

DC Surge Protection Devices Ex9UP for PV

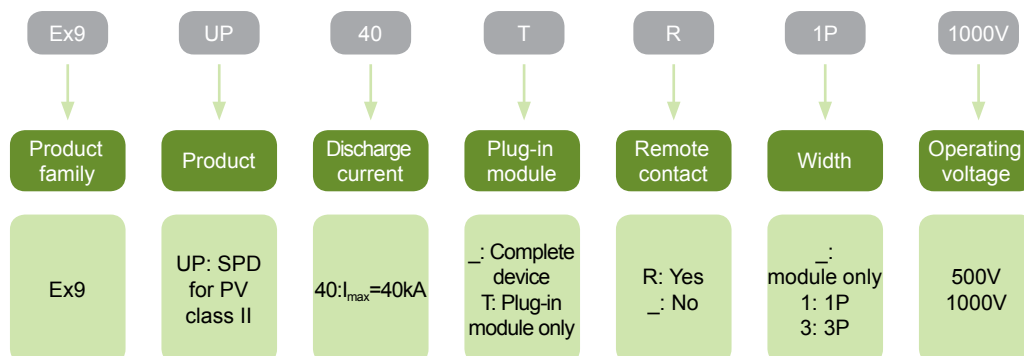


- DC Surge Protection Devices for Photovoltaic systems
- Nominal discharge current I_n 20 kA (8/20 μ s)
- Maximum discharge current I_{max} 40 kA (8/20 μ s)
- Max. continuous operational voltage 1000 V DC
- Meet requirements of IEC 61643-1 / EN 61643-11
- 1 and 3-pole version
- Plug-in module design
- Device status indicator

DC Surge protection devices Ex9UP are suitable for photovoltaic applications. These SPDs are tested according to Class II. Indication unit helps users to know the status of device and remote-signal port is able to provide remote indication and alarm.

Plug-in module design makes it convenient to change module without device disconnection.

Type Key



Certification marks



DC Surge Protection Devices Ex9UP for PV

500 V



Max continuous voltage U_c	Width	Article No.	Type	Packing
500 V	1 MU	102312	Ex9UP 40 1P 500V	1/12/144
500 V	1 MU	102313	Ex9UP 40R 1P 500V	1/12/144

1000 V for grounded PV systems



Max continuous voltage U_c	Width	Article No.	Type	Packing
1000 V	2 MU	102314	Ex9UP 40 1P 1000V	1/4/48
1000 V	2 MU	102315	Ex9UP 40R 1P 1000V	1/4/48

1000 V for ungrounded PV systems



Max continuous voltage U_c	Width	Article No.	Type	Packing
1000 V	3 MU	103371	Ex9UP 40 3P 1000V	1/4/48
1000 V	3 MU	103372	Ex9UP 40R 3P 1000V	1/4/48

Plug-in module



Max continuous voltage U_c	Poles	Article No.	Type	Packing
500 V	1	102316	Ex9UP 40T 500V	1

Technical Data DC SPDs Ex9UP

General parameters

Modular design device
Plug-in module design
Indication window help users to know the status of device
Optional remote-signaling contact

