Noark

Automation Distribution

Catalog

RDSD HV Series
DC Rotary Disconnect Switches

Excellent Products. Exceptional Value.

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ABOUT US

NOARK Electric is a global manufacturer of low-voltage electrical components for industrial applications. We specialize in motor controls and circuit protection for original equipment manufacturers. Our mission is to provide customers with the highest quality products at an exceptional value and back them with world-class service and support. Every NOARK product is tested and certified to the highest industry standards and covered by our exclusive five-year limited warranty.

Research and Development

The entire portfolio of high-quality NOARK products is designed for manufacturing and assembly (DFMA). Each component is developed in-house by our engineering team to meet the strictest standards and performance requirements. This dedication to excellence has led to the development of patented technology found in many of our products.

World-class Manufacturing

After being thoroughly tested, approved and certified – each NOARK product is sent into production at our state-of-the-art manufacturing facilities. This allows us to maintain strict quality control standards throughout the manufacturing process. In addition, NOARK Electric adheres to a policy of environmental protection and sustainability.

North American Distribution

NOARK's distribution centers are located in Pomona, CA and Kitchener, ON, with the aim of ensuring prompt and reliable deliveries of the entire product range to our customers all over North America. Our supply chain team works closely with our factories and logistics partners to ensure the availability of our products on the North American market and provide logistics services on the level which our customers expect. NOARK Electric is a subsidiary of the largest electrical manufacturing group in Asia with over 50 thousand employees and sales revenue of $22 billion USD. We have corporate facilities in Los Angeles, Shanghai and Prague to service the requirements of individual markets and countries.

140+	300+	20	22	3	10,000,000+	50,000+
Countries	Overseas Distributors	Overseas Subsidiaries	Logistics Centers	R & D Centers	Sq.Ft. Manufacturing Space	Employees Worldwide

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RDSD HV Series DC Rotary Disconnect Switches

Product Overview

The Noark RDSD HV rotary disconnect switch is strictly designed and manufactured in accordance with relevant UL standards, specifically providing a safe and reliable circuit control solution for DC power systems. This product is suitable for harsh working conditions with a maximum DC voltage of DV 1500V and a rated current of up to 1000A. It realizes the functions of infrequent manual disconnection of the circuit and power isolation through a rotary operating mechanism. Its core advantage lies in its ability to form an obvious physical disconnection point in line with safety regulations in the power system, providing reliable power - off protection for equipment maintenance and overhaul, and effectively reducing operational risks.

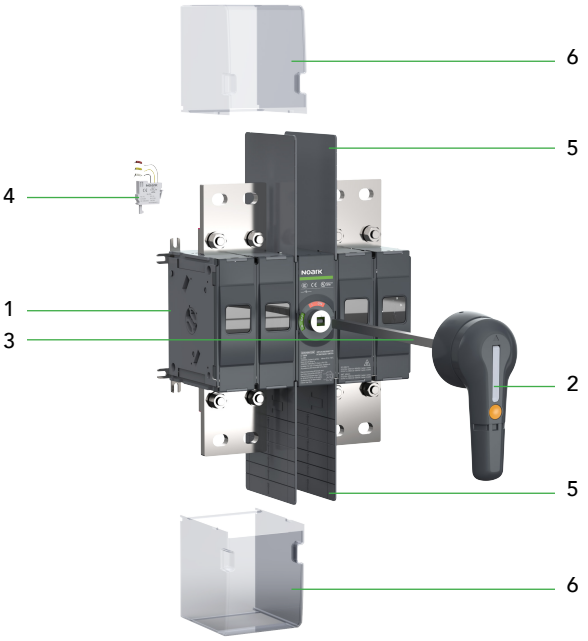
As an ideal component for high - voltage DC systems, the RDSD HV series of disconnect switch is particularly recommended for use in the photovoltaic energy storage industry, such as key nodes like the DC side of energy storage converters and the DC bus of photovoltaic inverters, providing dual protection for the reliable operation of equipment and the safe operation of personnel.

Features

- UL Certified: Rated for 100–1000A (up to DC 1500V) with stringent temperature rise requirements.
- Wide Operating Range: -40°C to +70°C (no derating below 70°C).
- Flexible Installation: Front or side operation options; mounting orientation unrestricted.
- Compact Design: Series-connected poles enable high-current interruption in minimal space.

