

DC Rotary Switch Disconnecter Ex9IR50



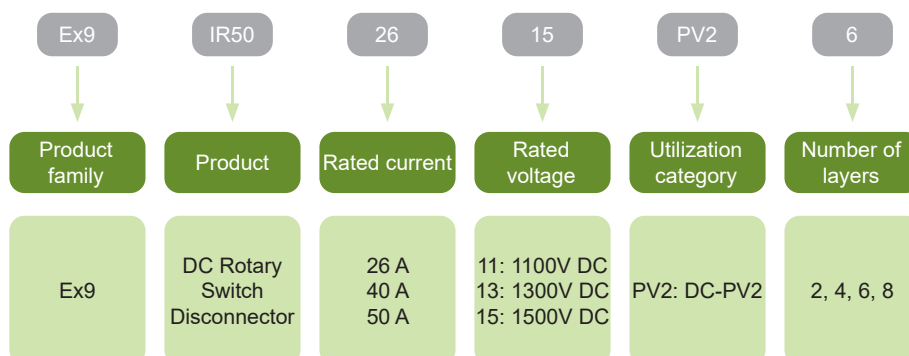
- DC Rotary Switch Disconnecter
- Non-polarized, suitable for PV systems
- Rated current up to 50 A at 1100 V DC
- Rated current up to 26 A at 1500 V DC
- Rated voltage up to 1500 V DC
- Meet requirements of IEC / EN 60947-3
- From 2 up to 8 layers
- Utilization category DC-PV2

Ex9IR50 DC Rotary Switch Disconnecter is an electrical safety device that manually disconnects itself from applications in such as Photovoltaic and energy storage systems. In PV applications this disconnecter is used for manually isolate solar panels for maintenance, installation or repair purposes.

Utilization category is DC-PV2, that means connecting and disconnecting PV circuits where significant over-currents may prevail and where current flow can be in both directions; for example, where several strings are connected in parallel and to the same inverter, or, one or more strings with a battery.

Rated current is up to 50A for 1100V DC and 26A for 1500V DC in solutions from 2 layers up to 8 layers.

Type Key



Certification marks



DC Rotary Switch Disconnecter Ex9IR50

2 Layers



Rated current	Rated voltage	Article no.	Type	Package
50 A	1100 V DC	113492	Ex9IR50-50/11/PV2/2	1/12/72
40 A	1300 V DC	113504	Ex9IR50-40/13/PV2/2	1/12/72
26 A	1500 V DC	113508	Ex9IR50-26/15/PV2/2	1/12/72

4 Layers



Rated current	Rated voltage	Article no.	Type	Package
50 A	1100 V DC	113524	Ex9IR50-50/11/PV2/4	1/12/60
40 A	1300 V DC	113536	Ex9IR50-40/13/PV2/4	1/12/60
26 A	1500 V DC	113540	Ex9IR50-26/15/PV2/4	1/12/60

6 Layers



Rated current	Rated voltage	Article no.	Type	Package
50 A	1100 V DC	113556	Ex9IR50-50/11/PV2/6	1/12/48
40 A	1300 V DC	113568	Ex9IR50-40/13/PV2/6	1/12/48
26 A	1500 V DC	113572	Ex9IR50-26/15/PV2/6	1/12/48

8 Layers



Rated current	Rated voltage	Article no.	Type	Package
50 A	1100 V DC	113588	Ex9IR50-50/11/PV2/8	1/12/36
40 A	1300 V DC	113600	Ex9IR50-40/13/PV2/8	1/12/36
26 A	1500 V DC	113604	Ex9IR50-26/15/PV2/8	1/12/36

Technical Data Ex9IR50

DC Rotary Switch Disconnecter up to 50 A

General parameters

Suitable for PV applications
Non-polarized
Up to 8 layers
Utilization category DC-PV2

Electrical parameters

Tested according to	IEC/EN 60947-3		
Rated operating voltage U_e	1100 V DC	1300 V DC	1500 V DC
Rated current I_e	50 A	40 A	26 A
Conventional thermal current I_{th}	≤ 62.5 A		
Number of layers	2, 4, 6, 8		
Utilization category	DC-PV2		
Rated insulation voltage U_i	1500 V DC		
Rated impulse withstand voltage U_{imp}	8 kV		
Rated short-time withstand current I_{cw} , 1 s	0.7 kA		
Rated short-circuit making capacity I_{cm}	1.4 kA		
Mechanical service life	9700 operation cycles		
Electrical service life	300 operation cycles		

