 (2x)	793-566	793-5566	793-4566	793-3566	248-566
51 ... 100 (2x)	793-507	793-5507	793-4507	793-3507	248-507
101 ... 150 (2x)	793-508	793-5508	793-4508	793-3508	248-508
151 ... 200 (2x)	793-509	793-5509	793-4509	793-3509	248-509
R, S, T, U, V, W, X, Y, Z, MP	793-544	793-5544	793-4544	793-3544	248-544
A, B, P, N, PE, PEN, L1, L2, L3, ⊕	793-545	793-5545	793-4545	793-3545	248-545
(in strips with 10 identical letters)					
for double-deck terminal blocks					All listed markings are also available on colored marker cards (black printing).
1, 3, 5, ..., 99 and 2, 4, 6, ..., 100 (1x)	793-599	793-5599	793-4599		Item no. suffixes for colored marker cards:
for triple-deck terminal blocks					● ... /000-002
1, 4, 7, ..., 88 and 2, 5, 8, ..., 89 and 3, 6, 9, ..., 90 and 91, 94, 97, ..., 99 (1x)	794-557	794-5557	-		● ... /000-005
					● ... /000-006
					● ... /000-007
					● ... /000-012
					● ... /000-017
					● ... /000-023
					● ... /000-024



Marking Conductors from 0.25 ... 16 mm²







211 Series

Marking sleeve, halogen-free for one marker, to be fitted prior to conductor termination	Marking sleeve, halogen-free for one marker, to be fitted prior to conductor termination	Marking sleeve, halogen-free, for cable tie, for one marker, can also be fitted after install
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Description	Item No.	Pack. Unit	Description	Item No.	Pack. Unit	Description	Item No.	Pack. Unit
Marking sleeve, 12 mm long			Marking sleeve, 23 mm long			Marking sleeve, 23 mm long		
for 1.6 ... 3.2 mm conductor diameter or 0.25 ... 1.5 mm ² cross-section	211-112	2000	for 1.6 ... 3.2 mm conductor diameter or 0.25 ... 1.5 mm ² cross-section	211-122	2000	for 10 mm ² conductors and larger for 6 mm Ø cables and larger	211-129	1000
for 2.2 ... 4.5 mm conductor diameter or 0.5 ... 4 mm ² cross-section	211-113	2000	for 2.2 ... 4.5 mm conductor diameter or 0.5 ... 4 mm ² cross-section	211-123	2000	Note: Only use with markers for plotter.		
for 3.7 ... 5.9 mm conductor diameter or 2.5 ... 6 mm ² cross-section	211-114	1000	for 3.7 ... 5.9 mm conductor diameter or 2.5 ... 6 mm ² cross-section	211-124	1000	Cable tie set 2.5 x 100 mm, 25 cable ties per set	807-090/101-100	1
for 5.5 ... 10 mm conductor diameter or 10 ... 25 mm ² cross-section	211-115	1000	for 5.5 ... 10 mm conductor diameter or 10 ... 25 mm ² cross-section	211-125	1000			

Accessories, 211 Series

Markers, for thermal transfer printer,  3,000 markers per roll; 12 mm long ○ 211-111 1	Markers, for thermal transfer printer,  3,000 cards per roll; 23 mm long ○ 211-121 1
Markers, for plotter,  57 markers per card, 12 mm long ○ 211-110 1	Markers, for plotter,  34 markers per card, 23 mm long ○ 211-120 1
Carrier plate for marker cards (IP 350 Plotter)  258-370 1	Carrier plate for marker cards (IP 350 Plotter)  258-370 1

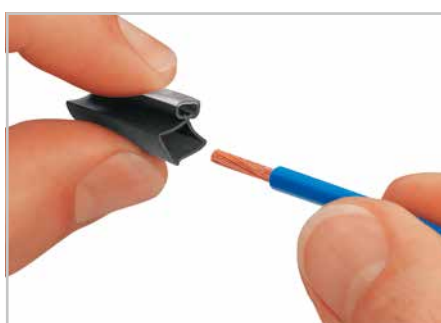


Slide the plotted or printed marker into the marking sleeve receptacle. Exchanging the marker is also possible after the conductor has been terminated.

Applications



Marking conductors via marking sleeves.



Compress the sleeve and slide it onto the conductor to be marked.



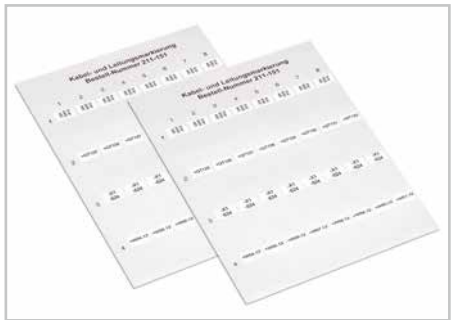
Attach the marking sleeve (211-129) to individual cables or conductors via cable ties (807-090/101-100).

Conductor Markers for Thread-On Mounting Self-Laminating Labels for Cable Marking 211 Series

Conductor markers for thread-on mounting
Shrink tubes for conductor marking

Self-laminating labels for cable marking
on DIN A4 sheets or roll
Cable diameter: approx. 3 ... 14 mm

Conductor markers

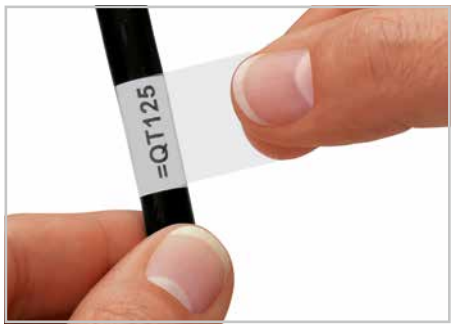


Self-laminating labels are available on A4 sheets for laser printers (plotters) or are supplied on roll for thermal transfer printers.

Description	Item No.	Pack. Unit	Description	Item No.	Pack. Unit
Conductor markers for thread-on mounting, 1,000 markers/roll, for 0.75 ... 1.5 mm ² conductors	211-861	1	Labels on DIN A4 sheets, for laser printer		
1,000 markers/roll, for 2.5 ... 6 mm ² conductors	211-862	1	Marking surface: "S" = 9 mm x "B" = 17 mm "L" = 35 mm for max. 8 mm cable diameter 70 labels per sheet		
1,000 markers/roll, for 6 ... 16 mm ² conductors	211-863	1	211-150	20	
Shrink tubes for conductor marking, halogen-free, 2:1 shrink ratio			Marking surface: "S" = 13 mm x "B" = 21 mm "L" = 56 mm for max. 14 mm cable diameter 32 labels per sheet		
20 m/roll			211-500	25	
○ 2.4 mm Ø, 0.25 ... 0.75 mm ²	211-500	1	Conductor markers, plain		
● 2.4 mm Ø, 0.25 ... 0.75 mm ²	211-500/000-002	1	Marking surface: 9 x 18 mm, 1,000 markers per roll		
○ 3.2 mm Ø, 0.75 ... 1 mm ²	211-501	1	211-855	1	
● 3.2 mm Ø, 0.75 ... 1 mm ²	211-501/000-002	1	Marking surface: 15 x 22 mm, 1000 markers per roll		
○ 4.8 mm Ø, 1 ... 2.5 mm ²	211-502	1	211-856	1	
● 4.8 mm Ø, 1 ... 2.5 mm ²	211-502/000-002	1	Marking surface: 18 x 44 mm, 500 markers per roll		
○ 6.4 mm Ø, 4 ... 6 mm ²	211-503	1	211-857	1	
● 6.4 mm Ø, 4 ... 6 mm ²	211-503/000-002	1			
15 m/roll					
○ 9.5 mm Ø, 10 ... 16 mm ²	211-504	1			
● 9.5 mm Ø, 10 ... 16 mm ²	211-504/000-002	1			
○ 12.7 mm Ø, 25 ... 35 mm ²	211-505	1			
● 12.7 mm Ø, 25 ... 35 mm ²	211-505/000-002	1			
○ 19.0 mm Ø, 35 ... 50 mm ²	211-506	1			
● 19.0 mm Ø, 35 ... 50 mm ²	211-506/000-002	1			



Remove the printed label from the sheet or roll.

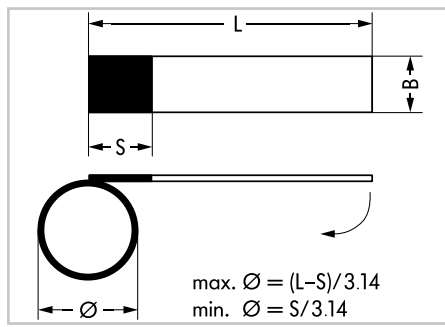


Wrap the label around the conductor or cable. The transparent laminate protects the marking.

Application and Dimensions



Conductor Markers for Thread-On Mounting













Dimensions of self-laminating label (in mm)



Compress the shrink tube and slide it onto the conductor to be marked.