Approvals

- Standards: UL 98B, IEC 60947-1/3, GB/T 14048.1/3
- Certifications: UL, CE, TUV, RoHS, CCC



1. Disconnect switch
2. Extension handle
3. Extension shaft
4. Auxiliary contact
5. Phase barrier
6. Terminal cover

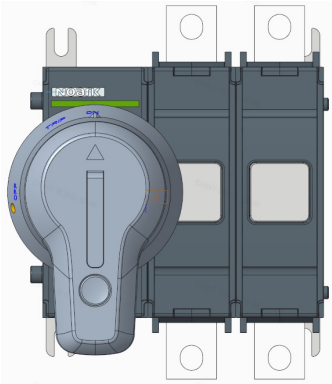
RDSD HV Series DC Rotary Disconnect Switches

Product Selection Guide

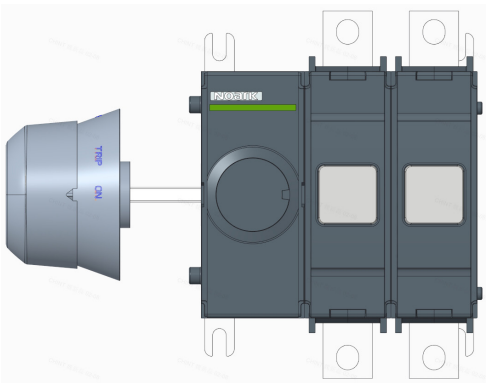
RDS	D	2	HV	11	W	300
Product series	Product Category	Frame Size	High Voltage	Pole Configuration	Operation Mode	Rated Current
Noark Rotary Disconnect Switch	DC Product	2:300A 4:600A 6:1000A	HV: DC1500V	11=2P (inter-pole mechanism) 02=2P (end mechanism) 22=4P (inter-pole mechanism)	W=Front-operated S=Side-operated	100A 150A 200A 250A 300A 350A 400A 500A 600A 800A 1000A

Example Model:
RDSD2HV11W100 = 100A, DC 1500V, front-operated, 2-pole (inter-pole mechanism), 300A frame.

Operation Mode

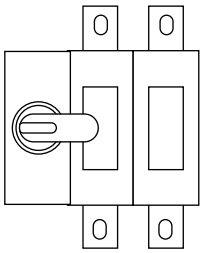


Front-operated

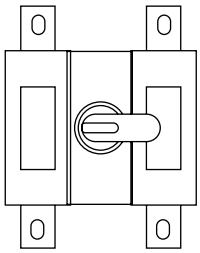


Side-operated

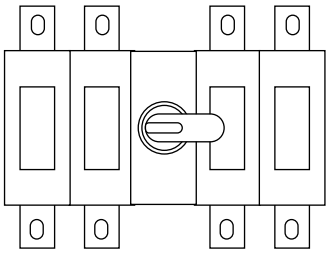
Pole Configuration



Configuration 02



Configuration 11



Configuration 22

RDSD HV Series DC Rotary Disconnect Switches

Ordering Information

Oder Code	SKU	Description
1600201	RDSD2HV02W100	100A,DC 1500V,front-operated,2-pole(end mechanism)
1600202	RDSD2HV02W150	150A,DC 1500V,front-operated,2-pole(end mechanism)
1600203	RDSD2HV02W200	200A,DC 1500V,front-operated,2-pole(end mechanism)
1600204	RDSD2HV02W250	250A,DC 1500V,front-operated,2-pole(end mechanism)
1600205	RDSD2HV02W300	300A,DC 1500V,front-operated,2-pole(end mechanism)
1600206	RDSD4HV02W350	350A,DC 1500V,front-operated,2-pole(end mechanism)
1600207	RDSD4HV02W400	400A,DC 1500V,front-operated,2-pole(end mechanism)
1600208	RDSD4HV02W500	500A,DC 1500V,front-operated,2-pole(end mechanism)
1600209	RDSD4HV02W600	600A,DC 1500V,front-operated,2-pole(end mechanism)
1600210	RDSD2HV11W100	100A,DC 1500V,front-operated,2-pole(inter-pole mechanism)
1600211	RDSD2HV11W150	150A,DC 1500V,front-operated,2-pole(inter-pole mechanism)
1600212	RDSD2HV11W200	200A,DC 1500V,front-operated,2-pole(inter-pole mechanism)
1600213	RDSD2HV11W250	250A,DC 1500V,front-operated,2-pole(inter-pole mechanism)
1600214	RDSD2HV11W300	300A,DC 1500V,front-operated,2-pole(inter-pole mechanism)
1600215	RDSD4HV11W350	350A,DC 1500V,front-operated,2-pole(inter-pole mechanism)
1600216	RDSD4HV11W400	400A,DC 1500V,front-operated,2-pole(inter-pole mechanism)
1600217	RDSD4HV11W500	500A,DC 1500V,front-operated,2-pole(inter-pole mechanism)
1600218	RDSD4HV11W600	600A,DC 1500V,front-operated,2-pole(inter-pole mechanism)
1600219	RDSD6HV22W800	800A,DC 1500V,front-operated,4-pole(inter-pole mechanism)
1600220	RDSD6HV22W1000	1000A,DC 1500V,front-operated,4-pole(inter-pole mechanism)
1600221	RDSD2HV02S100	100A,DC 1500V,side-operated,2-pole(end mechanism)
1600222	RDSD2HV02S150	150A,DC 1500V,side-operated,2-pole(end mechanism)
1600223	RDSD2HV02S200	200A,DC 1500V,side-operated,2-pole(end mechanism)
1600224	RDSD2HV02S250	250A,DC 1500V,side-operated,2-pole(end mechanism)
1600225	RDSD2HV02S300	300A,DC 1500V,side-operated,2-pole(end mechanism)
1600226	RDSD4HV02S350	350A,DC 1500V,side-operated,2-pole(end mechanism)
1600227	RDSD4HV02S400	400A,DC 1500V,side-operated,2-pole(end mechanism)
1600228	RDSD4HV02S500	500A,DC 1500V,side-operated,2-pole(end mechanism)
1600229	RDSD4HV02S600	600A,DC 1500V,side-operated,2-pole(end mechanism)

