



## Type 1 Surge Protector for Photovoltaic CDS60PV



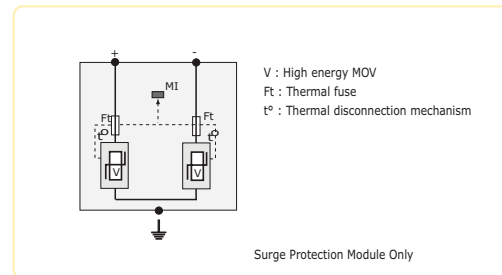
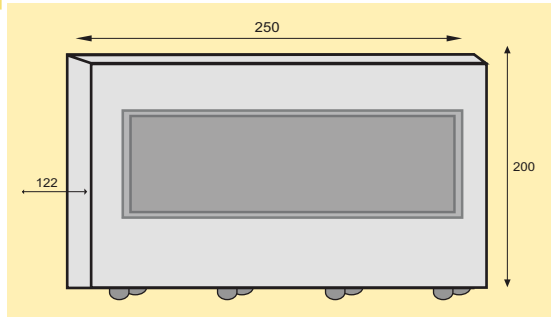
*CDS60PV is a Surge Protected Combiner box with an integrated DC Disconnect for up to 4 strings. The CDS60PV incorporates CITEL's Heavy Duty Type 1 DS60PV Surge Protectors. The DS60PV provides uncompromising protection against conducted surges that originate from direct lightning strikes. They utilize a multi-Varistor circuit with thermal fuses and real-time status indication. The DS60PV units are tested to the world's most stringent 10/350us surge waveforms from IEC-61643 Type 1 and ANSI/IEEE C62.41.*

*The CDS60PV is installed at both end of the DC power supply line, i.e. directly in front or inside the inverter and at the solar panel or solar array.*

*CDS60PV 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 1 SPD for Photovoltaic
- Iimp : 12.5 kA (10/350 µs wave by pole)
- Itotal : 25 kA (10/350 µs wave)
- Internal disconnecter, failure indicator
- Remote signal option

### Dimensions and Diagram



### Characteristics

CITEL part number	CDS60PV-500-40A	CDS50PV-1000-40A	
Nominal voltage network	500 Vdc	1060 Vdc	
Max. operating voltage	550 Vdc	1060 Vdc	
Follow current	If	none	
Residual voltage (at Iimp)	Ures	1.6 kV	1.9 kV
Protection level (at In)	Up	1.7 kV	2.4 kV
Operating current	Ic	none	none
Leakage current at Uc			
Nominal discharge current In 15 x 8/20 µs impulses	I <sub>n</sub>	30kA	30kA
Maximum discharge current I <sub>max</sub> max. withstand 8/20 µs	I <sub>max</sub>	70kA	70kA
Max. lightning current by pole I <sub>imp</sub> max. withstand 10/350 µs	I <sub>imp</sub>	25kA	25kA
Associated disconnection devices			
Thermal disconnection		internal	
Mechanical characteristics			
Connection		by screw terminals : 6-35 mm <sup>2</sup> /by bus	
Disconnection indicator		1 mechanical indicators	
Disconnect rating		40A; 600V	
Mounting		symmetrical rail 35 mm	
Operating temperature		-40/+85 °C	
Protection class		IP65 NEMA	
Housing material		Polycarbonate	
Standard Compliance		Surge Protection Device (SPD)	