I/O Marking, Labels and Push-Button Markers

210 / 211 Series

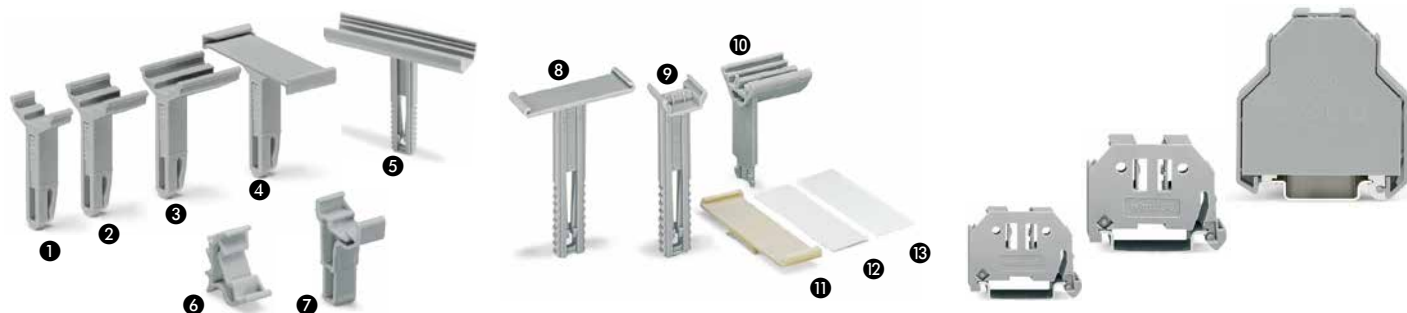
	Description	Technical Data	Color/Item No.
	Markers for I/O components (requires 258-371 Carrier Plate for plotting)	Plotter, 12 x 7 mm	○ 211-211
	Label roll, polyester, self-adhesive	15 x 6 mm, 3,000 labels/roll	○ 210-805
		15 x 6 mm, 3,000 labels/roll	● 210-805/000-002
		15 x 9 mm, 3,000 labels/roll	○ 210-806
		15 x 9 mm, 3,000 labels/roll	● 210-806/000-002
		20 x 8 mm, 3,000 labels/roll	○ 210-807
		20 x 8 mm, 3,000 labels/roll	● 210-807/000-002
		9.5 x 25 mm, 1,500 labels/roll	○ 210-808
		5 x 35 mm, 3,000 labels/roll	● 210-810
	Label roll, fabric, self-adhesive	20 x 7 mm, 3,000 labels/roll	○ 210-811
		20 x 7 mm, 3,000 labels/roll	● 210-811/000-002
	Type plates, polyester	70 x 33 mm, 500 plates/roll	○ 210-801
		70 x 33 mm, 500 plates/roll	○ 210-802
		44 x 99 mm, 500 plates/roll	○ 210-803
		44 x 99 mm, 500 plates/roll	○ 210-804
	Continuous labels, polyester, self-adhesive for PCB and MCS	2.3 mm wide, 9 lines at 25 m	○ 210-831
		3 mm wide, 9 lines at 25 m	○ 210-832
		5 mm wide, 5 lines at 25 m	○ 210-834
		6 mm wide, 5 lines at 25 m	○ 210-833
	Push-button markers, semi-permanent adhesive	26.5 x 18 mm, 1,000 markers/roll	○ 210-850
		27.5 x 17.5 mm, 1,000 markers/roll	○ 210-856
		22 x 22 mm, 1,000 markers/roll	○ 210-858
		27 x 27 mm, 1,000 markers/roll	○ 210-860
		27 x 12.5 mm, 1,000 markers/roll	○ 210-862
	Plastic covers for push-button markers	26.5 x 18 mm, transparent, 100 covers	○ 210-851
		27.5 x 17.5 mm, transparent, 100 covers	○ 210-857
		22 x 22 mm, transparent, 100 covers	○ 210-859
		27 x 27 mm, transparent, 100 covers	○ 210-861
		27 x 12.5 mm, transparent, 100 covers	○ 210-863
	Push-button markers, permanent adhesive	27 x 19 mm, 350 markers/roll	○ 210-852
		27 x 18 mm, 350 markers/roll	○ 210-855
	Universal push-button frame for 210-852	27 x 19 mm, transparent, 100 frames	○ 210-853
	Label roll DD (device designation), polyester	28 x 28 mm, 175 µm thick, 500 labels/roll	○ 210-854
	Marking strip	15 mm, 50 m roll	○ 210-701

Group Marker Carriers

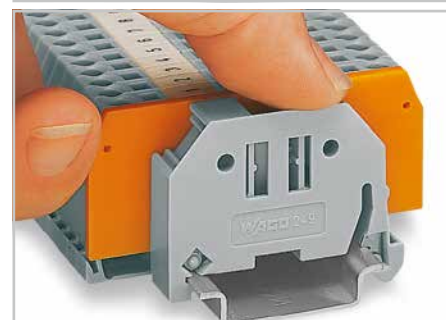
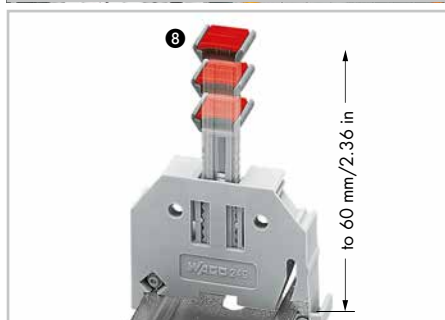
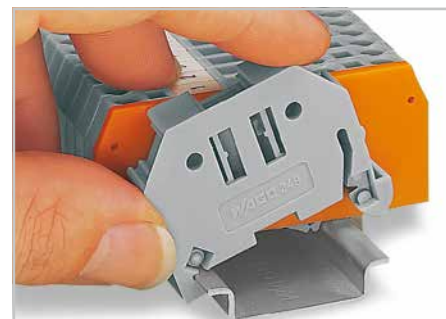
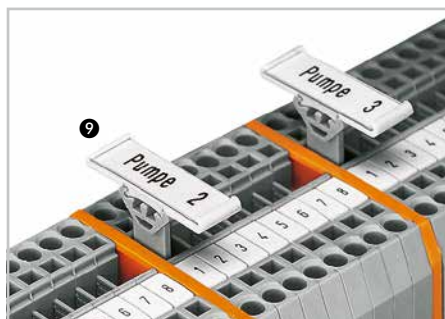
End Stops

209 / 210 / 249 / 709 / 2002 / 2009 Series

TOPJOB® S group marker carriers	Group marker carriers	Screwless end stops for DIN-35 rail
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Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
TOPJOB® S group marker carriers, snap-on type for jumper slot, for WMB Multi Marking System, WMB Inline and marking strips		Height-adjustable group marker carriers, for 249-116 and 249-117 end stops, for 1 marker or self-adhesive label and transparent protection covers		Screwless end stop, for DIN-35 rail 6 mm wide	249-116 100 (4 x 25)
5 mm wide 2009-191 ①	50 (2x25)	10 mm wide 249-119 ⑧	50 (2x25)	Screwless end stop, for DIN-35 rail 10 mm wide	249-117 50 (2 x 25)
10 mm wide 2009-192 ②	50 (2x25)	6 mm wide 249-120 ⑧	50 (2x25)	Screwless end stop, for DIN-35 rail 14 mm wide	249-197 10
15 mm wide 2009-193 ③	50 (2x25)	for 2 WSB Quick markers each or 1 x marking strip (2009-110)			
TOPJOB® S group marker carrier snap-on type for jumper slot, for marking strips		249-118 ⑨	100 (4x25)		
10 mm wide 2009-196 ④	50 (2x25)	Group marker carrier, fits into jumper slot of rail-mounted terminal blocks, for up to 3 WMB markers			
TOPJOB® S group marker carrier, snap-on type for end stops (249-116 and 249-117), adjustable in height from 45 to 61 mm for 9 WMB markers or marking strips		15 mm wide 209-140 ⑩	50		
12.2 mm wide 2009-163 ⑤	50 (2x25)	Group marker carrier, snaps into plastic end stop			
Marker carrier, for lateral marker slots		10 mm wide 209-112 ⑪	50		
5 mm wide 2009-198 ⑥	200 (8x25)	Markers, from white cardboard, for self-marking, 100 markers per sheet			
Marker carrier, for jumper slots (2002 Series)		209-113 ⑫	1 sheet		
5 mm wide 2002-161 ⑦	100 (4x25)	Stickers, for self-marking, 100 stickers per sheet			
		210-345	1 sheet		
		Protection cover, transparent			
		209-114 ⑬	50		
		Carrier-through element, height-adjustable			
		709-118	25		
		Carrier-end element, height-adjustable			
		709-119	25		



11

Sealable, Transparent Covers for Rail-Mounted Terminal Blocks

Collective Carriers for Jumpers

209 / 282 / 709 / 2009 Series

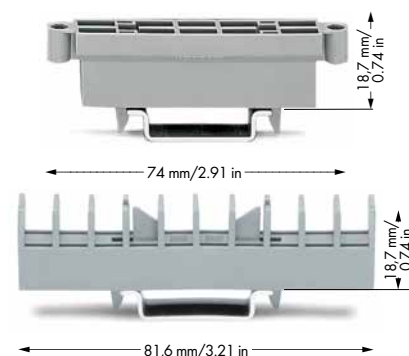
Cover and cover carrier, type 1, suitable for:
279 ... 282 Series Rail-Mounted Terminal Blocks
264 Series Miniature Rail-Mounted Terminal Blocks

Cover and cover carrier, type 2, suitable for:
283 ... 285 Series Rail-Mounted Terminal Blocks
280/281 Series Double-/Triple-Deck Terminal Blocks
280 Series Sensor/Actuator Terminal Blocks
282 Series Disconnect/Test Terminal Blocks for Transformer Circuits

Switchgear cabinet drawer
Collective carrier for adjacent jumpers
Collective carriers for jumpers



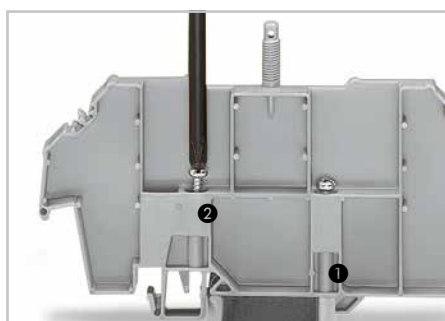
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Item No.	Pack. Unit
Cover, type 1, 1 m long, for cover carrier (type 1), transparent			Cover, type 2, 1 m long, for cover carrier (type 2), transparent			Switchgear cabinet drawer, DIN-35 rail mount drawer	
	709-153	10		709-154	1	709-591	1



Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Cover carrier, type 1, incl. mounting/securing screws and knurled nuts			Cover carrier, type 2, incl. mounting/securing screws and knurled nuts			Collective carrier for adjacent jumpers, 10.7 mm wide		
○	709-167	10	○	709-168	10	○	209-100	50 (2x25)
Accessories, 709 Series			Marking card with 6 marking strips, plain			Collective carrier for TOPJOB® S Jumpers, 16.9 mm wide		
Spare mounting/securing screws			709-183			25		
209-196			1			Suitable for 2000 ... 2016 Series Jumpers		
200 (8x25)						Collective carrier for jumpers, 15.8 mm wide		
Spare knurled nuts						25		
210-549						Suitable for jumpers for: transverse switching terminal blocks (282-811) and longitudinal switching disconnect terminal blocks (282-821)		
100 (4x25)								



Application example:
Cover (type 1) with safety warning and lead seals.



1 Mounting screw - prevents the cover carrier from being moved on the rail.
2 Securing screw - prevents lifting off from rail.



The switchgear cabinet drawer is the ideal place to store small parts that are not routinely used (e.g., instructions, test plug adapters, jumpers, spare fuses).

