

Power Protection - Class 1 - MER 12.5

Category IEC/EN/VEDE: Class I, II/Type 1, 2/B+C

Location of use: Main distribution boards

Protection modes: L/N - PE, L - PEN

Protective element: High Energy MOV

High surge discharge ratings: $I_{imp} = 12.5kA$

Housing: compact design

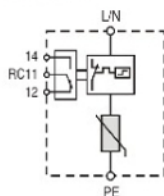
Technical data

Type	MER 12.5					
	150	275	320	385	440	
In accordance with	IEC-61643-1					
Max. continuous operating voltage (AC/DC)	U_C	150/200V	275/350V	320/420V	385/500V	440/580V
Nominal discharge current (8/20)	I_n	20kA				
Max. discharge current (8/20)	I_{max}	50kA				
Impulse current (10/350)	I_{imp}	12.5kA				
Specific energy		39kJ/Ω				
Charge		6.25As				
Protection level	U_p	< 0.8kV	< 1.5kV	< 1.6kV	< 1.7kV	< 2.0kV
Residual voltage at I_{imp}	U_{res}	< 0.7kV	< 1.2kV	< 1.3kV	< 1.4kV	< 1.9kV
Follow current	I_f	NO				
Response time	t_A	< 25ns				
Residual current at U_C	I_{PE}	< 2.5mA				
Thermal protection		YES				
Terminal screw torque		max. 3.5Nm				
Back-up fuse (if mains > 160A)		160A gL				
Short-circuit withstand current		25kA / 50Hz				
Temperature range		- 40°C ... + 80°C				
Terminal cross section		35mm ² (solid)/25mm ² (stranded)				
Mounting EN 60715		35mm top-hat rail				
Degree of protection		IP 20				
Housing material		thermoplastic; extinguishing degree UL 94 V-0				
Dimensions DIN 43880		1TE				
Weight per unit		124g	150g	150g	143g	146g
MER 12.5 (with remote contacts)						
Remote contacts		YES				
Contact ratings		AC: 250V/0.5A; 125V/3A				
Terminal cross section		max. 1.5mm ²				
Remote terminal torque		0.25Nm				
Weight per unit		129g	155g	155g	148g	151g
Packaging dimensions (single unit)		108 x 74 x 24mm				

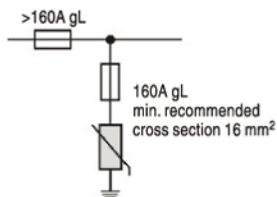


Connection diagram

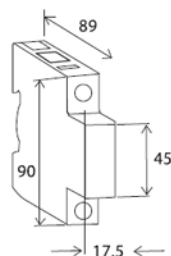
MER 12.5



Selection of back-up fuse



Dimensions



Power Protection - Class 1 - MER 25

Category IEC/EN/VDE: Class I, II/Type 1, 2/B+C

Location of use: Main distribution boards

Protection modes: L/N - PE, L - PEN

Protective element: High Energy MOV

Housing: compact design

Technical data

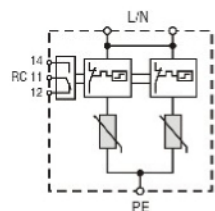
Type	MER 25					
	150	275	320	385	440	
In accordance with	IEC-61643-1					
Max. continuous operating voltage (AC/DC)	U_C	150/200V	275/350V	320/420V	385/500V	440/580V
Nominal discharge current (8/20)	I_n	25kA				
Max. discharge current (8/20)	I_{max}	100kA				
Impulse current (10/350)	I_{imp}	25kA				
Specific energy	156kJ/Ω					
Charge	12.5As					
Protection level	U_p	< 0.7kV	< 1.3kV	< 1.3kV	< 1.7kV	< 2.0kV
Residual voltage at I _{imp}	U_{res}	< 0.7kV	< 1.2kV	< 1.2kV	< 1.5kV	< 1.8kV
Follow current	I_f	NO				
Response time	t_A	< 25ns				
Residual current at U _C	I_{PE}	< 2.5mA				
Thermal protection	YES					
Terminal screw torque	max. 4.5Nm					
Back-up fuse (if mains > 250A)	250A gL					
Short-circuit withstand current	25kA / 50Hz					
Temperature range	- 40°C + 80°C					
Terminal cross section	35mm ² (solid) / 25mm ² (stranded)					
Mounting EN 60715	35mm top-hat rail					
Degree of protection	IP 20					
Housing material	thermoplastic; extinguishing degree UL 94 V-0					
Dimensions DIN 43880	2TE					
Weight per unit	200g	252g	252g	268g	284g	



