

Modular Multi-pole SPD

ProTec B2S(R) 37.5 (3+0)

Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards
 Network Systems: TN-C
 Mode of Protection: L - PEN
 Surge Ratings: $I_{imp} = 12.5 \text{ kA (10/350}\mu\text{s)}$
 $I_n = 25 \text{ kA (8/20}\mu\text{s)}$
 IEC/EN Category: Class I, II / Type 1, 2
 Protective Elements: High Energy MOV
 Housing: Modular Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

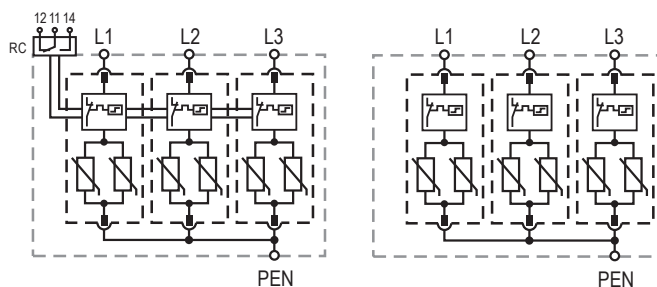
ProTec B2S(R) 37.5/xxx (3+0)		150	275	320	385	440
Electrical						
Nominal AC Voltage (50/60 Hz)	U_o	120 V	230 V	230 V	230 V	230 V
Maximum Continuous Operating Voltage (AC)	U_c	150 V	275 V	320 V	385 V	440 V
Nominal Discharge Current (8/20 μs)	I_n			25 kA		
Maximum Discharge Current (8/20 μs)	I_{max}			60 kA		
Impulse Discharge Current (10/350 μs)	I_{imp}			12.5 kA		
Total Discharge Current (10/350 μs)	I_{total}			37.5 kA		
Specific Energy	W/R			39 kJ/ Ω		
Charge	Q			6.25 As		
Voltage Protection Level	U_p	< 1.0 kV	< 1.4 kV	< 1.5 kV	< 1.7 kV	< 2.0 kV
Response Time	t_A			< 25 ns		
Back-Up Fuse (if mains > 160 A)				160 A gG		
Short-Circuit Current Rating (AC)	I_{SCCR}			25 kA		
TOV withstand 5s	U_T	174 V	335 V	335 V	403 V	580 V
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 ² (solid) / 25 mm ² (stranded)		
Mounting				35 mm DIN Rail, EN 60715		
Degree of Protection				IP 20		
Housing Material				Thermoplastic: Extinguishing Degree UL 94 V-0		
Thermal Protection				Yes		
Fault Indication				Red Flag		
Remote Contacts (RC)				Optional		
RC Switching Capacity				AC: 250V/0.5 A; 125V/3 A		
RC Terminal Cross Section (max)				1.5 mm ²		
RC Terminal Screw Torque	M_{max}			0.25 Nm		
Order Information						
Order Code		150	275	320	385	440
PROTEC B2S 37.5/xxx (3+0)		506.439	506.413	506.440	506.414	506.441
PROTEC B2SR 37.5/xxx (3+0) (with remote contacts)		506.442	506.415	506.443	506.416	506.444
Module PROTEC B2S(R) 12.5/xxx		506.471	506.472	506.473	506.474	506.475

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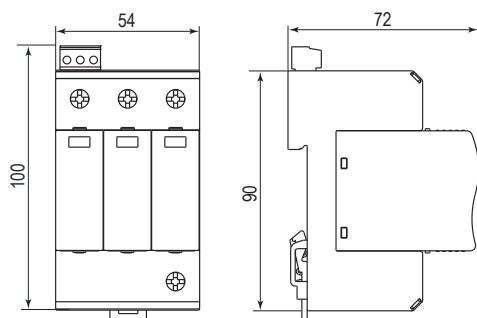
Internal Configuration

Legend

- L Line
- PEN Combined Protective Earth and Neutral
- RC Remote Contacts Optional



Dimensions & Packaging [mm]



Dimensions & Packaging

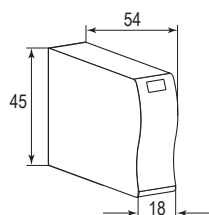
ProTec B2S 37.5/xxx (3+0)	150	275	320	385	440
Single Unit Weight	300 g	382 g	382 g	394 g	432 g
Single Unit DIN 43880 Dimension	3 TE				
Packaging Dimensions (H x W x L)	109 x 77 x 62 mm				
Minimum Order Quantity	5 Units				
ProTec B2SR 37.5/xxx (3+0)	150	275	320	385	440
Single Unit Weight	305 g	387 g	387 g	399 g	437 g
Single Unit DIN 43880 Dimension	3 TE				
Packaging Dimensions (H x W x L)	109 x 77 x 62 mm				
Minimum Order Quantity	5 Units				

Module Internal Configuration

Module ProTec B2S(R) 12.5/xxx



Dimensions & Packaging [mm]



Dimensions & Packaging

Module ProTec B2S(R) 12.5/xxx	150	275	320	385	440
Single Unit Weight	78 g	88 g	102 g	116 g	128 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				