



Type 2 Surge Protector for Photovoltaic

CDS50PV



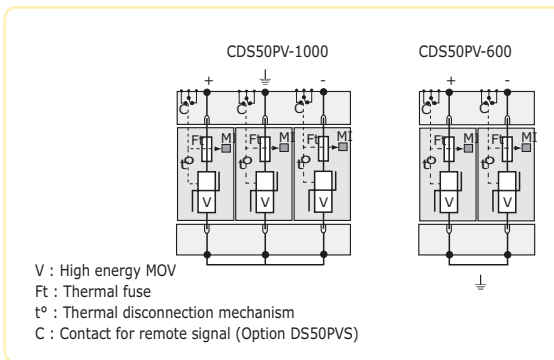
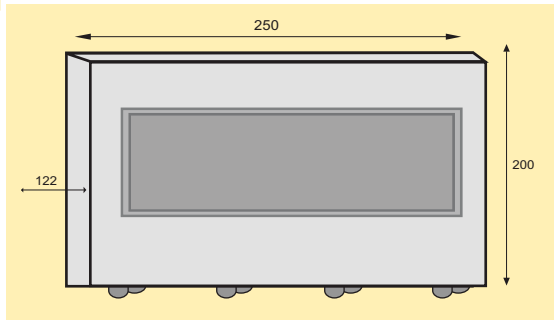
CDS50PV is a Surge Protected Combiner box with an integrated DC Disconnect for up to 4 strings. The CDS50PV incorporates Citel's Heavy Duty Type 2 DS50PV Surge Protectors. The DS50PV provides uncompromising protection against conducted surges that originate from direct lightning strikes. They utilize a varistor circuit with thermal fuses and real-time status indication. The DS50PV units are tested to 8/20 μ s surge waveforms from IEC-61643 Type 2 and ANSI/IEEE C62.41.

The CDS50PV is installed at both ends of the DC power supply line, i.e. directly in front or inside the inverter and at the solar panel or solar array.

CDS50PV is installed in series with the DC network to be protected and provides common mode protection. They are available for DC networks up 40A with voltages not to exceed 1,000VDC and it is housed in a outdoor rated enclosure (IP65).

- Type 2 SPD for Photovoltaic
- I_{max}: 40 kA (8/20 s wave by pole)
- Internal disconnecter, failure indicator
- Remote signaling contact

Dimensions and Diagram



Characteristics

CITEL part number	CDS50PV-600-40A	CDS50PV-1000-40A
Nominal voltage network	600 Vdc	1000 Vdc
Max. Operating voltage U _c	670 Vdc	1060 Vdc
Follow current	If none	none
Residual voltage (at I _{imp}) U _{res}	1.6 kV	1.9 kV
Protection level (at I _n) U _p	1.7 kV	2.4 kV
Operating current	I _c none	none
Leakage current at U _c		
Nominal discharge current 15 x 8/20 μ s impulses	I _n 20kA	20kA
Maximum discharge current max. withstand 8/20 μ s	I _{max} 40kA	40kA
Connection	by screw terminals : 6-35 mm /by bus	
Disconnection indicator	1 mechanical indicators	
Disconnect rating	40A; 1000V	
Mounting	symmetrical rail 35 mm	
Connection	by screw terminals : 6-35 mm /by bus	
Disconnection indicator	1 mechanical indicators	
Operating temperature	-40/+85 °C	
Protection class	IP65 NEMA	
Housing material	Polycarbonate	