RDSD HV Series DC Rotary Disconnect Switches

Technical Specifications

UL Technical Data

DC Rotary Disconnect Switches				
Standards	UL98B			
Frame Size	RDSD2HV		RDSD4HV	RDSD6HV
Rated Voltage (Un)	DC 1500V			
Rated Current (In)	100A 150A 200A	250A 300A	350A 400A 500A 600A	800A 1000A
Rated Insulation Voltage (Ui)	1500V			
Rated Impulse Withstand Voltage (Uimp)	12kV			
Rated Short-Circuit Making Capacity (Icm)	10kA			
Short-Circuit Withstand (Icw)	10kA/50ms			
Number of Poles	2P			4P (1 circuit)
Busbar cross-sectional area	64~193mm^2		225~387mm^2	516~645mm^2
Terminal Torque	16~18Nm		25~30Nm	
Making and breaking positions	Handle indication & Contact indication			
Operation Mode	Front-operated/Side-operated			Front-operated
Operating Torque	4~9Nm		8~13Nm	
Temperature	-40°C~+70°C (no derating)			
Altitude	≤2000m (no derating)			
Electrical Life	1,000 Cycles	400 Cycles		
Mechanical Life	8,000 Cycles			1,000 Cycles
Mandatory Parts	Operating Handle Outside the Cabinet, Extension Shaft			
Optional Accessories	Built-in Auxiliary Contact, Terminal Cover			

RDSD HV Series DC Rotary Disconnect Switches

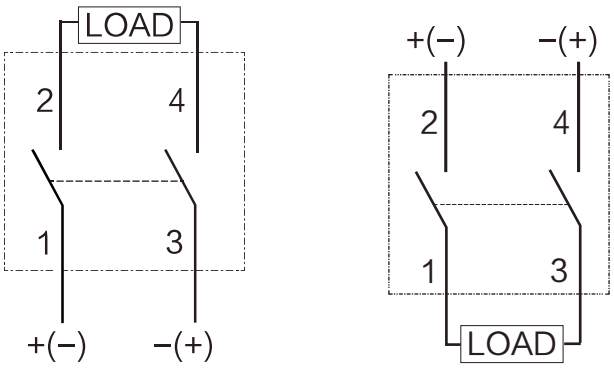
Technical Specifications

IEC Technical Data

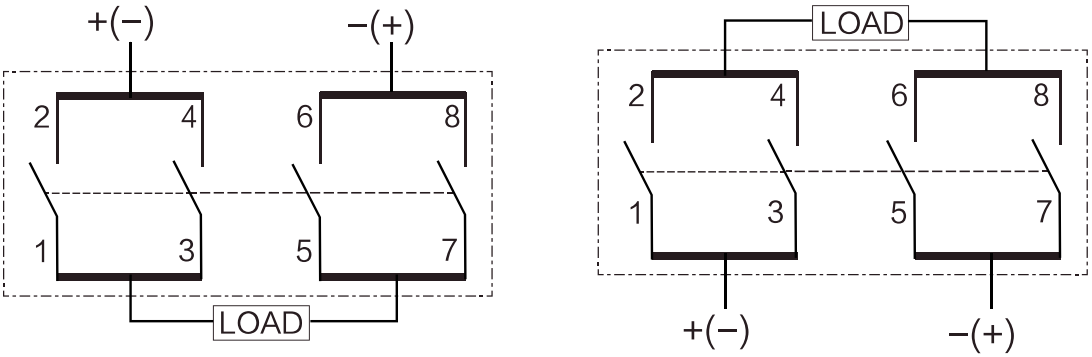
DC Rotary Disconnect Switches				
Standards	IEC 60947-1/3, GB/T 14048.1/3			
Frame Size	RDSD2HV		RDSD4HV	RDSD6HV
Rated Voltage (Un)	DC 1500V			
Rated Current (In)	100A 160A 200A	250A 320A	350A 400A 500A 630A	800A 1000A
Usage Categories	DC-21B DC-PV1		DC-21B/22B(Derated) DC-PV1/PV2	DC-21B DC-PV1
Rated Insulation Voltage (Ui)	1500V			
Rated Impulse Withstand Voltage (Uimp)	12kV			
Rated Short - Circuit Making Capacity (Icm)	10kA			
Rated Short - Time Withstand Current (Icw)	8kA/1s,10kA/50ms		10kA/1s,15kA/0.5s,20kA/0.15s	10kA/1s
Number of Poles	2P			4P (1 Circuit)
Cross - Sectional Area of Conductors or Busbars	35~185mm²		185~370mm²	480~600mm²
Terminal Tightening Torque	16~18Nm		25~30Nm	
Making and Breaking Positions	Indicated by Handle & Contact			
Protection Degree	IP20 for the Whole Unit IP66 for the External Cabinet Handle			
Operation Modes	Front-operated/Side-operated			Front-operated
Operating Torque	4~9 Nm		8~13 Nm	
Operating Ambient Temperature	-40°C+70°C (No derating)			
Operating Altitude	≤2000m (No derating)			
Electrical Life	200 Cycles			100 Cycles
Mechanical Life	8,000 Cycles			1,000 Cycles
Mandatory Parts	Operating Handle Outside the Cabinet, Extension Shaft			
Optional Accessories	Built-in Auxiliary Contact, Terminal Cover			