Mechanical parameters

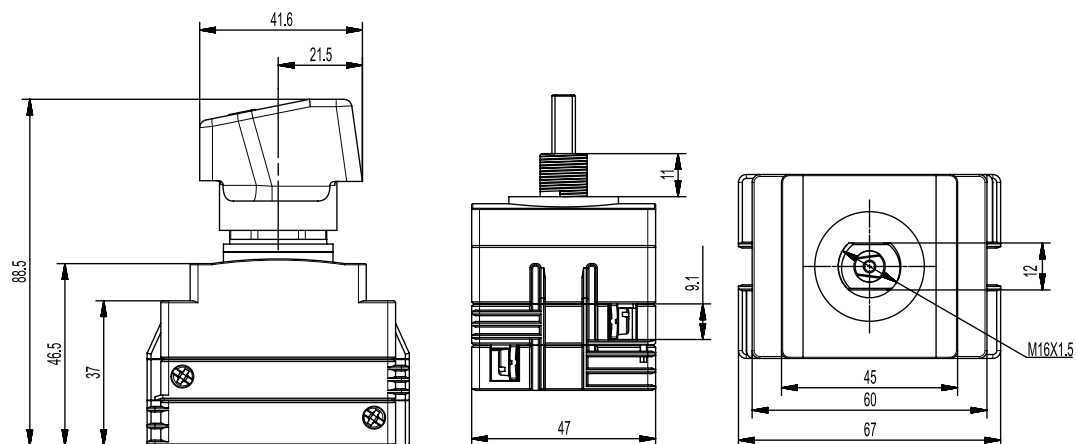
Device width	47 mm			
Device height	63 mm			
Device depth	88.5 mm (2P), 109.5 mm (4P), 130.5 mm (6P), 151.5 mm (8P)			
Mounting	Into panel cutout			
Degree of protection	IP20			
Terminal capacity	1 — 16 mm ²			
Fastening torque of terminals	1.5 — 1.7 Nm			
Ambient temperature	-40 — +85 °C			
Altitude	≤ 2000 m			
Relative humidity	≤ 95 %			
Pollution degree	3			
Weight	214g, 2P	308g, 4P	402g, 6P	493g, 8P

