

PROTEC C(R) 120 (3+0)



- **Category IEC / EN:** Class II / Type 2
- **Location of use:** Sub-distribution boards
- **Network systems:** TN-C
- **Protection modes:** L/N - PE, L- PEN
- **Protective element:** MOV
- **Surge discharge rating:** $I_{max} = 40kA$
- **MOV max. withstand capability 1 x 8/20:** 60kA per pole
- **Housing:** Modular design
- **Complies with:** IEC 61643-11:2011, EN 61643-11:2012;



Technical data

Type	PROTEC C(R) 120/xxx (3+0)				
	150	275	320	385	440
● Electrical characteristics					
Nominal AC voltage	U_o		120V 50/60Hz	230V 50/60Hz	
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 per pole		
Max. discharge current (8/20)	I_{max}		40kA per pole		
Protection level	U_p		< 0.9kV	< 1.5kV	< 1.5kV < 1.9kV < 2.2kV
Residual voltage at 5kA (8/20)	U_{res}		< 0.6kV	< 1.1kV	< 1.1kV < 1.4kV < 1.6kV
Follow current	I_{fi}		NO		
Response time	t_A		< 25ns		
Thermal protection			YES		
Back-up fuse (if mains > 125A)			125A gG/gL		
Short-circuit current rating	I_{scCR}		25kA/50Hz		
TOV withstand 5s	U_T		174V		334V
TOV disconnection 120min	U_T		229V		438V
Number of ports			1		
● Mechanical characteristics					
Temperature range	T_a		-40°C +70°C		
Permissible humidity	RH		5%...95%		
Terminal screw torque	M_{max}		3.0Nm		
Conductor cross section			35mm ² (solid) / 25mm ² (stranded)		
AWG conductor cross section			2 AWG (solid) / 3 AWG (stranded)		
Mounting			35mm DIN rail, EN 60715		
Degree of protection			IP 20		
Housing material			thermoplastic; extinguishing degree UL 94 V-0		
Indication of thermal disconnecter operation			red flag		
Remote contacts (RC)			YES		
Contact ratings			AC: 250V/0.5A; 125V/3A		
Terminal cross section			max. 1.5mm ²		
Remote terminal torque			0.25Nm		

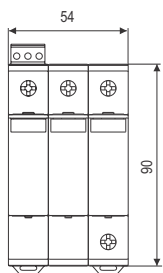
Ordering information

U_c	150	275	320	385	440
Ordering code PROTEC C 120/xxx (3+0)	50.A102	50.A052	50.A103	50.A059	50.A104
Ordering code PROTEC CR 120/xxx (3+0) (with remote contacts)	50.A105	50.A053	50.A106	50.A060	50.A107
Ordering code Module PROTEC C(R) 40/xxx	50.A074	50.A075	50.A049	50.A076	50.A077

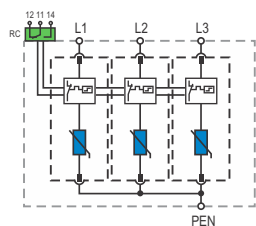
Dimensions, Internal configuration, Weight and Packaging

PROTEC C(R) 120/xxx (3+0)

Dimensions



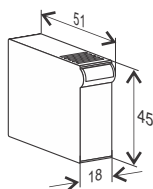
Internal configuration



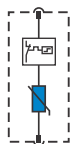
PROTEC C 120/xxx (3+0)	150	275	320	385	440
Dimensions DIN 43880	3TE				
Weight per unit	330g	352g	352g	354g	356g
PROTEC CR 120/xxx (3+0)	150	275	320	385	440
Dimensions DIN 43880	3TE				
Weight per unit	335g	357g	357g	359g	361g
Packaging dimensions (single unit)	109 x 76.5 x 61.5mm				
Min. packaging quantity	5 pcs.				

Module PROTEC C(R) 40/xxx

Dimensions



Internal configuration



Module PROTEC C(R) 40/xxx	75	150	275	320	385	440
Weight per unit	44g	48g	52g	56g	58g	60g
Packaging dimensions	221 x 64.5 x 48.5mm					
Min. packaging quantity	12 pcs.					