RDSD HV Series DC Rotary Disconnect Switches

Wiring Diagram



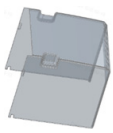
2P Wiring Schematic Diagram



4P Wiring Schematic Diagram

Accessories

Attachment list

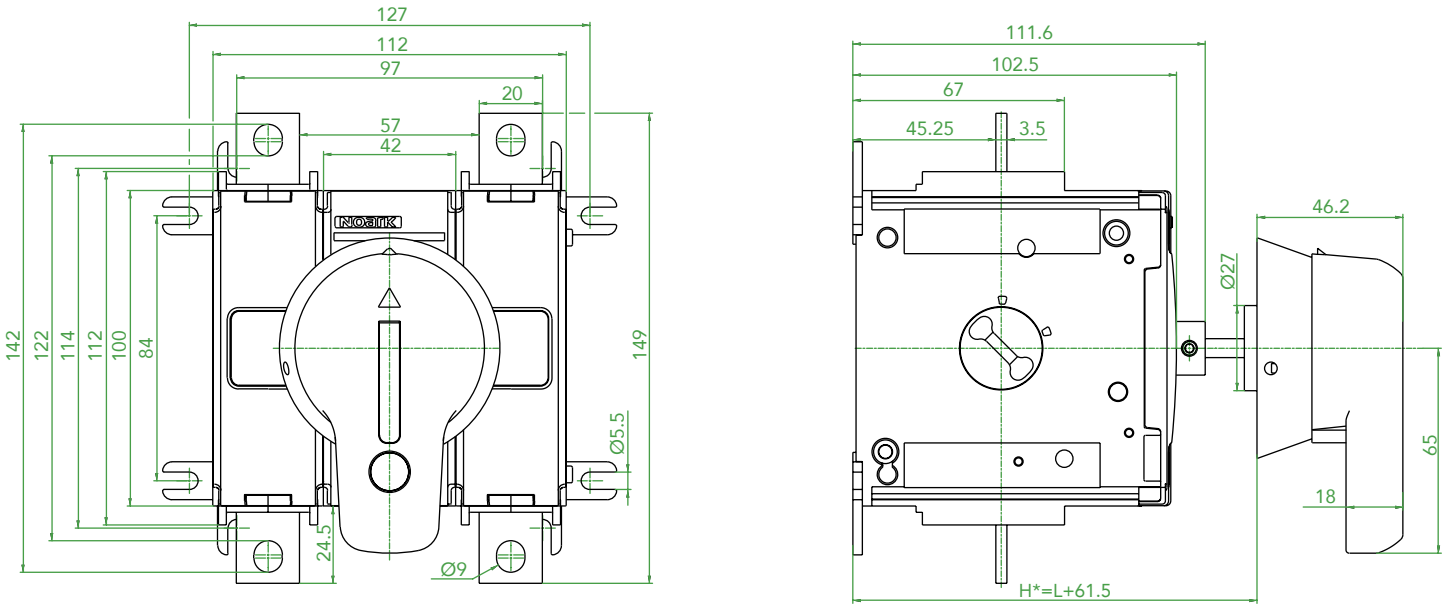
Oder Code	SKU	Picture	Description
1103495	AXC21P		Auxiliary contact
1103299	NEH1B2		65mm extension handle, black, IP66, compatible with RDSD2
1103300	NEH1R2		65mm extension handle, red, IP66, compatible with RDSD2
1102358	NEH2B2		130mm extension handle, black, NEMA4/4X, compatible with RDSD4&RDSD6
1102359	NEH2R2		130mm extension handle, red, NEMA4/4X, compatible with RDSD4&RDSD6
1002999	ES20E		Extension shaft, 200mm length, 6×6mm cross-section, compatible with NEH1 Handle
1003000	ES32E		Extension shaft, 300mm length, 6×6mm cross-section, compatible with NEH1 Handle
1003001	ES40E		Extension shaft, 400mm length, 6×6mm cross-section, compatible with NEH1 Handle
1102362	ES20A		Extension shaft, 200mm length, 10×10mm cross-section, compatible with NEH2 Handle
1102364	ES32A		Extension shaft, 320mm length, 10×10mm cross-section, compatible with NEH2 Handle
1102366	ES50A		Extension shaft, 500mm length, 10×10mm cross-section, compatible with NEH2 Handle
1600230	TCVRDS2		Terminal cover for RDSD2
1600231	TCVRDS4		Terminal cover for RDSD4
1600232	TCVRDS6		Terminal cover for RDSD6