Carrier Rails

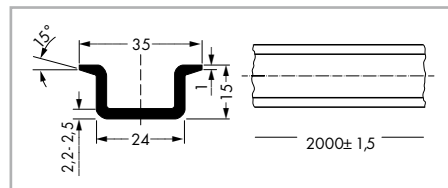
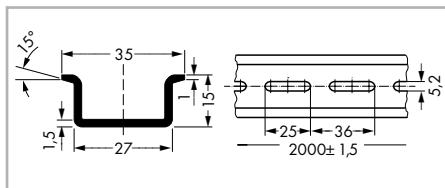
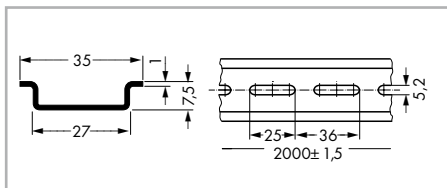
Angled Support Brackets

210 Series

Carrier rail, 35 x 7.5 mm, 1 mm thick, per IEC 60715, steel, zinc-plated, I _N 76 A (reference length of 1 m)	Carrier rail, 35 x 15 mm, 1.5 / 2.3 mm thick, per IEC 60715, steel, zinc-plated, I _N 125 A (reference length of 1 m)	Carrier rail, 35 x 15 mm, 2.3 mm thick, per IEC 60715, copper, unplated, I _N 309 A (reference length of 1 m)
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Length	Item No.	Pack. Unit	Length	Item No.	Pack. Unit	Length	Item No.	Pack. Unit
Steel carrier rail, 35 x 7.5 mm, 1 mm thick, unslotted, 2 m long	210-113	10	Steel carrier rail, 35 x 15 mm, 1.5 mm thick, unslotted, 2 m long	210-114	10	Copper carrier rail, 35 x 15 mm, 2.3 mm thick, unslotted, 2 m long	210-198	10
Steel carrier rail, 35 x 7.5 mm, 1 mm thick, slotted, 2 m long	210-112	10	Steel carrier rail, 35 x 15 mm, 1.5 mm thick, slotted, 2 m long	210-197	10			
			Steel carrier rail, 35 x 15 mm, 2.3 mm thick, unslotted, 2 m long	210-118	10			

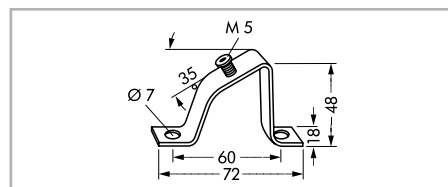
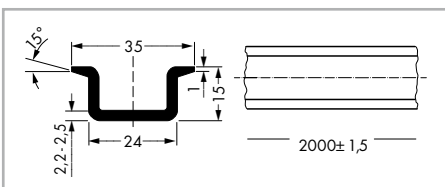
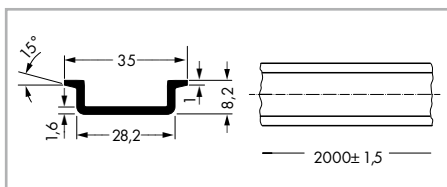


Carrier rail, 35 x 7.5 mm, 1.5 mm thick, per IEC 60715, aluminum, unplated, I _N 76 A (reference length of 1 m)	Carrier rail, 35 x 15 mm, 2.3 mm thick, per EN 60715, PA6-GV30-V0 plastic	Accessories
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Length	Item No.	Pack. Unit	Length	Item No.	Pack. Unit
Aluminum carrier rail, 35 x 7.5 mm, 1.5 mm thick, unslotted, 2 m long	210-196	10	Plastic carrier rail, 35 x 15 mm, 2.3 mm thick, unslotted, 2 m long	210-509	1

	Item No.	Pack. Unit
Angled support bracket, without screw	210-148	10
Screw M 5 x 8, for angled support bracket	210-149	100 (5x20)
Rail end cap, for DIN-35 rail (7.5 mm high) gray	210-109	50 (2x25)



Operating Tools

209 / 210 / 279 / 280 / 282 Series

<p>Operating tools, per DIN 5264, with a partially insulated shaft, ideal for operating WAGO terminal blocks</p>	<p>Insulated multipole operating tools for front-entry terminal blocks</p>	<p>Short operating tools, per DIN 5264, with a partially insulated shaft, ideal for operating WAGO terminal blocks</p>
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Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
<p>Operating tool with a partially insulated shaft, type 1, (2.5 x 0.4) mm blade, suitable for 218, 233, 234, 235, 250, 253, 279, 726, 727, 733, 734, 735, 750, 752, 753, 770, 2000, 2001, 2020 Series</p> <p>210-719 1</p>		<p>Operating tool, insulated, suitable for 279 Series</p> <p>1-pole 209-129 1</p> <p>2-pole 279-432 1</p> <p>3-pole 279-433 1</p> <p>10-pole 279-440 1</p>		<p>Operating tool, (2.5 x 0.4) mm blade, suitable for 218, 233, 234, 235, 250, 253, 279, 726, 727, 733, 734, 735, 750, 752, 753, 770, 2000, 2001, 2020, 2734 Series</p> <p>210-647 1</p>	
<p>Operating tool with a partially insulated shaft, type 2, (3.5 x 0.5) mm blade, suitable for 231, 232, 236, 255, 256, 257, 260, 261, 262, 264, 270, 280, 281, 290, 721, 722, 736, 737, 738, 742, 745, 775, 776, 777, 769, 780, 781, 804, 869, 870, 880, 2002, 2003, 2004, 2005, 2022 Series</p> <p>210-720 1</p>		<p>suitable for 264*, 280, 281** Series</p> <p>1-pole 209-130 1</p> <p>2-pole 280-432 1</p> <p>3-pole 280-433 1</p> <p>4-pole 280-434 1</p> <p>5-pole 280-435 1</p> <p>6-pole 280-436 1</p> <p>7-pole 280-437 1</p> <p>8-pole 280-438 1</p> <p>9-pole 280-439 1</p> <p>10-pole 280-440 1</p>		<p>Operating tool, angled, (2.5 x 0.4) mm blade, suitable for 279, 2000, 2001, 2020 Series</p> <p>210-648 1</p>	
<p>Operating tool with a partially insulated shaft, type 3, (5.5 x 0.8) mm blade, suitable for 282, 283, 284, 285, 745, 782, 783, 784, 785, 2006, 2010, 2016 Series</p> <p>210-721 1</p>		<p>suitable for 281 Series</p> <p>5-pole 281-440 1</p>		<p>Operating tool, angled, (3.5 x 0.5) mm blade, suitable for 231, 232, 236, 255, 256, 257, 260, 261, 262, 264, 280, 281, 721, 722, 736, 737, 738, 742, 745, 804, 869, 870, 880, 2002, 2004, 2022 Series</p> <p>210-658 1</p>	
<p>Set of operating tools with a partially insulated shaft, type 1, (2.5 x 0.4) mm blade, type 2, (3.5 x 0.5) mm blade, type 3, (5.5 x 0.8) mm blade</p> <p>210-722 1</p>		<p>*only 1- and 2-pole</p> <p>**only up to 3-pole</p>			

Application notes:



Set of operating tools in a box



Commoning front-entry disconnect terminal blocks via comb-style jumper bar using a 10-pole operating tool.



The operating tools with blade dimensions per DIN 5264 are ideal for operating 280 Series Front-Entry Sensor/Actuator Terminal Blocks.

Operating Tools for MCS MIDI

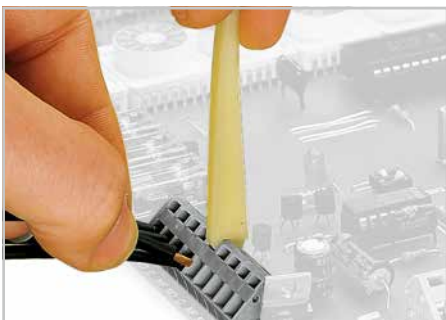
231 / 233 / 236 / 733 / 734 / 769 Series

Operating tools for factory wiring of PCB terminal strips	Operating levers for male and female connectors equipped with CAGE CLAMP®	Operating tools for male and female connectors equipped with CAGE CLAMP®
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Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Operating tool, for 233, 733, 2060 Series			Operating lever, for 231, 232, 721, 722, 723, 731, 732 Series			Operating tool, for 231, 232, 721, 722, 723, 731, 732 Series		
● metal, partially insulated	233-335 ①	1	○	231-131 ⑥	100	○	231-159 ⑬	100
○ insulated	233-332 ②	25	●	231-291 ⑦	100	●	231-231 ⑭	100
● insulated	233-331 ③	25	for 734 Series			for 734 Series		
for 236 Series			○	734-230 ⑧	100	○	734-190 ⑮	100
○ insulated	236-332 ④	400	●	734-191 ⑨	100	●	734-231 ⑯	100
metal	236-335 ⑤	1	for 733 Series					
			○	733-130 ⑩	100			
			●	733-191 ⑪	100			
			for 769 Series					
			○	769-434 ⑫	2000			

Application notes:



Conductor termination via operating tool



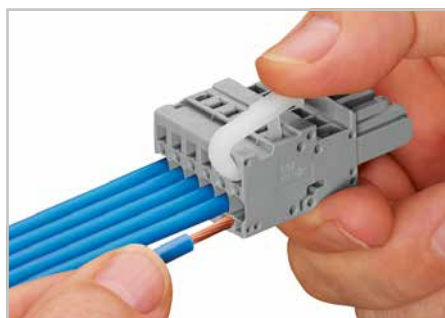
Conductor termination via operating lever



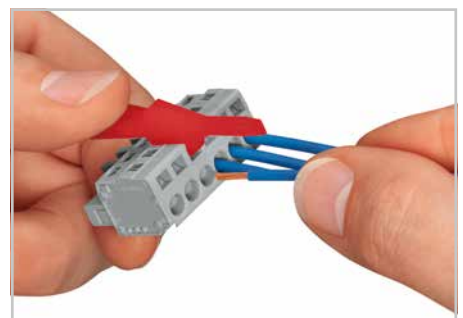
Conductor termination parallel to CAGE CLAMP® actuation



Conductor termination via operating tool



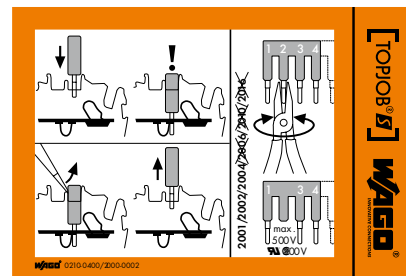
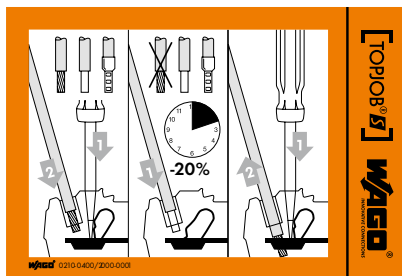
Conductor termination via operating lever