Technical Data Ex9IR50

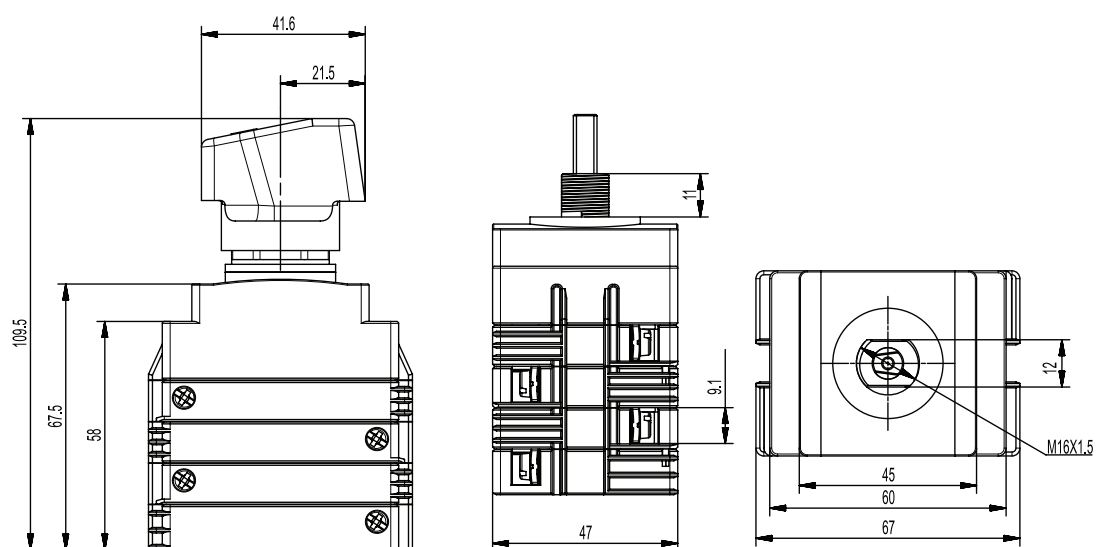
DC Rotary Switch Disconnecter Ex9IR50

Dimensions

2 Layers



4 Layers

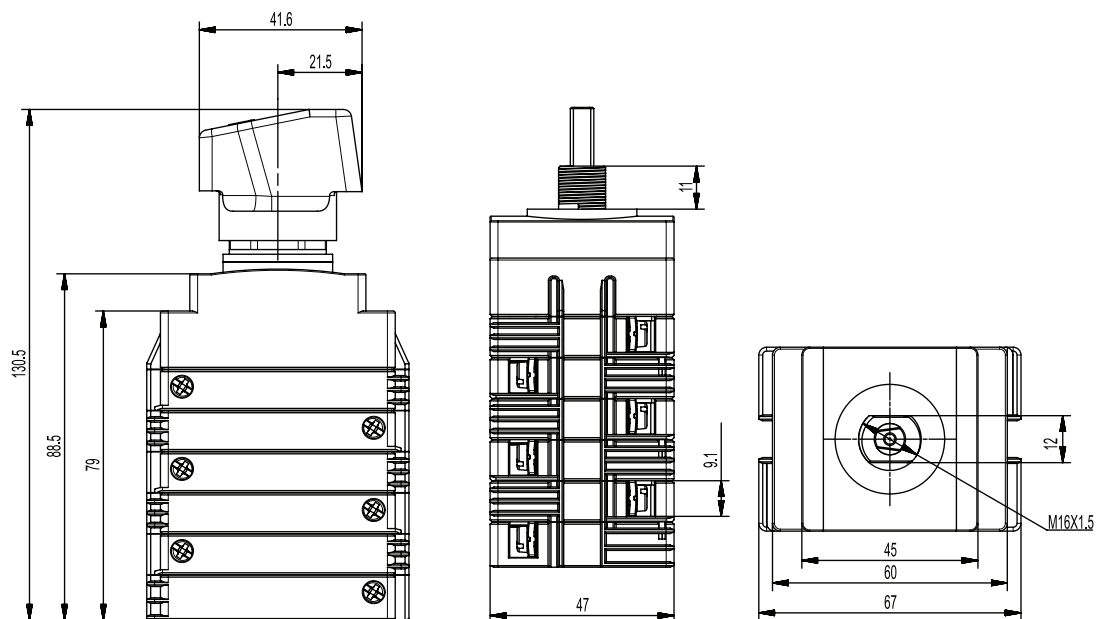


Technical Data Ex9IR50

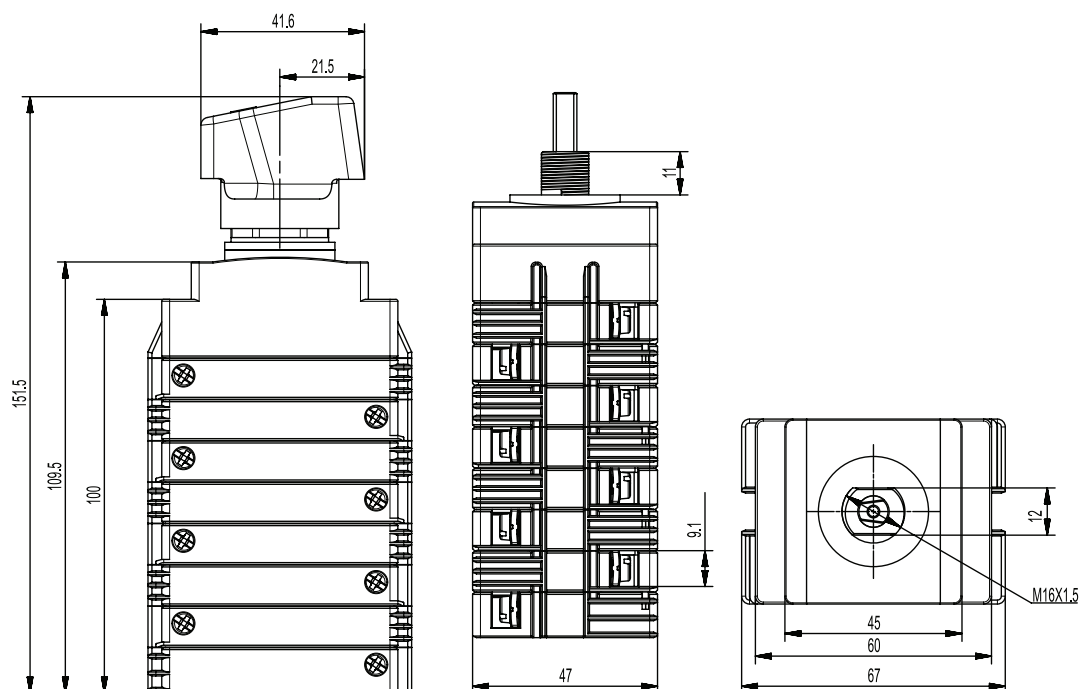
DC Rotary Switch Disconnecter Ex9IR50

Dimensions

6 Layers



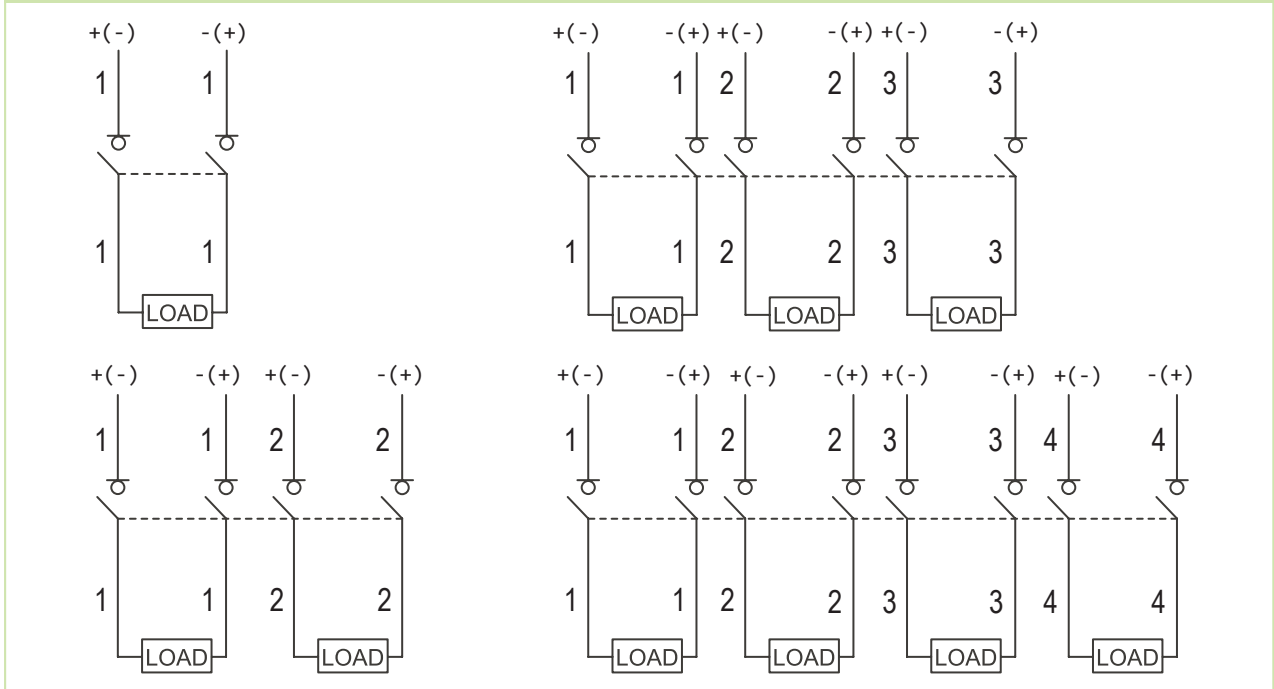
8 Layers



Technical Data Ex9IR50

DC Rotary Switch Disconnecter Ex9IR50

Wiring diagrams



Power loss

Voltage	Layers	Rated current (A)		
		26	40	50
1100V DC	2	-	-	5.5 W
	4	-	-	11 W
	6	-	-	16.5 W
	8	-	-	22 W
1300V DC	2	-	3.5 W	-
	4	-	7 W	-
	6	-	10.5 W	-
	8	-	14 W	-
1500V DC	2	1.5 W	-	-
	4	3 W	-	-
	6	4.5 W	-	-
	8	6 W	-	-