RDSD HV Series DC Rotary Disconnect Switches

Dimensions

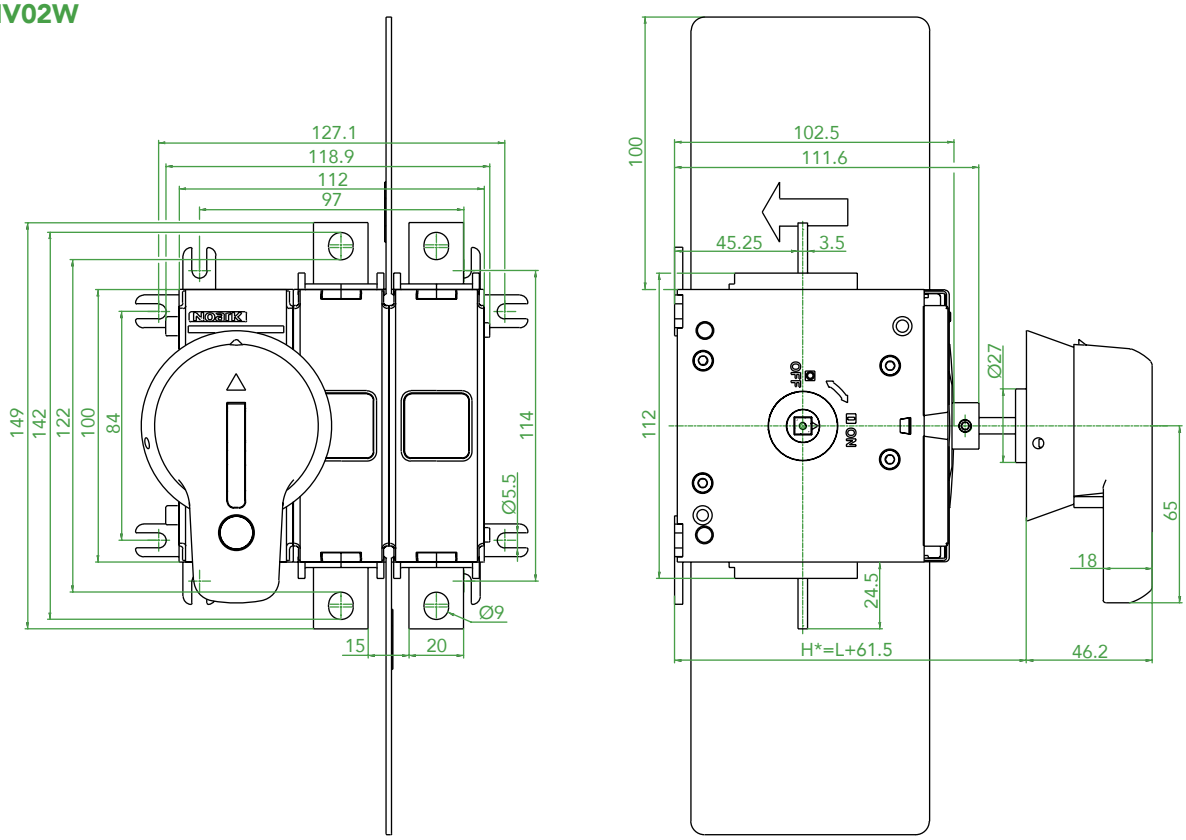
RDSD2HV11W

Unit: mm



RDSD2HV02W

Unit: mm



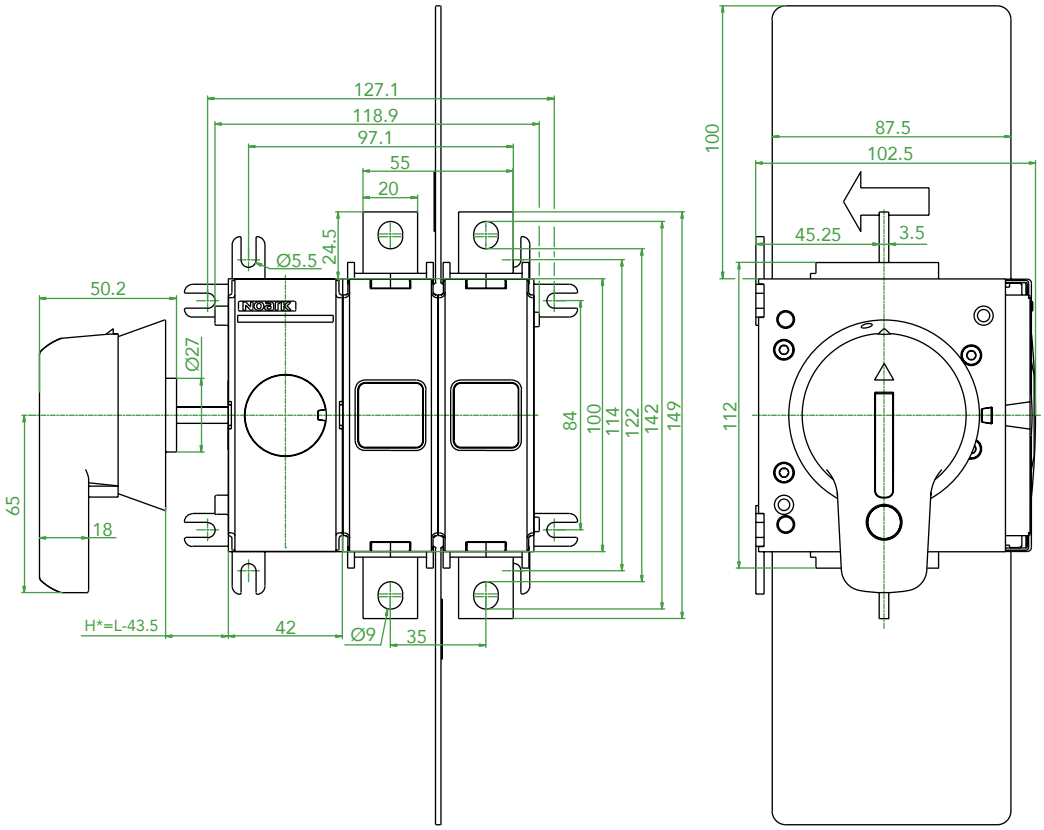
*H is the distance from the installation surface of the handle cabinet door to the installation corner of the switch, and L is the length of the square shaft.