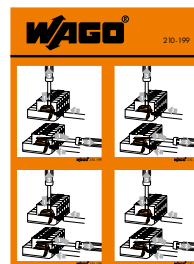
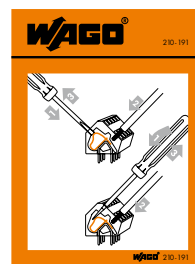
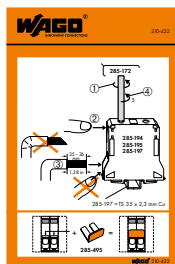
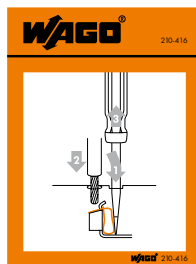
Conductor termination perpendicular to CAGE CLAMP® actuation

Operating Tools, Stickers for Operating Instructions 210 Series

Operating tools for male and female connectors equipped with CAGE CLAMP®	Stickers for operating instructions	Stickers for operating instructions
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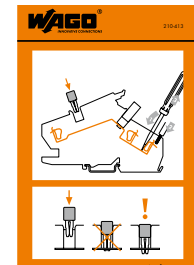
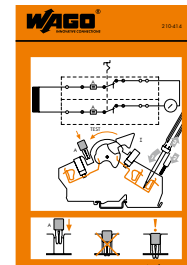
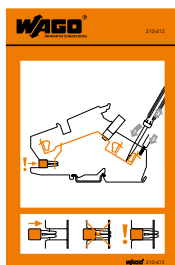
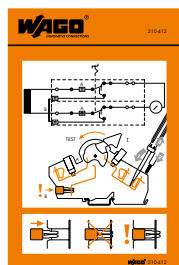
Color	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
	Operating tools, 2.5/3.5 mm and 3.81 mm pin spacing, for MCS MICRO		Stickers for operating instructions, for TOPJOB® S Rail-Mounted Terminal Blocks 210-400/2000-001		Stickers for operating instructions, for TOPJOB® S Jumpers 210-400/2000-002	
●	210-251	1				
	5/5.08 mm and 7.5/7.62 mm pin spacing, for MCS MIDI					
●	210-250	1				



Color	Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
●	Operating tool, for X-COM®-SYSTEM 769 Series Male and Female Connectors		Stickers for operating instructions, for CAGE CLAMP®, universal 210-416		Stickers for operating instructions, for PCB terminal blocks 236 Series 210-191 736/737/738 Series 210-406	
	210-490	1		100		100
			Stickers for operating instructions, for 95 mm² high-current terminal blocks, 285 Series 210-422		Stickers for operating instructions, for MCS with CAGE CLAMP® 210-199	
				100		100



Conductor termination via operating tool



Item No.	Pack. Unit	Item No.	Pack. Unit
Stickers for operating instructions, for 282-870 Disconnect/Test Terminal Block (current transformer) 210-412	100	Stickers for operating instructions, for 282-860 Disconnect/Test Terminal Block (voltage transformer) 210-414	100
Stickers for operating instructions, for 282-865 Through Terminal Block (current transformer) 210-415	100	Stickers for operating instructions, for 282-866 Through Terminal Block (voltage transformer) 210-413	100



Cable Cutter Cable Strippers 206 Series

Cable cutter per VDE up to 35 mm ²	Cable stripper for round cables 2.5 ... 11 mm Ø	Cable stripper for round cables 4.5 ... 45 mm Ø
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Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Cable cutter, for copper or aluminum conductors up to 35 mm ²		Cable stripper, for round cables with 2.5 ... 11 mm outer diameter		Cable stripper, for round cables with 4.5 ... 45 mm outer diameter	
206-118	1	206-171	1	206-174	1

Accessories, 206 Series

	Replacement blade, for 2.5 ... 11 mm Ø  206-170	Replacement blade, for 4.5 ... 45 mm Ø  206-173
	1	1

Application notes:



Cutting a cable.

206-171 Cable Stripper

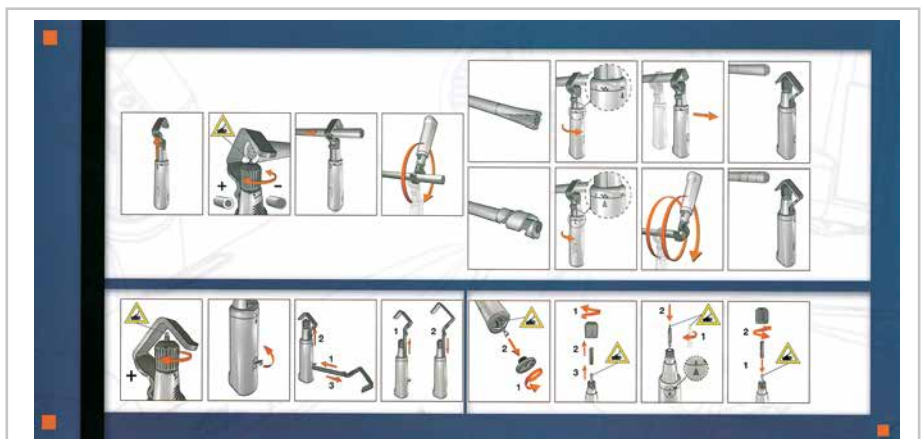
- 10-position adjustment wheel ensures consistent stripping results
- Fine adjustability via 10-position blade cutting depth adjustment
- Strips the sheath from multi-core and fiber optic cables up to 11 mm diameter
- Safe and easy to use through closed stripping cavity

206-174 Cable Stripper

- Safe and easy to use: three locking positions for circular, longitudinal and spiral cuts
- High cable stripping capacity of up to 45 mm diameter
- Ergonomic design features rests with thumb, index and pinky fingers to ease raising of the cable retention hook
- Replacement blades can be stored within the tool's handle



Operating instructions for 206-171 Cable Stripper



Operating instructions for 206-174 Cable Stripper

Wire Strippers

206 Series

"Quickstrip 10" wire stripper

0.02 ... 10 mm² "f-st"

"Quickstrip 16" wire stripper

4 ... 16 mm²



Item No.	Pack. Unit	Item No.	Pack. Unit
"Quickstrip 10" wire stripper, 0.02 ... 10 mm ² "f-st" (6 mm ² "s")		"Quickstrip 16" wire stripper, 4 ... 16 mm ²	
Cutter for conductors up to 10 mm ² "f-st" (1.5 mm ² "s")		Cutter for conductors up to 10 mm ² "f-st" (1.5 mm ² "s")	
206-124	1	206-125	1






Stripping a conductor.

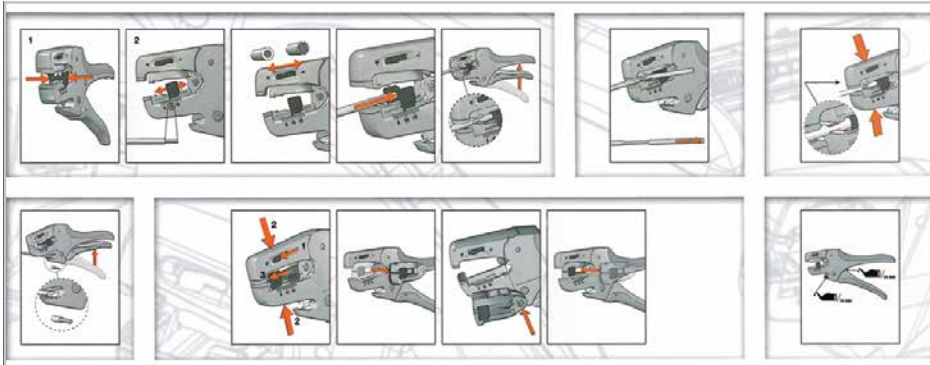


Cutting a conductor.

Accessories, 206 Series

"Standard" blade cassette, 0.02 ... 10 mm ²		"Standard" blade cassette, 4 ... 16 mm ²	
 206-126	1	 206-128	1
"V" blade cassette, 0.1 ... 4 mm ² for PTFE			
 206-127	1		

Application notes:



Operating instructions for wire strippers

Crimping Tools

206 Series

"Variocrimp 4" crimping tool
0.25 ... 4 mm²

"Variocrimp 16" crimping tool
6 ... 16 mm²

Crimping Tool 25,
10 mm², 16 mm² and 25 mm²

Crimping Tool 50,
35 mm² and 50 mm²



Item No.	Pack. Unit	Item No.	Pack. Unit
"Variocrimp 4" crimping tool, for insulated and uninsulated ferrules, crimping range: 0.25 ... 4 mm ²		Crimping Tool 25, for insulated and uninsulated ferrules, crimping range: 10 mm ² , 16 mm ² and 25 mm ²	
206-204	1	206-225	1
"Variocrimp 16" crimping tool, for insulated and uninsulated ferrules, crimping range: 6 ... 16 mm ²		Crimping Tool 50, for insulated and uninsulated ferrules, crimping range: 35 mm ² and 50 mm ²	
206-216	1	206-250	1

What is a "gas-tight" connection?

In a gas-tight connection, the conductor and the ferrule are compressed, eliminating all spaces. Under normal atmospheric conditions, neither a liquid nor gaseous medium can penetrate the crimped connection. Oxidation between crimped single conductors is prevented, virtually eliminating the possibility of any increase in the crimped connection's resistance. In some exceptional cases, minute, isolated spaces may be present. However, these instances can be considered as closed off due to the twisted conductor.

Inadequate crimping can allow the conductor to be pulled out of the connection. Hollow spaces also remain, permitting oxidation formation and leading to an increase in contact resistance.

Elevated resistance is detrimental for both signal transmission (signal flow is damped) and power transmission, resulting in power loss and contact heating (risk of fire).

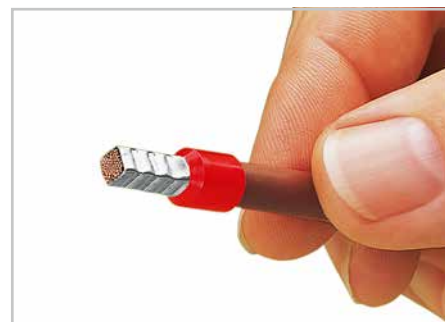
Crimping tools with built-in ratchets are recommended (e.g., **WAGO Crimping Tools**). These tools only open after the crimping process has been fully completed. Space-saving crimping from all four sides is ideal for spring clamp termination.

Ferruled conductor sizes specified for WAGO products are based on this crimping method.

Application notes:



Insert ferruled conductor into crimping station. Squeeze handles until ratchet mechanism is released.



