

**DATA SHEET**

**Modular Single Pole SPD**  
**ProTec B2S(R) 12.5 (1+0)**  
**Class I • Class II • Type 1 • Type 2**



Location of Use: Main Distribution Boards  
 Network Systems: TN-S, TN-C, TT (only L-N)  
 Mode of Protection: L-PE, N-PE, L-PEN, L-N  
 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**

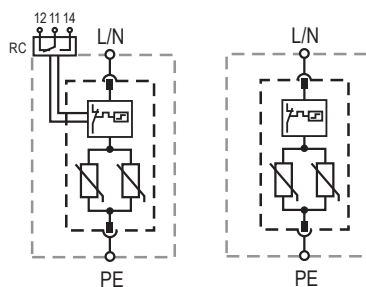
ProTec B2S(R) 12.5/xxx (1+0)		150	275	320	385	440
<b>Electrical</b>						
Nominal AC Voltage (50/60 Hz)	$U_o$	120 V	230 V	230 V	230 V	230 V
Maximum Continuous Operating Voltage (AC)	$U_c$	150 V	275 V	320 V	385 V	440 V
Nominal Discharge Current (8/20 $\mu\text{s}$ )	$I_n$			25 kA		
Maximum Discharge Current (8/20 $\mu\text{s}$ )	$I_{max}$			60 kA		
Impulse Discharge Current (10/350 $\mu\text{s}$ )	$I_{imp}$			12.5 kA		
Specific Energy	W/R			39 kJ/ $\Omega$		
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		
<b>General</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				Yes		
Fault Indication				Red Flag		
Remote Contacts (RC)				Optional		
RC Switching Capacity				AC: 250 V/0.5 A; 125 V/3 A		
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 B2S 12.5/xxx (1+0)		506.423	506.424	506.425	506.426	506.427
PROTEC B2SR 12.5/xxx (1+0) (with remote contacts)		506.428	506.429	506.430	506.431	506.432
Module PROTEC B2S(R) 12.5/xxx		506.471	506.472	506.473	506.474	506.475

## ProTec B2S(R) 12.5 (1+0)

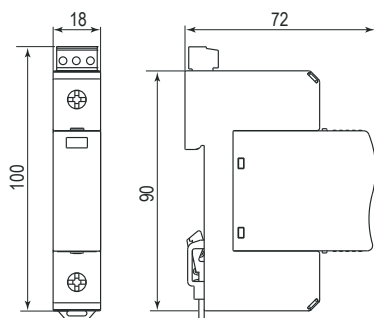
### Internal Configuration

#### Legend

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



### Dimensions & Packaging [mm]



#### Dimensions & Packaging

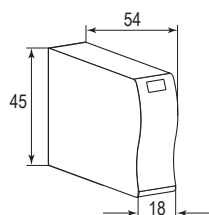
ProTec B2S 12.5/xxx (1+0)	150	275	320	385	440
Single Unit Weight	124 g	150 g	150 g	143 g	146 g
Single Unit DIN 43880 Dimension	1 TE				
Packaging Dimensions (H x W x L)	109 x 77 x 24 mm				
Minimum Order Quantity	12 Units				
ProTec B2SR 12.5/xxx (1+0)	150	275	320	385	440
Single Unit Weight	129 g	155 g	155 g	146 g	151 g
Single Unit DIN 43880 Dimension	1TE				
Packaging Dimensions (H x W x L)	109 x 77 x 24 mm				
Minimum Order Quantity	12 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				