RDSD HV Series DC Rotary Disconnect Switches

Dimensions

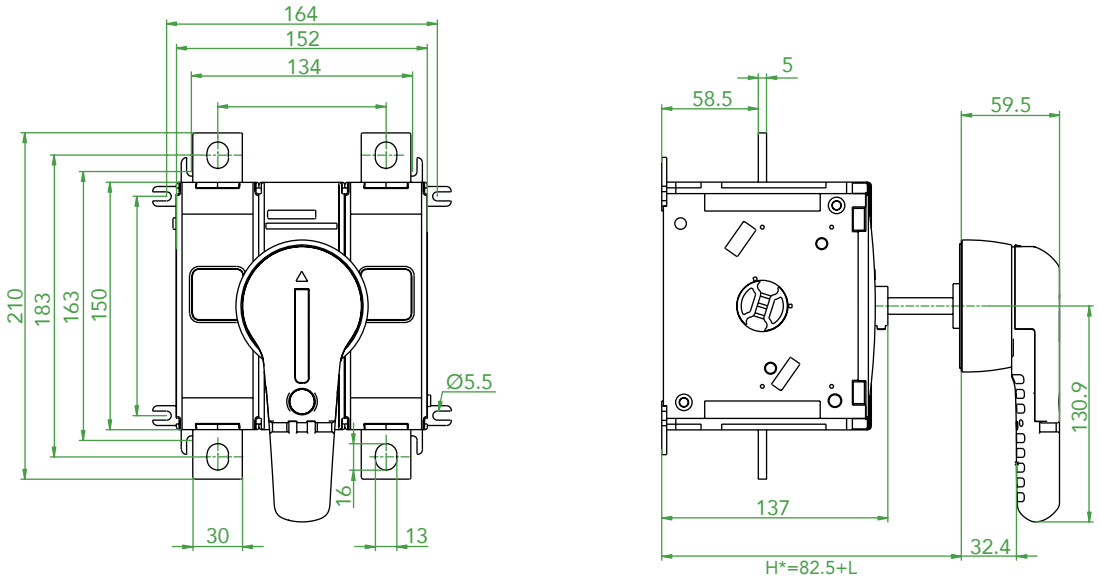
RDSD2HV02S

Unit: mm



RDSD4HV11W

Unit: mm



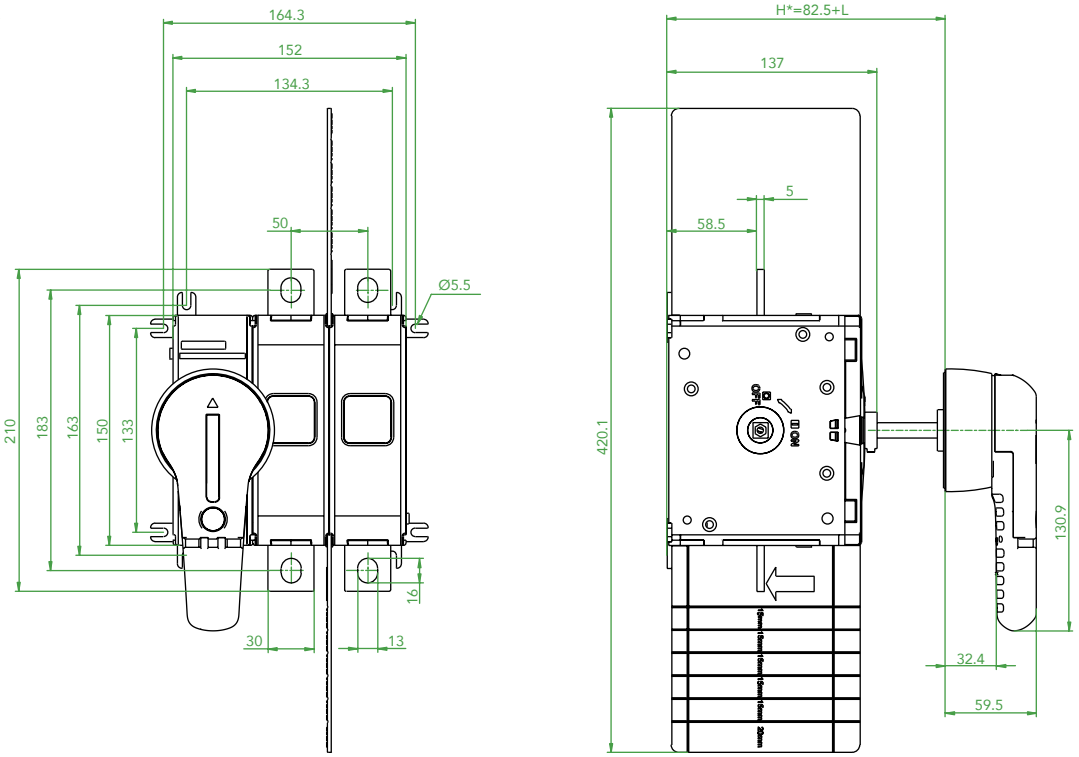
*H is the distance from the installation surface of the handle cabinet door to the installation corner of the switch, and L is the length of the square shaft.