A perfect gas-tight crimp - both electrically and mechanically reliable

- The built-in crimping pressure control of "Variocrimp 4" automatically adjusts the crimping force to the conductor cross-section. Select the wire gauge on "Variocrimp 16" before crimping.
- Only one crimping station is needed to handle the specified conductor sizes
- Uniform, compact crimping on all four sides for high conductor retention
- No need to center the conductor into the ferrule
- Conductor and ferrule insertion possible from both sides (for left- and right-handers)
- Built-in ratchet mechanism ensures gas-tight crimp connection
- Crimping tools open automatically after crimping operation is complete
- Comfortable handles for operator

Conductor Size (mm ²)	Conductor Retention Force ≥ ... N
0.25	30
0.5	50
0.75	60
1.0	70
1.5	80
2.5	100
4	120
6	160
10	180
16	200
25	270
35	380
50	470

All crimping tools are factory-calibrated. We recommend that you periodically check to see if the crimping tool functions as expected after approximately 3,000 crimps. The accompanying table allows you to check the crimping quality. For additional information on care and maintenance, please refer to the instruction leaflet.

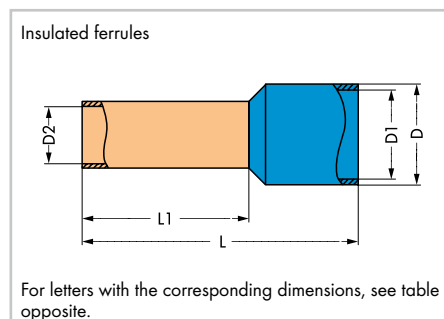
Ferrules

216 Series

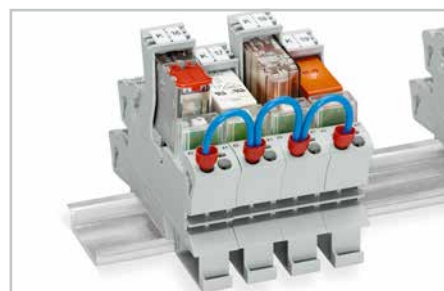
Sleeve for mm ²	Color AWG	Strip Length mm	L	L1	D	D1	D2	Item No.	Pack. Unit	
Insulated ferrules, extra long, for TOBJOB® S Terminal Blocks										
0.5	22	○	12.0	16.0	10.0	3.1	2.6	1.0	216-241	1000
0.75	20	○	12.0	16.0	10.0	3.3	2.8	1.2	216-242	1000
0.75	20	○	14.0	18.0	12.0	3.3	2.8	1.2	216-262	1000
1.0	18	●	12.0	16.0	10.0	3.5	3.0	1.4	216-243	1000
1.0	18	●	14.0	18.0	12.0	3.5	3.0	1.4	216-263	1000
1.5	16	●	12.0	16.0	10.0	4.0	3.5	1.7	216-244	1000
1.5	16	●	14.0	18.0	12.0	4.0	3.5	1.7	216-264	1000
1.5	16	●	20.0	24.0	18.0	4.0	3.5	1.7	216-284	1000
2.5	14	●	12.0	17.0	10.0	4.7	4.2	2.2	216-246	1000
2.5	14	●	14.0	19.0	12.0	4.7	4.2	2.2	216-266	1000
2.5	14	●	20.0	25.0	18.0	4.7	4.2	2.2	216-286	1000
4.0	12	○	14.0	20.0	12.0	5.4	4.8	2.8	216-267	500
4.0	12	○	20.0	26.0	18.0	5.4	4.8	2.8	216-287	500
6.0	10	●	14.0	20.0	12.0	6.9	6.3	3.5	216-208	500
6.0	10	●	20.0	26.0	18.0	6.9	6.3	3.5	216-288	500
10.0	8	●	20.0	28.0	18.0	8.4	7.6	4.5	216-289	500
16.0	6	●	23.0	28.0	18.0	9.6	8.8	5.8	216-210	500



Insulated ferrules, in standard length										
0.25	24	●	7.5	10.5	6.0	2.5	2.0	0.8	216-321	1000
0.25	24	●	9.5	12.5	8.0	2.5	2.0	0.8	216-301	1000
0.35	24	●	7.5	10.5	6.0	2.5	2.0	0.8	216-322	1000
0.34	24	●	9.5	12.5	8.0	2.5	2.0	0.8	216-302	1000
0.5	22	○	7.5	11.5	6.0	3.0	2.5	1.1	216-221	1000
0.5	22	○	9.5	13.5	8.0	3.0	2.5	1.1	216-201	1000
0.75	20	○	8.0	12.0	6.0	3.3	2.8	1.3	216-222	1000
0.75	20	○	10.0	14.0	8.0	3.3	2.8	1.3	216-202	1000
1.0	18	●	8.0	12.0	6.0	3.6	3.0	1.5	216-223	1000
1.0	18	●	10.0	14.0	8.0	3.6	3.0	1.5	216-203	1000
1.5	16	●	8.0	12.0	6.0	4.0	3.4	1.8	216-224	1000
1.5	16	●	10.0	14.0	8.0	4.0	3.4	1.8	216-204	1000
2.08	14	●	10.0	14.5	8.0	4.2	3.6	2.05	216-205	1000
2.5	14	●	10.0	15.0	8.0	4.8	4.2	2.3	216-206	1000
4.0	12	○	12.0	16.8	9.5	5.4	4.8	2.9	216-207	1000
6.0	10	●	14.0	20.0	12.0	6.8	6.2	3.5	216-208	100
10.0	8	●	16.0	21.0	12.0	8.1	7.5	4.6	216-209	100
16.0	6	●	23.0	28.0	18.0	9.6	8.8	5.8	216-210	100

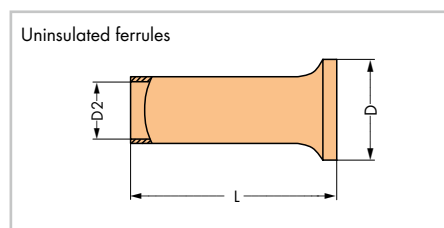
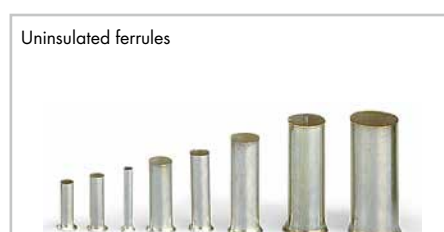


Insulated twin ferrules, extra long, for TOBJOB® S Terminal Blocks										
2 x 0.5	2 x 20	○	10.0	16.4	10.0	3.5x2.0	2.9x1.4	1.4	216-530	500
2 x 1.0	2 x 18	●	12.0	19.2	12.0	5.8x3.2	5.2x2.6	2.0	216-542	500
2 x 1.5	2 x 16	●	12.0	20.0	12.0	6.5x3.6	5.9x3.0	2.2	216-543	500
2 x 2.5	2 x 14	●	12.0	21.0	12.0	8.0x4.5	7.2x3.7	2.8	216-545	500
2 x 4.0	2 x 12	○	12.0	22.0	12.0	9.0x5.2	8.0x4.2	3.5	216-546	500
2 x 6.0	2 x 10	●	12.0	23.0	12.0	11.4x6.2	10.4x5.2	4.5	216-547	500



Wire bridge with twin ferrules

Uninsulated ferrules, in standard length										
0.25	24		5.0	5.0		1.7		0.75	216-151	1000
0.25	24		7.0	7.0		1.7		0.75	216-131	1000
0.34	24		5.0	5.0		1.7		0.85	216-152	1000
0.34	24		7.0	7.0		1.7		0.85	216-132	1000
0.5	22		6.0	6.0		2.1		1.0	216-121	1000
0.5	22		8.0	8.0		2.1		1.0	216-101	1000
0.75	20		6.0	6.0		2.3		1.2	216-122	1000
0.75	20		8.0	8.0		2.3		1.2	216-102	1000
1.0	18		6.0	6.0		2.5		1.4	216-123	1000
1.0	18		8.0	8.0		2.5		1.4	216-103	1000
1.5	16		6.0	6.0		2.8		1.7	216-124	1000
1.5	16		8.0	8.0		2.8		1.7	216-104	1000
2.5	14		10.0	10.0		3.4		2.2	216-106	1000
4.0	12		10.0	10.0		4.0		2.8	216-107	1000
6.0	10		12.0	12.0		4.7		3.5	216-108	250
10.0	8		12.0	12.0		5.8		4.5	216-109	250
16.0	6		12.0	15.0		7.5		5.8	216-110	250



Test and Measurement Devices

206 Series

Voltage tester Profi III LED+	Voltage tester Profi III LCD+	Voltage tester Testboy
---	---	----------------------------------



Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Profi III LED+ , 2-pole voltage tester with LED display, removable test probes (4 mm Ø) Measurement range: 6 ... 1000 VAC 6 ... 1,400 VDC Protection class: IP65 Resistance measurement: no Frequency measurement: no Data hold function: no		Profi III LCD+ , 2-pole voltage tester with LCD display, removable test probes (4 mm Ø) Measurement range: 3 ... 1,000 VAC TRMS 4 ... 1,400 VDC Protection class: IP65 Resistance measurement: 1 ... 1999 Ω Frequency measurement: 0 ... 1000 Hz Data hold function: yes		Testboy , non-contact voltage tester, with integrated flashlight Voltage range: 12 ... 1,000 VAC	
206-806	1	206-807	1	206-804	1

Accessories, 206 Series

Replacement test probes, 4 mm Ø (2 probes)	Replacement test probes, 4 mm Ø (2 probes)
206-808	206-808



Additional Profi III LED+ features:

- Automatic measurement range selection
- Single-pole phase testing AC >100 V
- Two-pole sequence testing (R and L)
- Continuity testing
- FI/RCD testing (30 mA) via buttons
- One-hand operation for SCHUKO® and CEE sockets
- LED torch lamp function (white)
- CAT IV 1,000 V
- TÜV/GS tested and approved
- IEC/EN 61243-3 (DIN VDE 0682-401)

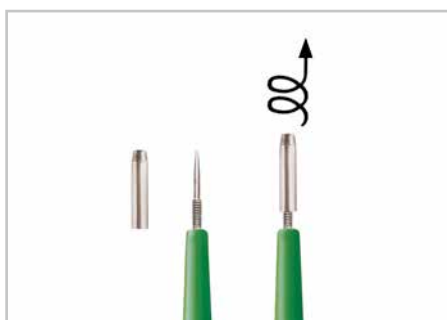
Additional Profi III LCD+ features:

- Automatic measurement range selection
- Single-pole phase testing AC >100 V
- Two-pole sequence testing (R and L)
- Continuity testing
- FI/RCD testing (30 mA) via buttons
- One-hand operation for SCHUKO® and CEE sockets
- LED torch lamp function (white)
- Automatic backlight
- Auto power-off function (with countdown indicator)
- CAT IV 1,000 V
- TÜV/GS tested and approved
- IEC/EN 61243-3 (DIN VDE 0682-401)

The device reliably detects AC voltage in cables, sockets, fuses, switches, junction boxes and other installations.

