

# PROTEC B2S(R) 12.5

## Class I, II, III Single-pole Surge Protective Device $I_{imp} = 12.5kA (10/350)$

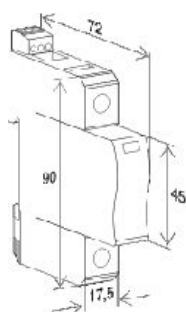


- ◆ Category IEC / EN / VDE: Class I, II, III / Type 1, 2, 3 / B+C+D
- ◆ Location of use: Main distribution boards
- ◆ Connections: TN-S, TN-C, IT
- ◆ Protection modes: L/N - PE, L - PEN
- ◆ Protective element: High Energy MOV
- ◆ High surge discharge rating:  $I_{imp} = 12.5kA$
- ◆ MOV max withstand capability 1 x 8/20:  $I_{max} = 100kA$
- ◆ Housing: Modular design
- ◆ Complies with: IEC-61643-1

### Technical data

Type	PROTEC B2S(R) 12.5/xxx				
	150	275	320	385	440
<b>Electrical characteristics</b>					
Max. continuous operating voltage (AC/DC) $U_c$	150/200V	275/350V	320/420V	385/500V	440/580V
Nominal discharge current (8/20) $I_n$			25kA		
Max. discharge current (8/20) $I_{max}$			60kA		
Combination wave (1.2/50, 8/20) $U_{oc}/I_{sc}$			10kV/5kA		
Impulse current (10/350) $I_{imp}$			12.5kA		
Specific energy			39kJ/Ω		
Charge			6.25As		
Protection level $U_p$	< 1.0kV	< 1.4kV	< 1.5kV	< 1.7kV	< 2.0kV
Residual voltage at $I_{imp}$ $U_{res}$	< 0.7kV	< 1.0kV	< 1.1kV	< 1.4kV	< 1.5kV
Follow current $I_f$			NO		
Response time $t_A$			< 25ns		
Thermal protection			YES		
Back-up fuse (if mains > 160A)			160A gL		
Short-circuit withstand current			25kA / 50Hz		
<b>Mechanical characteristics</b>					
Temperature range			- 40°C ....+ 80°C		
Terminal screw torque			max. 3.5Nm		
Terminal cross section			35mm <sup>2</sup> (solid)/25mm <sup>2</sup> (stranded)		
Mounting EN 60715			35mm top-hat rail		
Degree of protection			IP 20		
Housing material			Thermoplastic; extinguishing degree UL 94 V-0		
Dimensions DIN 43880			1TE		
Weight per unit	141g	161g	177g	189g	191g
Ordering code <b>PROTEC B2S 12.5/xxx</b>	<b>506 017</b>	<b>506 018</b>	<b>506 019</b>	<b>506 020</b>	<b>506 021</b>
Remote contacts			YES		
Contact ratings			AC: 250V/0.5A; 125V/3A		
Terminal cross section			max. 1.5mm <sup>2</sup>		
Remote terminal torque			0.25Nm		
Weight per unit	146g	166g	182g	194g	196g
Ordering code <b>PROTEC B2SR 12.5/xxx - with remote contacts</b>	<b>506 022</b>	<b>506 023</b>	<b>506 024</b>	<b>506 025</b>	<b>506 026</b>
Packaging dimensions (single unit)			108 x 74 x 24mm		
Ordering code <b>Module PROTEC B2S(R) 12.5/xxx</b>	<b>506 001</b>	<b>506 002</b>	<b>506 003</b>	<b>506 004</b>	<b>506 005</b>
Packaging dimensions (12 pcs.)			219 x 62 x 47mm		

### Dimensions



### Connection diagram