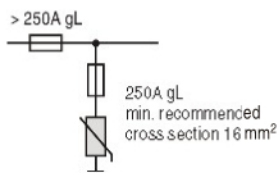
MER 25 (with remote contacts)					
Remote contacts	YES				
Contact ratings	AC: 250V/0.5A; 125V/3A				
Terminal cross section	max. 1.5mm ²				
Remote terminal torque	0.25Nm				
Weight per unit	205g	257g	257g	273g	289g
Packaging dimensions (single unit)	109 x 76.5 x 41.5mm				

Connection diagram

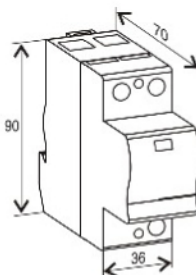
MER 25



Selection of back-up fuse



Dimensions



Power Protection - Class 2 - PROTEC C(R) 40

Category IEC/EN/VEDE: Class II/Type 2/C

Location of use: Branch sub-distribution boards

Protection modes: L/N - PE, L-PEN

Protective element: MOV

Surge discharge ratings: $I_{max} = 40kA$

Housing: Modular design

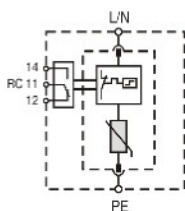
Technical data

Type	PROTEC C(R) 40/xxx					
	150	275	320	385	440	
In accordance with	IEC-61643-1					
Max. continuous operating voltage (AC/DC)	U_C	150/200V	275/350V	320/420V	385/500V	440/580V
Nominal discharge current (8/20)	I_n	20kA				
Max. discharge current (8/20)	I_{max}	40kA				
Protection level	U_p	< 0.9kV	< 1.5kV	< 1.5kV	< 1.9kV	< 2.2kV
Follow current	I_f	NO				
Response time	t_A	< 25ns				
Residual current at U_C	I_{PE}	< 1.5mA				
Thermal protection		YES				
Terminal screw torque		max. 4.5Nm				
Back-up fuse (if mains > 125A)		125A gL				
Short-circuit withstand current		25kA / 50Hz				
Temperature range		- 40°C + 80°C				
Terminal cross section		35mm ² (solid) / 25mm ² (stranded)				
Mounting EN 60715		35mm top-hat rail				
Degree of protection		IP 20				
Housing material		thermoplastic; extinguishing degree UL 94 V-0				
Dimensions DIN 43880		1TE				
Weight per unit		122g	128g	128g	129g	130g
PROTEC CR 40/xxx (with remote contacts)						
Remote contacts		YES				
Contact ratings		AC: 250V/0.5A; 125V/3A				
Terminal cross section		max. 1.5mm ²				
Remote terminal torque		0.25Nm				
Weight per unit		127g	133g	133g	134g	135g
Packaging dimensions (single unit)		108 x 74 x 24mm				

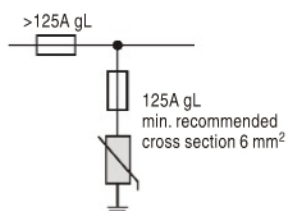


Connection diagram

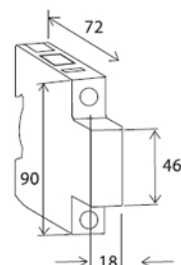
PROTEC CR 40/xxx



Selection of back-up fuse



Dimensions



Power Protection - Class 2 - PROTUBE C 40

Category IEC/EN/VEDE: ClassII/Type2/C

Location of use: Longitudinal, Transverse

Protection modes: N-PE

Protective element: GDT

Surge discharge ratings: $I_{max}=40kA$

Housing: Modular Design

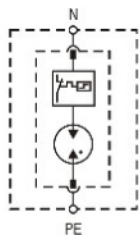
Technical data

Type	PROTUBE C 40/255	
In accordance with	IEC-61643-1	
Max. continuous operating voltage (AC)	U_c	255V
Nominal discharge current (8/20)	I_n	20kA
Max. discharge current (8/20)	I_{max}	40kA
Protection level	U_p	< 2.0kV
Follow current	I_f	> 100ARMS
Response time	t_A	< 100ns
Thermal protection	YES	
Terminal screw torque	max. 4.5Nm	
Temperature range	- 40°C+80°C	
Terminal cross section	35mm ² (solid) / 25mm ² (stranded)	
Mounting EN 60715	35mm top-hat rail	
Degree of protection	IP 20	
Housing material	thermoplastic; extinguishing degree UL 94 V-0	
Dimensions DIN 43880	1TE	
Weight per unit	118g	
Packaging dimensions (single unit)	108 x 74 x 24mm	



Connection diagram

PROTUBE C 40



Dimensions