The voltage tester detects:

- Live conductors
- Cable breaks
- Blown fuses (in cartridges or holders)
- Defective switches
- Defective lamps



Profi-LED+ and Profi-LCD+

- Improved socket contact via Ø 4 mm test probes
- Removable test probes for small test ports (suitable for all WAGO terminal blocks)

Test and Measurement Devices

206 Series

Digital multimeter	Digital clamp meter	Digital clamp meter
Multi-Tester	Amp-Tester	Clamp-Multi-Tester



Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Multi-Tester, digital multimeter with contact-less voltage tester, Carrying case (included) Measurement range: 600 V AC/DC; 10 A AC/DC Resistance measurement: up to 20 MΩ		Amp-Tester, digital clamp meter True RMS measurement Carrying case (included) Measurement range: 0.01 ... 200 A AC/DC, up to 400 Hz (sinus) Degree of protection: IP44		Clamp-Multi-Tester, Digital clamp meter DC and AC current up to 600 A True RMS and min./max. value measurement DC and AC voltage up to 600 V Manual or automatic measurement range selection	
206-810	1	206-815	1	206-816	1



Additional Multi-Tester features:

- Contact-less voltage test AC > 100 V (optical and acoustical)
- Resistance measurement: up to 20 MΩ
- Acoustical continuity test
- Diode test
- Data hold function
- Auto power-off function
- LED torch lamp function
- CAT IV 600 V
- TÜV/GS tested and approved
- IEC/EN 61010-1 (DIN VDE 0411)



Additional Amp-Tester features:


- AC and DC current measurement
- True RMS measurement
- Data hold function
- Maximum jaw opening: 21 mm Ø
- Compact design for measuring in tight spaces
- Resolution: 0.01 A at 40 A
- Resolution: 0.1 A at 200 A
- Sampling rate: 3 times per second
- Auto power-off function
- CAT III 300 V
- TÜV/GS tested and approved
- IEC/EN 61010-1 (DIN VDE 0411)



Additional Clamp-Multi-Tester features:

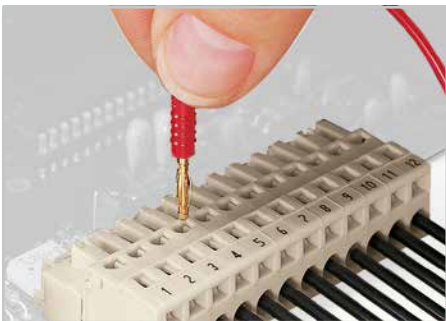
- Resistance up to 60 MΩ
- Capacitance measurement
- Acoustical continuity test
- Diode test
- Data hold function
- Large LCD with backlight
- LED measuring point lighting
- CAT III 600 V overvoltage protection
- IEC/EN 61010-1 (DIN VDE 0411)
- Includes batteries, measurement leads and carrying bag

Test Plugs, Test Pin, Banana Plugs 210 / 215 / 735 Series

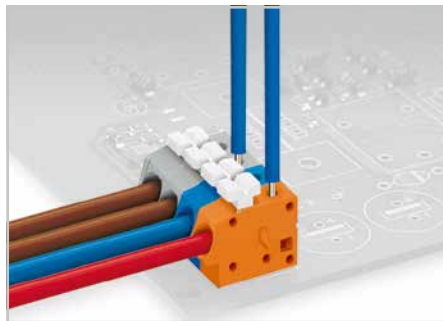
Test plugs	Test pin	Banana plugs for 4 mm Ø sockets 0.08 ... 2.5 mm ² 28 ... 14 AWG 42 V I _N 20 A  9 ... 11 mm / 0.39 in.
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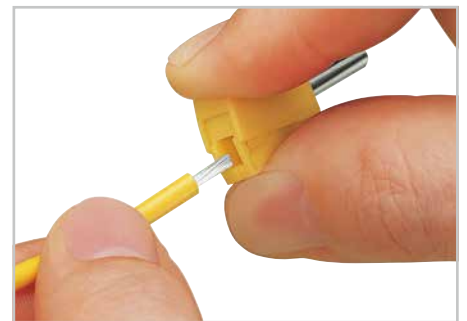
Item No.	Pack. Unit	Item No.	Pack. Unit	Item No.	Pack. Unit
Test plug, 2 mm Ø, 500 mm cable length		Test pin, 1 mm Ø, with solder connection for test cable		Banana plugs, for 4 mm Ø sockets, orange, blue, yellow, white, black, color mixed	
● red	210-136	50	735-500	1	215-111
Test plug, 2.3 mm Ø, 500 mm cable length				Banana plugs, for 4 mm Ø sockets,	
● yellow	210-137	50		● orange	215-211
Step-down test plug, from 4mm socket to 2mm plug				● red	215-212
● red	210-297	100		● black	215-311
				● green	215-411
				● yellow	215-511
				○ white	215-611
				● blue	215-711
				○ gray	215-811
				● green-yellow	215-911



Testing with 2 mm Ø test plug.



Testing with 1 mm Ø test pin - touch contact.



Conductor termination:
Press button fully and insert stripped conductor into square entry and release.





Testing with step-down test plug.



Banana plug used as test plug -
Testing via 209-170 Test Plug Adapter.

Test Plug Modules for 236, 736, 737 and 738 Series PCB Terminal Blocks 231 Series

Pin spacing: 5 mm / 0.197 in. Pin spacing: 7.5 mm / 0.295 in. 0.08 ... 2.5 mm² 28 ... 12 AWG 250 V / 2.5 kV / 2 (II)* 0.5 A  12 ... 13 mm / 0.47 ... 0.51 in.	Pin spacing: 5.08 mm / 0.2 in. Pin spacing: 7.62 mm / 0.3 in. 0.08 ... 2.5 mm² 28 ... 12 AWG 250 V / 2.5 kV / 2 (II)* 0.5 A  12 ... 13 mm / 0.47 ... 0.51 in.
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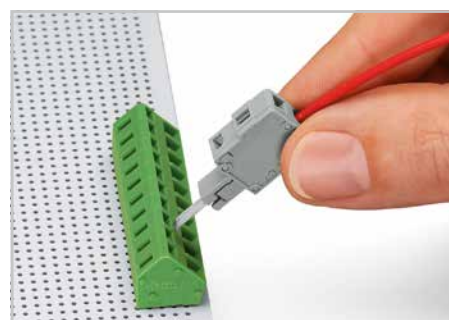


Contact type A
Testing only when unwired.

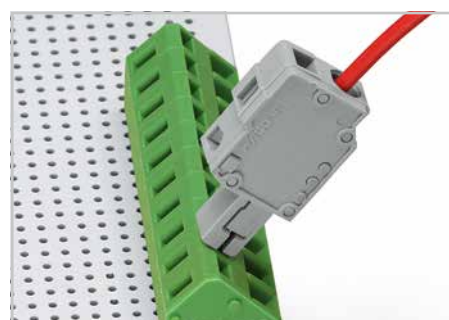
Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Test plug module, contact type A with 10 mm contact lug, for 236 Series, can be snapped together			Test plug module, contact type A with 10 mm contact lug, for 236 Series, can be snapped together		
○ gray	231-127	100	● orange	231-128	100
Pin spacing: 5 mm / 0.197 in.			Pin spacing: 5.08 mm / 0.2 in.		
○ gray	231-161	100	● orange	231-125	100
Pin spacing: 7.5 mm / 0.295 in.			Pin spacing: 7.62 mm / 0.3 in.		
Test plug module, contact type A with 17 mm contact lug, for 280, 736, 737, 738 and 780 Series, can be snapped together			Test plug module, contact type A with 17 mm contact lug, for 736, 737 and 738, can be snapped together		
○ gray	231-126	100	● orange	231-426	100
Pin spacing: 5 mm / 0.197 in.			Pin spacing: 5.08 mm / 0.2 in.		
Test plug module, contact type B with 18 mm contact lug, for 280, 736, 737, 738 and 780 Series, can be snapped together			Test plug module, contact type B with 18 mm contact lug, for 736, 737 and 738, can be snapped together		
○ gray	231-155	100	● orange	231-455	100
Pin spacing: 5 mm / 0.197 in.			Pin spacing: 5.08 mm / 0.2 in.		
Test plug module, contact type B with 18 mm contact lug, for 736 and 737 Series, can be snapped together					
Pin spacing: 7.5 mm / 0.295 in.					
○ gray	231-456	100			



Contact type B
Testing only when wired –
0.75 ... 1.5 mm² "fst" or 0.5 mm² "sol."





Inserting a test plug module into the operating slot.



Unwired terminal strip with inserted test plug module

Accessories, 231 Series











End plate	Item No.	Pack. Unit	End plate	Item No.	Pack. Unit
	○ 231-100	200 (2 x 100)		● 231-300	200 (2 x 100)

*Observe protection against direct contact for 42 V and higher voltages!

