DATASHEET

Mains power protection

MMP C600PV & MMP C1300PV

Type 2 (Class II / Class C) protector
***I*max = 40 kA 8/20 µs**

Features & benefits

- The varistor based design eliminates the high follow current (*If*) associated with spark gap based surge protection
- Common mode protection
- No leakage current
- The CPV Series utilises replaceable protection modules
- A red indicator shows when the protector requires replacement (replacement module part no. MMP CPVXXX where XXX is the system voltage - 600, 1300)
- This indication can also trigger a remote signal contact to interface with a building management system. Please use '/S' after the part no. to order the remote indication (change-over) contact version

Application

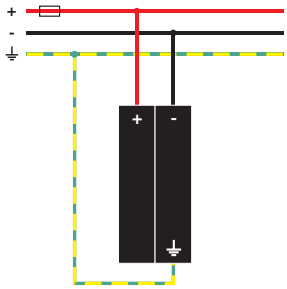
Use on photovoltaic systems up to 1000 V DC for protection against partial direct or indirect lightning strikes.

Installation

Should be installed on the DC side of the DC-AC inverter, as close as possible (within 10 m) to the equipment to be protected. The protector's base is suitable for attachment to a 35 mm top hat DIN rail.

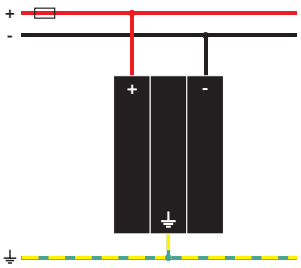
Note: a separate mains surge protector should also be installed on the AC side of the DC-AC inverter.

The diagrams below illustrate how to wire the appropriate MMP protector to the PV electrical system.



550 V DC

MMP C600PV installation



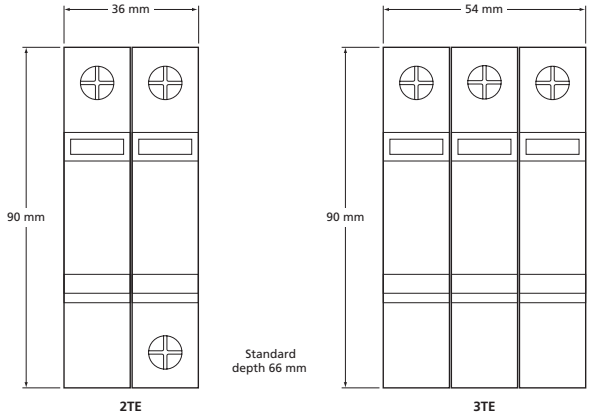
1000 V DC

MMP C1300PV installation

MMP C600PV & C1300PV - Technical specification

Electrical specification	**MMP C600PV**	**MMP C1300PV**
Nominal voltage	550 Vdc	1000 Vdc
Maximum continuous operating voltage (U_c)	640 Vdc	1300 Vdc
Back up fuse	Fuses specifically designed for use on PV systems are recommended. Determine the most appropriate back up fuse from assessment of the nominal current of the PV module, and the open circuit voltage of the PV array: 1. multiply the nominal current of the photovoltaic module by a factor of 1.4 and select the closest, higher value fuse to the calculated figure. 2. multiply the open circuit voltage of the PV array by a factor of 1.2 and ensure that the selected fuse has a higher voltage withstand than the calculated figure.	
Signal contact ratings	250 Vdc / 0.1 A (for /S option)	
Transient specification	**MMP C600PV**	**MMP C1300PV**
SPD classification[1]		
EN	2	2
IEC	II	II
E DIN VDE 0675	C	C
Surge current rating		
Nominal discharge current I_n (8/20 µs)	20 kA	20 kA
Maximum discharge current I_{max} (8/20 µs)	40 kA	40 kA
Let-through voltage (Up)[2] In (20 kA 8/20 µs)	< 2.2 kV	< 4.0 kV
Mechanical specification	**MMP C600PV**	**MMP C1300PV**
Temperature range	-40 to +80 °C	
Connection type		
for power	35 mm² solid conductor, 25 mm² stranded conductor - maximum torque 3 Nm	
for signal (remote contact)	1.5 mm² conductor (/S option) - maximum torque 0.25 Nm	
Mounting	Indoor, 35 mm top hat DIN rail to EN 50022	
Degree of protection	IP20	
Case material	Thermoplastic, UL 94 V-0	
Dimensions	to DIN 43880	
	90 mm x 66 mm x 36 mm (2TE)	90 mm x 66 mm x 54 mm (3TE)
	Units with the remote signal contact terminals (removable) are 100 mm high	

[1] Tested to BS EN/IEC-61643
[2] Values stated are per pole



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