DATASHEET

# Mains power protection

# MMP BT+CT Series

Type 1 (Class I / B) Gas Discharge Tube protector (BT Series)

Type 2 (Class II / C) Gas Discharge Tube protector (CT Series)  $I_{max} = 100 \text{ kA } 8/20 \text{ } \mu \text{s} \text{ (BT Series)} \text{ and } 40 \text{ kA } 8/20 \text{ } \mu \text{s} \text{ (CT Series)}$   $I_{imp} = 100 \text{ kA } 10/350 \text{ } \mu \text{s} \text{ (BT Series)} \text{ and } 12.5 \text{ kA } 10/350 \text{ } \mu \text{s} \text{ (CT Series)}$ 



#### Features & benefits

- Suitable to provide galvanic separation between N PE conductors (in TT systems)
- Two red indicators show when the protector requires replacement (BT Series)
- If only one indicator is displayed then there is still limited or reduced protection offered by the unit (BT Series)
- A red indicator shows when the protection module requires replacement (CT Series - replacement module part no. MMP CT255)
- 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

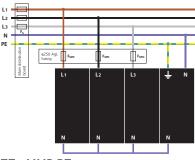
## **Application**

Use in conjunction with other Type 1 or Type 2 varistor based surge protection devices. The BT Series protect against both direct and indirect lightning strikes whereas the CT Series protect primarily against indirect lightning

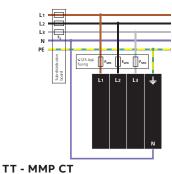
## Installation

The BT Series should be installed in a main distribution panel. The CT Series should be installed in a subdistribution panel or as close as possible to the equipment to be protected. The protector's base is suitable for attachment to a 35 mm top hat DIN rail.

The diagrams below illustrate how to wire the appropriate MMP protector according to your chosen electrical system.



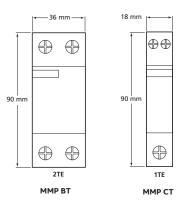
TT - MMP BT

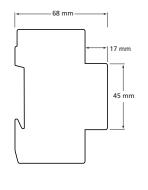




Electrical specification	MMP BT255B/1	MMP CT255/1
Installation	TT	TT
SPD protective element	GDT	GDT
Nominal voltage (U <sub>o</sub> )	220-240 VRMS	220-240 VRMS
Nominal frequency range	47-63 Hz	47-63 Hz
Maximum continuous operating voltage ( <i>U</i> <sub>c</sub> )	255 Vac	255 Vac
Maximum back up fuse	250 AgL	125 AgL
Short circuit capability	25 kA / 50 Hz	25 kA / 50 Hz
Signal contact ratings	250 VRMS / 0.5 A	250 VRMS / 0.5 A
Part numbers:		
SPD part no.	MMP BT255B/1	MMP CT255/1
SPD part no. with signal contact	MMP BT255B/1/S	MMP CT255/1/S
Replacement module part no.	-	MMP CT255
Transient specification	MMP BT255B/1	MMP CT255/1
Arrester classification¹		
EN	1 (1 + 2)	2
IEC	I (I + II)	I + II
E DIN VDE 0675	B (B + C)	С
Let-through voltage (Up)² at 1.2/50 μs	< 1.75 kV	< 2.0 kV
Nominal discharge current <i>I</i> n (8/20 μs)	100 kA	20 kA
Maximum discharge current		
lmax (8/20 μs)	100 kA	40 kA
/imp (10/350 μs)	100 kA	12.5 kA
Mechanical specification	MMP BT255B/1	MMP CT255/1
Temperature range	-40 to +80 °C	
Connection type		
for power, MMP BT	100 kA	40 kA
for power, MMP CT	35 mm² solid conductor, 25 mm² stranded conductor - maximum torque 3.0 Nm	
for signal (remote contact), MMP CT	1.5 mm² conductor (/S option) - maximum torque 0.25 Nm	
Mounting	Indoor, 35 mm top hat DIN rail	
Degree of protection	IP20	
Case material	Thermoplastic, UL 94 V-0	
Weight	260 g	145 g³
Dimensions to DIN 43880	90 mm x 68 mm x 36 mm (2TE) Units with the remote signal contact terminals (removable) are 100 mm high	90 mm x 68 mm x 18 mm (1TE) Units with the remote signal contact terminals (removable) are 100 mm high

<sup>&</sup>lt;sup>1</sup> Tested to BS EN/IEC-61643





Values stated are per pole
 Remote signal contact adds 5 g to weight