International Certifications – Overview

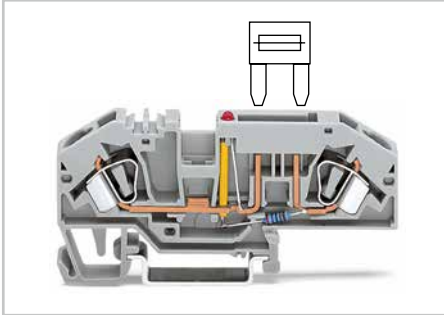
	Abbreviation for Online Search		Abbreviation for Online Search
 Underwriters Laboratories USA http://www.ul.com	UL	 Danmarks Elektriske Materielkontrol Denmark http://www.demko.dk	DEMKO
 Underwriters Laboratories USA http://www.ul.com	UL	CENELEC CERTIFICATION AGREEMENT	
 Underwriters Laboratories USA http://www.ul.com	cURus	 Danmarks Elektriske Materielkontrol Denmark http://www.cenelec.org	CCA Appr. No. with DK
 Underwriters Laboratories USA http://www.ul.com	cULus	 SETI – FEMKO Sähkötarkastuskeskus Elinspektionscentralen Finland http://www.seti.fi	
 Canadian Standards Association Canada http://www.csa.ca	CSA	 Sähkötarkastuskeskus Elinspektionscentralen Finland http://www.fimko.com	FIMKO
 VDE-Gutachten mit Fertigungsüberwachung Germany http://www.vde.de/vde/html/e/home.htm	VDE	SABS South African Bureau of Standards South Africa http://www.sabs.co.za	SABS
 VDE – Deutscher Verband für Elektrotechnik Germany http://www.vde.de		 RosTest Russia http://www.rostest.ru	ROSTEST
VDE VDE – Prüfbericht Germany		 Departamentul Moldovastandard Moldavia http://www.moldova.md/ro/government/oll/D_STAND/en/strcent2.htm	CSM
 Österreichischer Verband für Elektrotechnik Austria http://www.ove.at	ÖVE	 Certificate of Registration Great Britain http://www.astacertification.com	ASTA
 Schweizerischer Elektrotechnischer Verein Switzerland http://www.sev.ch/	SEV	 Rheinisch-Westfälischer Technischer Überwachungsverein e.V. Germany http://www.rwtuv.de	RWTÜV
 N.V. tot Keuring van Elektrotechnische Materialen Netherlands http://www.kema.nl	KEMA	 Elektrotechnick ý v ýskumn ý a projektov ý ústav Czech Republic http://www.ezu.cz	EZU
CENELEC CERTIFICATION AGREEMENT CCA N.V. tot Keuring van Elektrotechnische Materialen Netherlands http://www.cenelec.org	CCA Appr. No. with NL	 Stowarzyszenie Elektrykow Polskich Poland http://www.bbj.pl	BBJ
 Norges Elektriske Materialkontroll Norway http://express.nemko.com	NEMKO	 Stowarzyszenie Elektrykow Polskich Poland http://www.sep.com.pl	SEP
 Svenska Elektriska Materielkontrollanstalten AB Sweden http://www.semko.com	SEMKO		

For complete, up-to-date approval information, visit www.wago.com.

	Abbreviation for Online Search		Abbreviation for Online Search
CNET	CNET		BKI
LCIE	LCIE	CB	CB
	FTZU	CB	CB
			ENEC
Marine Approvals		Ex Approvals	
	GL		PTB
BV	BV		cURus-EX
	LR		KEMA-EX
	DNV	GOSENERGO-Ex	GOSENERGO-EX
	RMR		FTZU
	PRS		BKI-EX
	KR		
ABS	ABS		

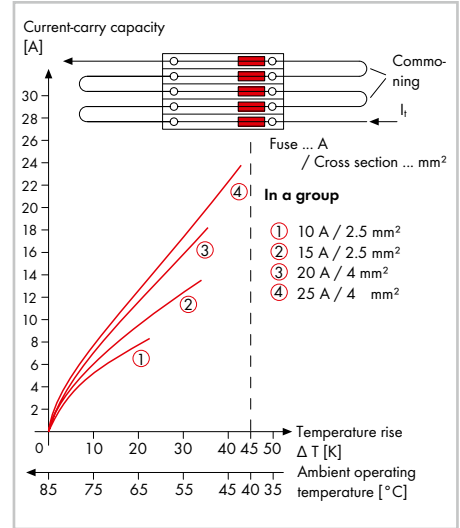
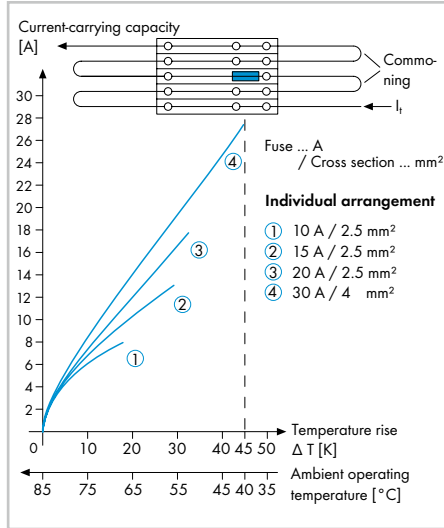
Current-Carrying Capacity Curves Fuse Terminal Blocks for Mini-Automotive, Blade-Style Fuses

Higher ambient temperatures (T_{amb}) place additional strain on fuse cartridges. Therefore, a reduced rated current according to the following diagrams and tables (see factor F_T) should be accounted for in such applications:



Information from the mini-automotive, blade-type fuse manufacturers

Derating $T_{amb} / ^\circ\text{C}$	%	F_T
- 25	14	0.877
- 20	13	0.885
- 15	12	0.893
- 10	11	0.901
- 5	10	0.909
0	9	0.917
5	8	0.926
10	6	0.943
15	4	0.962
20	2	0.980
23	0	1.000
30	- 2	1.020
35	- 4	1.042
40	- 6	1.064
45	- 8	1.087
50	- 10	1.111
55	- 13	1.149
60	- 16	1.190
65	- 19	1.235
70	- 22	1.282

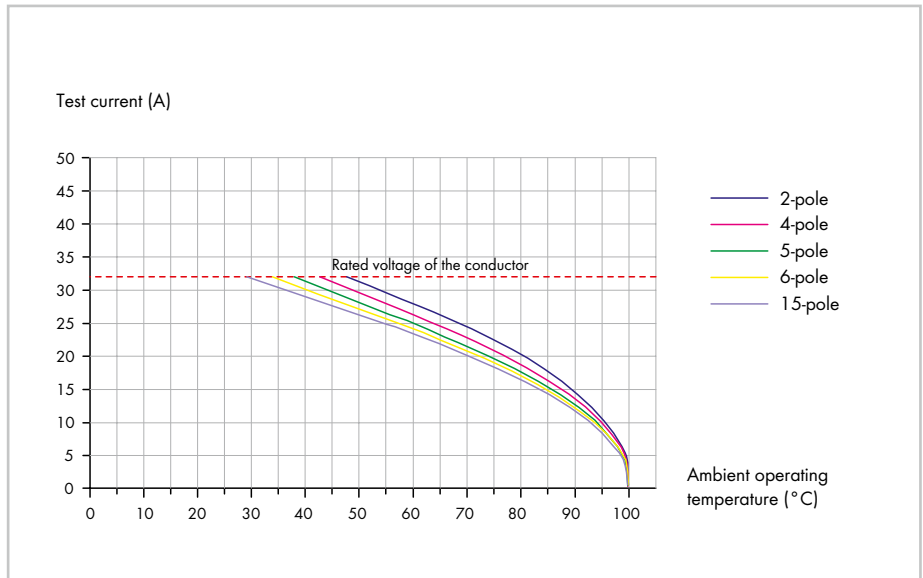


Current-Carrying Capacity Curves for 1-Conductor/1-Pin and 2-Pin Carrier Terminal Blocks and 1-Conductor Female Plugs X-COM®-SYSTEM

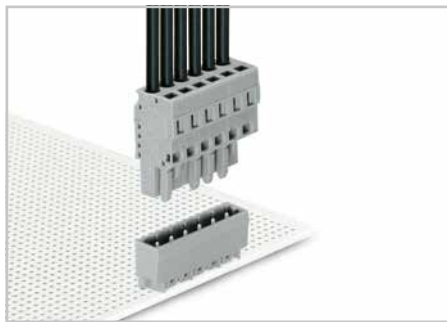


1-Conductor/1-Pin
Carrier Terminal Block: 769-176
Conductor size: 4 mm² (12 AWG)

1-Conductor Female Plugs: 769-102 ... 769-115
Conductor size: 4 mm² (12 AWG)
Conductor loop length: 1 m



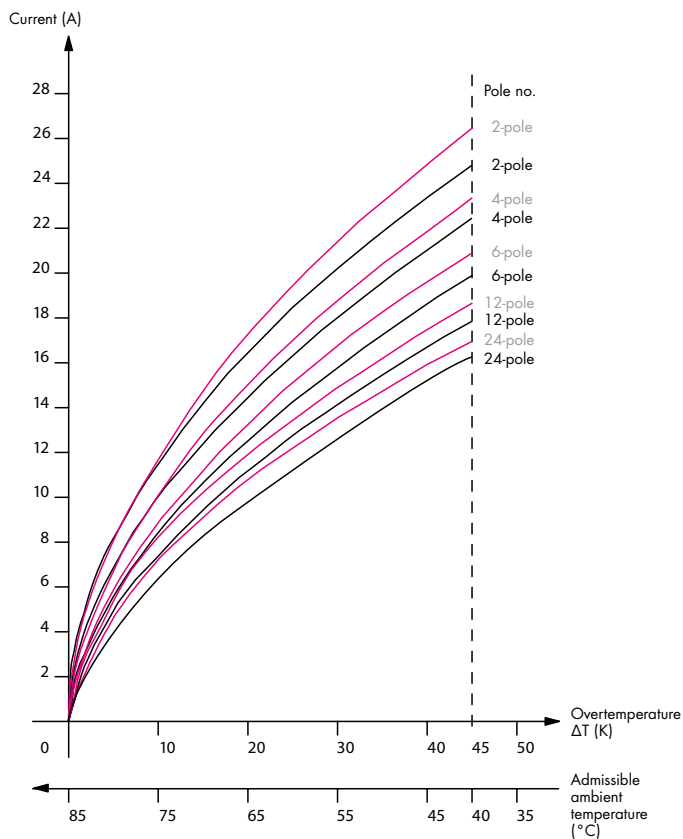
Current-Carrying Capacity Curves for Headers/Connectors with CAGE CLAMP® MULTI CONNECTION SYSTEM (MCS) – MIDI



Male Headers with Solder Pins	231-132/001-000 ...
1 mm x 1 mm:	231-154/001-000
1.2 mm x 1.2 mm:	231-162/001-000 ...
	231-184/001-000
Female Connectors:	231-102/026-000 ...
	231-124/026-000
Conductor size (2.5 mm ² "f-st"):	PCB side commoned with 2.5 mm ²
Conductor loop length:	1 m

Additional current-carrying capacity curves upon request.