RDSD HV Series DC Rotary Disconnect Switches

Dimensions

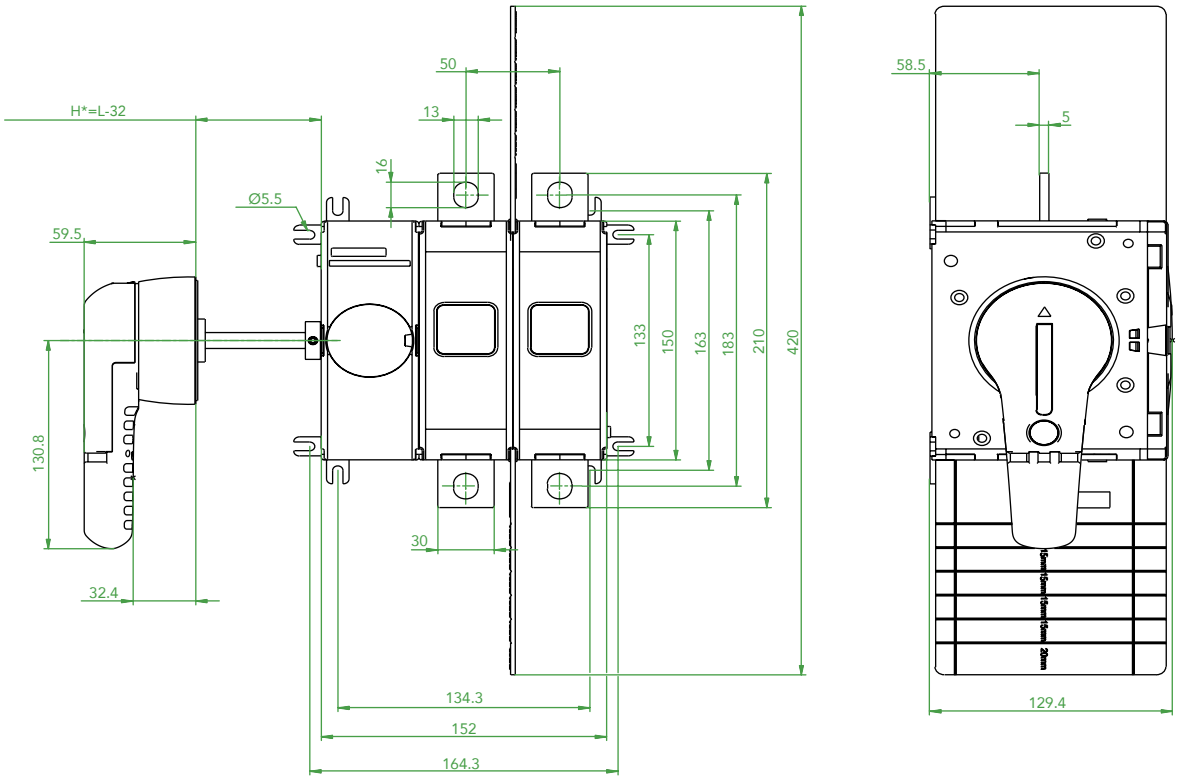
RDSD4HV02W

Unit: mm



RDSD4HV02S

Unit: mm



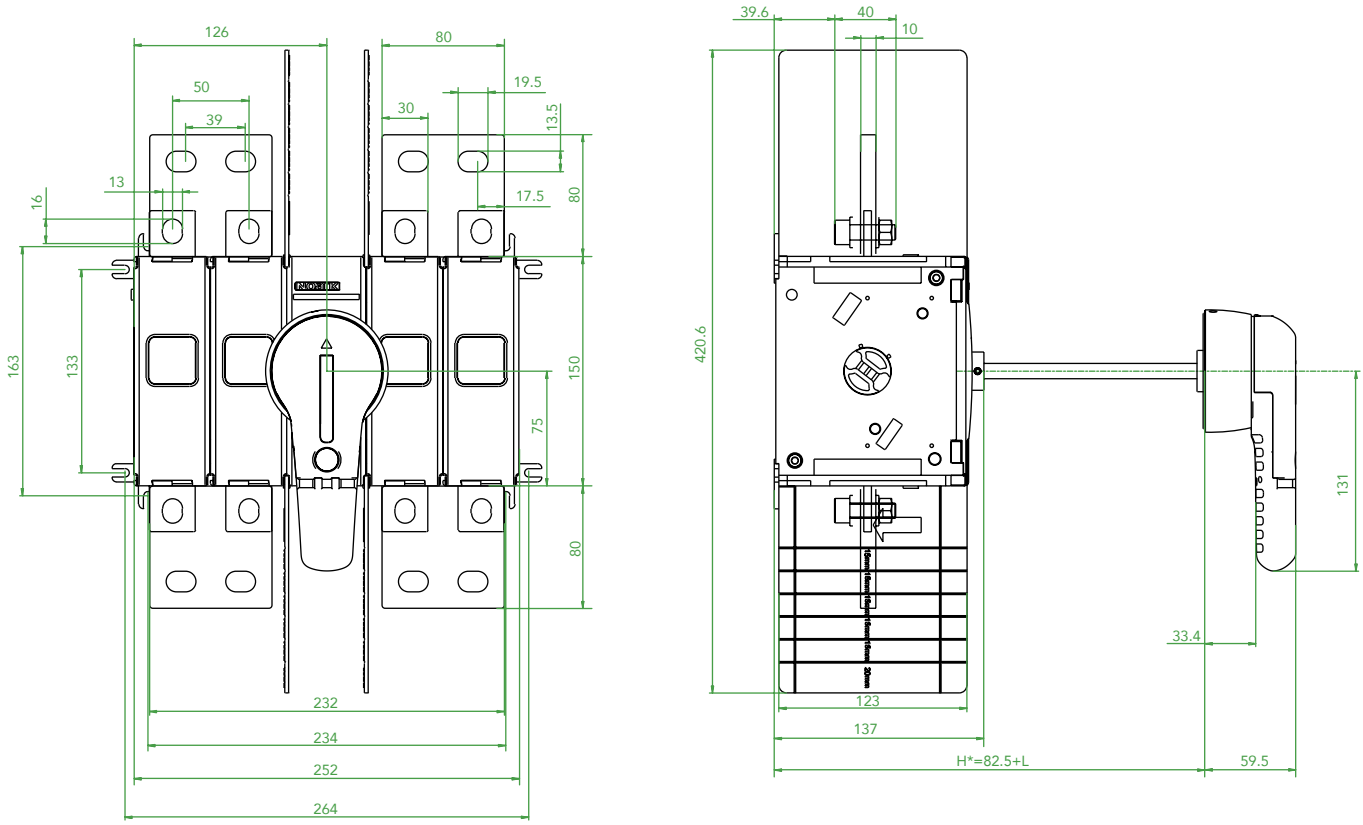
*H is the distance from the installation surface of the handle cabinet door to the installation corner of the switch, and L is the length of the square shaft.

RDSD HV Series DC Rotary Disconnect Switches

Dimensions

RDSD6HV22W

Unit: mm



*H is the distance from the installation surface of the handle cabinet door to the installation corner of the switch, and L is the length of the square shaft.

NOARK Electric USA
2188 Pomona Blvd.
Pomona, CA 91768
(626) 330-7007
nasales@noark-electric.com

NOARK Electric Canada
975 Bleams Rd. Unit 3
Kitchener, ON N2E 3Z5
519-790-0605
casales@noark-electric.com

na.noark-electric.com