

# Modular Multi-pole SPD ProTec C(R) 80 (1+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

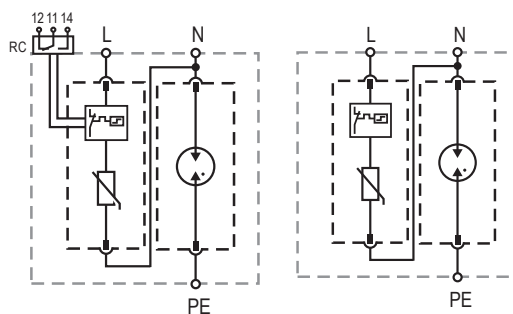
ProTec C(R) 80/xxx (1+1)		150	275	320	385	440
<b>Electrical</b>						
Nominal AC Voltage (50/60 Hz)	$U_o$	120V	230V	230V	230V	230V
Maximum Continuous Operating Voltage (AC)	(L-N) $U_c$	150V	275V	320V	385V	440V
	(N-PE) $U_c$			255V		
Nominal Discharge Current (8/20 $\mu\text{s}$ )	(L-N)/(N-PE) $I_n$			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) $U_p$	< 1.0 kV	< 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) $U_T$	174V	335V	335V	438V	438V
TOV Withstand 200ms	(N-PE) $U_T$			1200V/300A		
Number of Ports				1		
<b>Mechanical &amp; Environmental</b>						
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/0.5A; 125V/3A		
RC Terminal Cross Section (max)				1.5 mm <sup>2</sup>		
RC Terminal Screw Torque	$M_{max}$			0.25 Nm		
<b>Order Information</b>						
Order Code		150	275	320	385	440
PROTEC C 80/xxx (1+1)		50.A116	50.A117	50.A118	50.A119	50.A120
PROTEC CR 80/xxx (1+1) (with remote contacts)		50.A121	50.A122	50.A123	50.A124	50.A125
Module PROTEC C(R) 40/xxx		50.A074	50.A075	50.A049	50.A076	50.A077
Module PROTUBE C 40/255		50.A050	50.A050	50.A050	50.A050	50.A050

## ProTec C(R) 80 (1+1)

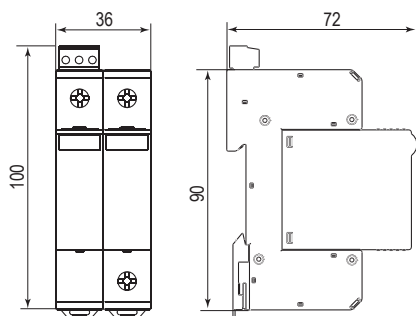
### Internal Configuration

#### Legend

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



### Dimensions & Packaging [mm]



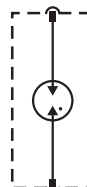
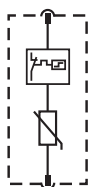
#### Dimensions & Packaging

	150	275	320	385	440
<b>ProTec C 80/xxx (1+1)</b>					
Single Unit Weight	221 g	225 g	225 g	226 g	227 g
Single Unit DIN 43880 Dimension	2 TE				
Packaging Dimensions (H x W x L)	109 x 77 x 42 mm				
Minimum Order Quantity	7 Units				
<b>ProTec CR 80/xxx (1+1)</b>					
Single Unit Weight	226 g	230 g	230 g	231 g	232 g
Single Unit DIN 43880 Dimension	2 TE				
Packaging Dimensions (H x W x L)	109 x 77 x 42 mm				
Minimum Order Quantity	7 Units				

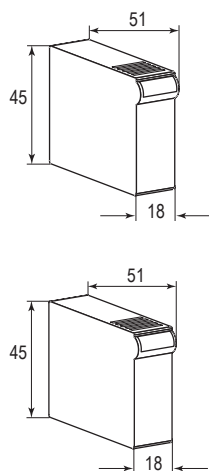
### Module Internal Configuration

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

#### Module ProTube C 40/xxx



### Dimensions & Packaging [mm]



#### Dimensions & Packaging

	150	275	320	385	440
<b>Module ProTec C(R) 40/xxx</b>					
Single Unit Weight	48 g	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

	255
<b>Module ProTube C 40/xxx</b>	
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