Male Headers with Straight Solder Pins: 1 mm x 1 mm/1.2 mm x 1.2 mm MIDI
Pin Spacing: 5 mm, 5.08 mm, 7.5 mm and 7.62 mm



Determining Maximum Load

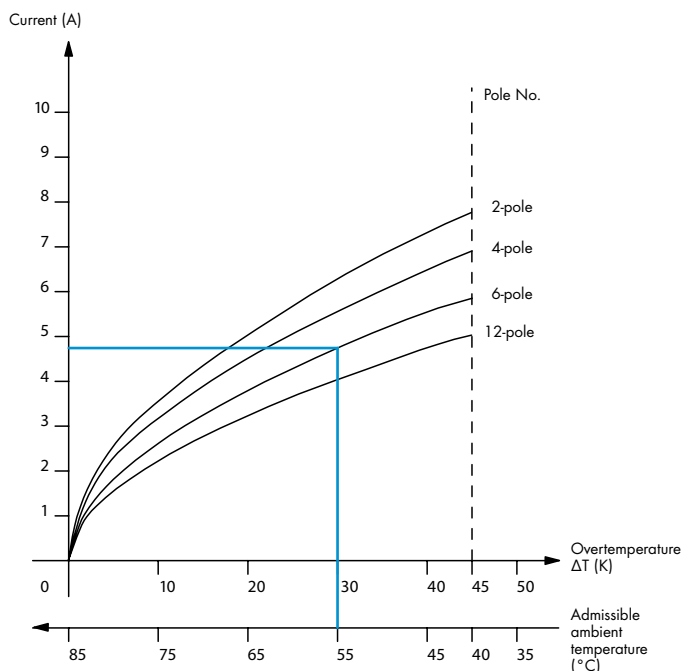
Explanation using the following example:

What load (amps) can a 6-pole connector assembly handle when subjected to an ambient operating temperature of 55 $^{\circ}\text{C}$?

- 1.) On the bottom axis (x-coordinate = temperature), select the ambient operating temperature for the connector assembly (here 55 $^{\circ}\text{C}$).
- 2.) For this temperature, draw a vertical line up to the curve corresponding to the number of poles (here 6-pole).
- 3.) From the point of intersection, draw a line horizontally to the intersection with the y-axis and read the value of the current.

In this example, all poles of the 6-pole connector assembly can be simultaneously loaded with 4.8 amps at a 55 $^{\circ}\text{C}$ ambient operating temperature.

Example



Tests and Testing Procedures per IEC/EN Standards

Electrical Tests

- Insulation Parameters per IEC/EN 60664-1

Table F.4 – Creepage Distances to Avoid Failure due to Tracking
DIN EN 60664-1/VDE 0110, Part 1

Voltage ¹⁾ rms V	Minimum Creepage Distances								
	Printed Circuits		Pollution Degree						
	Pollution Degree		Pollution Degree						
	1 All Material Groups	2 All Material Groups except IIIb	1 All Material Groups	2 Material Group I	2 Material Group II	2 Material Group III	3 Material Group I	3 Material Group II	3 Material Group III ²⁾
mm	mm	mm	mm	mm	mm	mm	mm	mm	
10	0.025	0.040	0.080	0.400	0.400	0.400	1.000	1.000	1.000
12.5	0.025	0.040	0.090	0.420	0.420	0.420	1.050	1.050	1.050
16	0.025	0.040	0.100	0.450	0.450	0.450	1.100	1.100	1.100
20	0.025	0.040	0.110	0.480	0.480	0.480	1.200	1.200	1.200
25	0.025	0.040	0.125	0.500	0.500	0.500	1.250	1.250	1.250
32	0.025	0.040	0.14	0.53	0.53	0.53	1.30	1.30	1.30
40	0.025	0.040	0.16	0.56	0.80	1.10	1.40	1.60	1.80
50	0.025	0.040	0.18	0.60	0.85	1.20	1.50	1.70	1.90
63	0.040	0.063	0.20	0.63	0.90	1.25	1.60	1.80	2.00
80	0.063	0.100	0.22	0.67	0.95	1.30	1.70	1.90	2.10
100	0.100	0.160	0.25	0.71	1.00	1.40	1.80	2.00	2.20
125	0.160	0.250	0.28	0.75	1.05	1.50	1.90	2.10	2.40
160	0.250	0.400	0.32	0.80	1.10	1.60	2.00	2.20	2.50
200	0.400	0.630	0.42	1.00	1.40	2.00	2.50	2.80	3.20
250	0.560	1.00	0.56	1.25	1.80	2.50	3.20	3.60	4.00
320	0.75	1.60	0.75	1.60	2.20	3.20	4.00	4.50	5.00
400	1.0	2.0	1.0	2.0	2.8	4.0	5.0	5.6	6.3
500	1.3	2.5	1.3	2.5	3.6	5.0	6.3	7.1	8.0
630	1.8	3.2	1.8	3.2	4.5	6.3	8.0	9.0	10.0
800	2.4	4.0	2.4	4.0	5.6	8.0	10.0	11.0	12.5
1,000	3.2	5.0	3.2	5.0	7.1	10.0	12.5	14.0	16.0
1,250			4.2	6.3	9.0	12.5	16.0	18.0	20.0
1,600			5.6	8.0	11.0	16.0	20.0	22.0	25.0
2,000			7.5	10.0	14.0	20.0	25.0	28.0	32.0
2,500			10.0	12.5	18.0	25.0	32.0	36.0	40.0
3,200			12.5	16.0	22.0	32.0	40.0	45.0	50.0
4,000			16.0	20.0	28.0	40.0	50.0	56.0	63.0
5,000			20.0	25.0	36.0	50.0	63.0	71.0	80.0
6,300			25.0	32.0	45.0	63.0	80.0	90.0	100.0
8,000			32.0	40.0	56.0	80.0	100.0	110.0	125.0
10,000			40.0	50.0	71.0	100.0	125.0	140.0	160.0
12,500			50.0 ³⁾	63.0 ³⁾	90.0 ³⁾	125.0 ³⁾			
16,000			63.0 ³⁾	80.0 ³⁾	110.0 ³⁾	160.0 ³⁾			
20,000			80.0 ³⁾	100.0 ³⁾	140.0 ³⁾	200.0 ³⁾			
25,000			100.0 ³⁾	125.0 ³⁾	180.0 ³⁾	250.0 ³⁾			
32,000			125.0 ³⁾	160.0 ³⁾	220.0 ³⁾	320.0 ³⁾			
40,000			160.0 ³⁾	200.0 ³⁾	280.0 ³⁾	400.0 ³⁾			
50,000			200.0 ³⁾	250.0 ³⁾	360.0 ³⁾	500.0 ³⁾			
63,000			250.0 ³⁾	320.0 ³⁾	450.0 ³⁾	600.0 ³⁾			

¹⁾ This voltage is for:
 – functional insulation: the working voltage
 – basic and supplementary insulation of the circuit energized directly from the mains (see 4.3.2.2.1): for the voltage rationalized through Table F.3a or F.3b, based on the rated voltage of the equipment, or the rated insulation voltage
 – basic and supplementary insulation of systems, equipment and internal circuits not energized directly from the mains (see 4.3.2.2.2): the highest rms voltage which can occur in the system, equipment or internal circuit when supplied at rated voltage and under the most taxing combination of operation conditions within equipment rating



²⁾ Material group IIIb is not recommended for applications in pollution degree 3 above 630 V.

³⁾ Provisional data based on extrapolation. Technical committees with other information based on experience may use their dimensions.

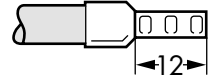
⁴⁾ The values in brackets shall only be applied for reducing creepage distances if a rib is used (see 5.2.5).

The high degree of accuracy of the creepage distances given in the table does not imply that the measuring accuracy must be of the same quality.

Technical Information and Abbreviations

0.25 ... 2.5 (4) mm² ① 800 V/8 kV/3 I_N 24 A Terminal block width: 5.2 mm / 0.205 in.  10 ... 12 mm / 0.43 in. ② Approvals	22 ... 12 AWG 600 V, 20 A ㉗ 600 V, 20 A ㉘	Pin spacing: 5 mm / 0.197 in. 0.5 ... 2.5 mm² "s+f-st" 20 ... 12 AWG "s+f-st" 250 V/4 kV/3, 16 A 300 V, 10 A 500 V/4 kV/2, 16 A	 10 ... 11 mm / 0.41 in. ② Approvals
---	--	---	--

- ① Conductor range: 0.25 ... 4 mm² "s+f-st";
 Push-in termination: 0.75 ... 4 mm² "s" and 0.75 ... 2.5 mm² "insulated ferrule, 12 mm"
 (Length of ferrule is only related to the metallic part.)



Pin spacing 5 mm / 0.197 in.: Pin spacing of the terminal block/connector
 (e.g., PCB terminal blocks and *MULTI CONNECTION SYSTEM*)

0.25 ... 2.5 (4) mm² / 22 ... 12 AWG: Conductor range (min. ... max.),
 ferrules reduce cross-section to 2.5 mm² (see ①)

800 V/250 V/500 V: Rated voltage (see Full Line Catalog)

8 kV/4 kV: Rated impulse voltage (see Full Line Catalog)

3/2: Degree of pollution (see Full Line Catalog)


I_N 24 A/16 A: Maximum current


600 V, 20 A ㉗: Voltage and current values per UL approval

600 V, 20 A ㉘: Voltage and current values per CSA approval

300 V, 10 A: Voltage and current values per applied UL and CSA approvals

Terminal block width 5.2 mm/0.205 in.: Width of modular terminal blocks (e.g., rail-mounted terminal blocks)

 **10 ... 12 mm / 0.43 in.:** Strip length (fine-stranded conductor)

 **10 ... 11 mm / 0.41 in.:** Strip length (solid conductor)

② **Approvals** (Current approvals are available online at: www.wago.com)

Abbreviations

"s": Solid conductor	AWG: American Wire Gauge
"st": Stranded conductor	I_N 32 A: Nominal current of 32 A (e.g., for jumpers)
"f-st": Fine-stranded conductor	WCB: WAGO Combi Marking System
"s+f-st": Solid and fine-stranded conductors	WMB: WAGO Multi Marking System
"sol.": Solid conductor	WSB: WAGO Quick Marking System
"f-st": Fine-stranded conductor	

Material Specifications

Insulating Materials:

WAGO primarily uses polyamide (PA 6.6 and PA 4.6) as carriers of current-conducting parts and polycarbonate (PC) as insulating material. For more than 40 years, these materials have proven themselves in WAGO products and all are approved by certified, third-party agencies.

Contact Materials:

Hard and extra-hard electrolytic copper (ECu), as well as extra-hard copper alloys are the standard materials used for the current-carrying parts of all WAGO products. This material combines excellent conductivity and good chemical resistance without the risk of stress-induced cracking.

Contact Plating:

The special tin layer, which is the standard layer for all current-carrying parts in WAGO products, ensures perfect long-term protection against corrosive substances. Furthermore, these layers provide a gas-tight contact that ensures a durable transition resistance.

Clamping Spring Material:

Every WAGO clamping spring is made of high-quality, accurately tested austenitic chrome nickel steel (CrNi) with high tensile strength, which boasts proven corrosion resistance through long-term usage. It is resistant to sea spray, city pollutants and industrial emissions (e.g., sulfur dioxide, hydrogen sulfide).

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Notes

A large grid of graph paper for taking notes, consisting of 20 columns and 30 rows of small squares.

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