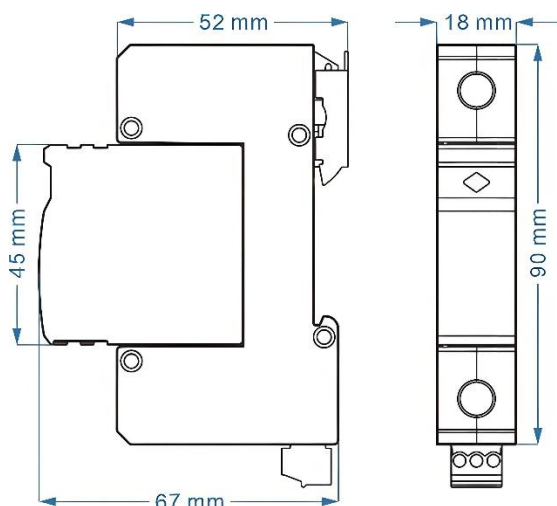


Surge Protection Devices for Photovoltaic Systems

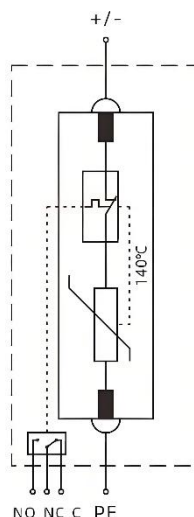
Product: SPD20C/1-48PVS

- **DC surge Protective device** specially used for photovoltaic system less than 48Vdc.
- The core parts are metal oxide varistor components with high discharge capacity.
- With reliable control thanks to Thermo Dynamic Control disconnecter.
- With remote signaling contact for control device.
- Fault indication via red mark in the inspection window.

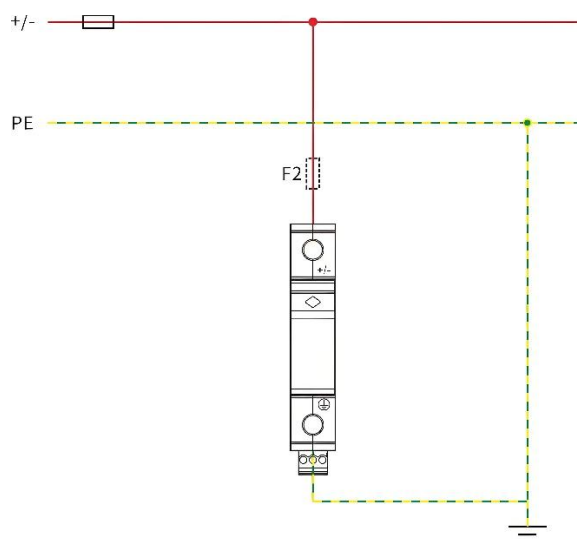
Dimension:

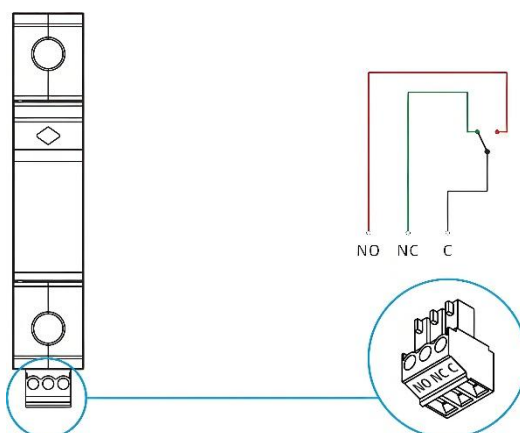


Circuit:



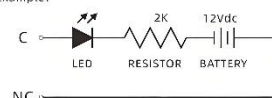
Installation:


$$F1 > 125 \text{ AgL/gG} \rightarrow F2 = 125 \text{ AgL/gG}$$

$$F1 \leq 125 \text{ AgL/gG} \rightarrow \cancel{F2}$$


Work : NC & C close
Defect : NO & C close

Example:



Electrical parameters:

Model. No.	SPD20C/1-48PVS
SPD protection conforms to EN50539-11/IEC61643-31	Type 2
SPD installation type conforms to EN50539-11/IEC61643-31	Class II
Protection level conforms to DIN VDE0675-6	C
Type of Network	Photovoltaic systems DC side
Protection mode	(+/-)-PE
Nominal Voltage U_N	48 Vdc
Maximum continuous operating voltage for PV application U_{CPV}	75 Vdc
Continuous operating current I_{CPV}	<20 μ A
Residual current I_{PE}	$\leq 20 \mu$ A dc $\leq 500 \mu$ A ac
Standby power consumption P_c	≤ 25 mVA
Maximum discharge current (8/20 μ s) I_{max}	40 kA
Nominal discharge current (8/20 μ s) I_n	20 kA
Voltage protection level U_p	≤ 0.6 kV
Isolation resistance R_{isol}	> 1000 M Ω
Response time t_A	≤ 25 ns
Remote control contact	YES
Disconnection indicator	Mechanical indicator (Green: OK, Red: Replace)
I/O Connections	By screw terminal:10-35mm ² By connection bus
Installation location	Inside
Mounting type	Symmetrical rail (EN50022/DIN46277-3)
Color	Gray
Degree of protection	IP20
Housing material	UL94V-0
Ambient temperature	-40°C ~+80°C
Altitude	≤ 2000 m (amsl (above mean sea level))
Permissible humidity	30%~90%