Electrical parameters

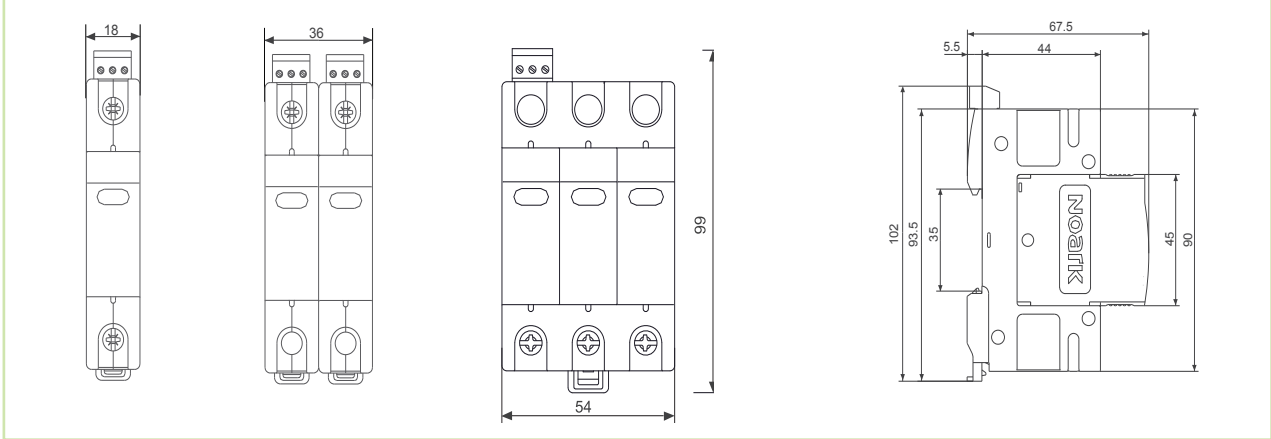
	Ex9UP 40(R) 1P 500V	Ex9UP 40(R) 1P/3P 1000V
Open voltage $U_{oc,max}$	500 V DC	1000 V DC
SPD class according to	IEC 61643-1 / EN 61643-11	
Classified test	II (C, T2)	
Max continuous operational voltage U_c	500 V DC	1000 V DC
Rated nominal discharge current I_n	20 kA (8/20 μ s)	
Max impulse current I_{max}	40 kA (8/20 μ s)	
Protection voltage U_p	2.0 kV	3.8 kV
Remote contact op. voltage	250 V AC / 30 V DC	
Remote contact op. current	1 A	

Mechanical parameters

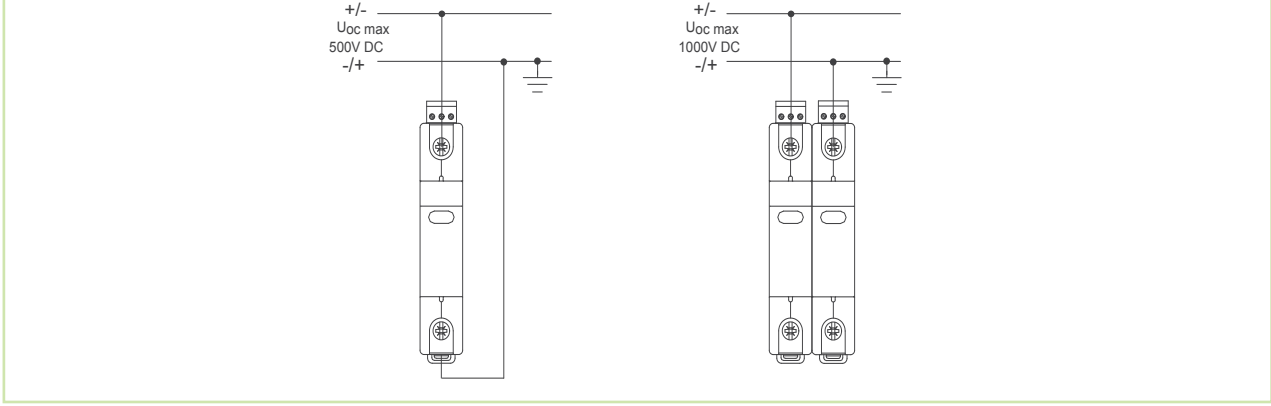
Device width	18 mm (per pole/module)
Device height	83 mm (89 mm including rail clip)
Frame size	45 mm
Mounting	easy fastening onto 35 mm device rail (DIN)
Degree of protection	IP40, terminals IP20
Terminals	M5 screws
Terminal capacity	4 — 25 mm ²
Fastening torque of terminals	3,5 nm
Ambient temperature	-30 — +70 °C
Altitude	≤ 2000 m
Relative humidity	30 — 90 %
Weight	0.12 kg (per pole/module)

Technical Data DC SPDs Ex9UP

Dimensions



Wiring diagrams - grounded systems



Wiring diagrams - ungrounded systems

