

Modular Multi-pole SPD  
**ProTec C(R) 160 (3+1)**  
 Class II • Type 2



Location of Use: Sub-distribution Boards  
 Network Systems: TT, TN-S  
 Mode of Protection: L - N, N - PE  
 Surge Ratings:  $I_n = 20 \text{ kA (8/20}\mu\text{s)}$   
 $I_{max} = 40 \text{ kA (8/20}\mu\text{s)}$   
 IEC/EN Category: Class II / Type 2  
 Protective Elements: High Energy MOV and GDT  
 Housing: Modular Design  
 Compliance: IEC 61643-11:2011  
 EN 61643-11:2012

**Technical Data**

**ProTec C(R) 160/xxx (3+1)**

**275                      320                      385                      440**

**Electrical**

Nominal AC Voltage (50/60 Hz)	$U_o$	230V	230V	230V	230V
Maximum Continuous Operating Voltage (AC)	(L - N) $U_c$	275V	320V	385V	440V
	(N - PE) $U_c$			255V	
Nominal Discharge Current (8/20 $\mu\text{s}$ )	(L - N)/(N - PE) $I_n$		20 kA/20 kA		
Maximum Discharge Current (8/20 $\mu\text{s}$ )	(L - N)/(N - PE) $I_{max}$		40 kA/40 kA		
Voltage Protection Level	(L - N) $U_p$	< 1.5 kV	< 1.5 kV	< 1.9 kV	< 2.0 kV
	(N - PE) $U_p$			< 1.5 kV	
Follow Current Interrupt Rating	(N - PE) $I_{fi}$		100 A <sub>RMS</sub>		
Response Time	(L - N)/(N - PE) $t_A$		< 25 ns / < 100 ns		
Back-Up Fuse (if mains > 125 A)			125 A gG		
Short-Circuit Current Rating (AC)	$I_{SCCR}$		25 kA		
TOV Withstand 5s	(L - N) $U_T$	335V	335V	438V	438V
TOV Withstand 200ms	(N - PE) $U_T$			1200V/300A	
Number of Ports			1		

**Mechanical & Environmental**

Temperature Range	$T_a$	-40 °C to +85 °C
Permissible Humidity	RH	5%...95%
Terminal Screw Torque	$M_{max}$	3.0 Nm
Conductor Cross Section (max)		35 mm <sup>2</sup> (solid) / 25 mm <sup>2</sup> (stranded)
Mounting		35 mm DIN Rail, EN 60715
Degree of Protection		IP 20
Housing Material		Thermoplastic: Extinguishing Degree UL 94 V-0
Thermal Protection	(L - N)/(N - PE)	Yes/No
Fault Indication	(L - N)/(N - PE)	Red Flag/No
Remote Contacts (RC)		Optional
RC Switching Capacity		AC: 250V/0.5 A; 125V/3 A
RC Terminal Cross Section (max)		1.5 mm <sup>2</sup>
RC Terminal Screw Torque	$M_{max}$	0.25 Nm

**Order Information**

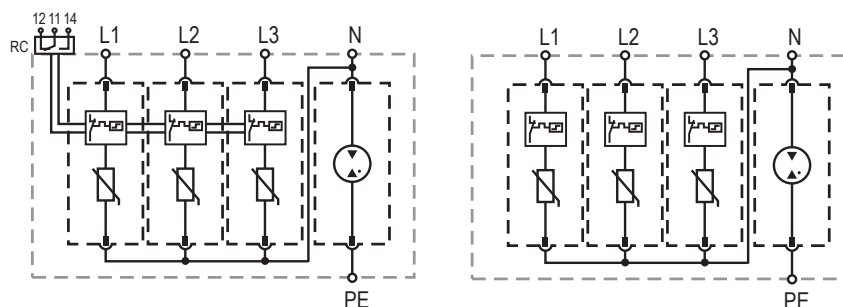
<b>Order Code</b>	<b>275</b>	<b>320</b>	<b>385</b>	<b>440</b>
PROTEC C 160/xxx (3+1)	50.A127	50.A047	50.A128	50.A056
PROTEC CR 160/xxx (3+1) (with remote contacts)	50.A130	50.A048	50.A061	50.A057
Module PROTEC C(R) 40/xxx	50.A075	50.A049	50.A076	50.A077
Module PROTUBE C 40/255	50.A050	50.A050	50.A050	50.A050

## ProTec C(R) 160 (3+1)

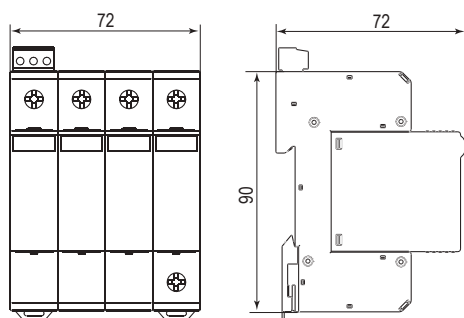
### Internal Configuration

#### Legend

- L Line
- N Neutral
- PE Protective Earth
- RC Remote Contacts Optional



### Dimensions & Packaging [mm]



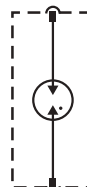
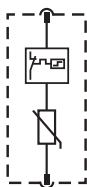
#### Dimensions & Packaging

ProTec C 160/xxx (3+1)	275	320	385	440
Single Unit Weight	441 g	441 g	445 g	447 g
Single Unit DIN 43880 Dimension	4 TE			
Packaging Dimensions (H x W x L)	109 x 77 x 80 mm			
Minimum Order Quantity	3 Units			
ProTec CR 160/xxx (3+1)	275	385	385	440
Single Unit Weight	446 g	446 g	450 g	452 g
Single Unit DIN 43880 Dimension	4 TE			
Packaging Dimensions (H x W x L)	109 x 77 x 80 mm			
Minimum Order Quantity	3 Units			

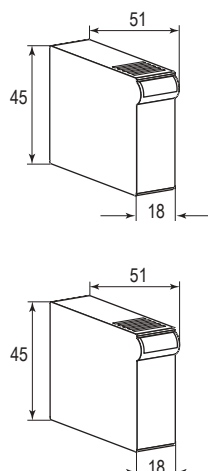
### Module Internal Configuration

#### Module ProTec C(R) 40/xxx

#### Module ProTube C 40/xxx



### Dimensions & Packaging [mm]



#### Dimensions & Packaging

Module ProTec C(R) 40/xxx	275	320	385	440
Single Unit Weight	52 g	56 g	58 g	60 g
Single Unit DIN 43880 Dimension	1 TE			
Packaging Dimensions (H x W x L)	98 x 77 x 110 mm			
Minimum Order Quantity	12 Units			

#### Dimensions & Packaging

Module ProTube C 40/xxx	255
Single Unit Weight	34 g
Single Unit DIN 43880 Dimension	1 TE
Packaging Dimensions (H x W x L)	98 x 77 x 110 mm
Minimum Order Quantity	12 Units

Information contained in this document is subject to change at any time without notice.

