

Compact Multi-pole SPD

DVSB Class B Surge Protection Device Three Phase TNC

12.5 kA Series

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: $I_{imp} = 12.5 \text{ kA (10/350 } \mu\text{s)}$
 $I_n = 20 \text{ kA (8/20 } \mu\text{s)}$
 IEC/EN Category: Class I, II / Type 1, 2
 Protective Elements: High Energy MOV
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

DVSBXXX653TNC Class B Surge Protection Device Three Phase TNC

		150	275*	400	440
Electrical					
Nominal AC Voltage (50/60Hz)	U_o	120V	230V	230V	400V
Maximum Continuous Operating Voltage (AC)	U_c	150V	275V	320V	440V
Nominal Discharge Current (8/20 μ s)	I_n		20 kA		
Maximum Discharge Current (8/20 μ s)	I_{max}		50 kA		
Impulse Discharge Current (10/350 μ s)	I_{imp}		12.5 kA		
Total Discharge Current (10/350 μ s)	I_{total}		37.5 kA		
Specific Energy	W/R		39 kJ/ Ω		
Charge	Q		6.25 As		
Voltage Protection Level	U_p	< 1.0kV	< 1.5kV	< 1.5kV	< 1.9kV
Response Time	t_A		< 25 ns		
Back-Up Fuse (if mains > 250 A)			250 A gG		
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA		
TOV Withstand 5s	U_T	174V	334V	334V	585V
TOV Safe Fail 120min	U_T	229V	438V	438V	769V
Number of Ports			1		
Mechanical & Environmental					
Temperature Range	T_a	-40 °F to +185 °F [-40 °C to +85 °C]			
Permissible Humidity	RH	5%...95%			
Terminal Screw Torque	M_{max}	26.5 lbf-in [3.0Nm]			
Conductor Cross Section (max)		2 AWG (Solid, Stranded) / 4 AWG (Flexible)			
		35mm ² (Solid, Stranded) / 25mm ² (Flexible)			
Mounting		35 mm DIN Rail, EN 60715			
Degree of Protection		IP 20 (built-in)			
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/0.5A; 125V/3A			
RC Terminal Cross Section (max)		1.5mm ² (Solid) / 16 AWG (Solid)			
RC Terminal Screw Torque	M_{max}	2.2 lbf-in [0.25Nm]			

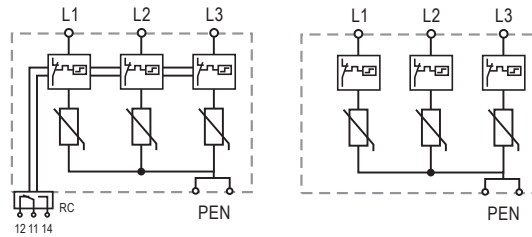
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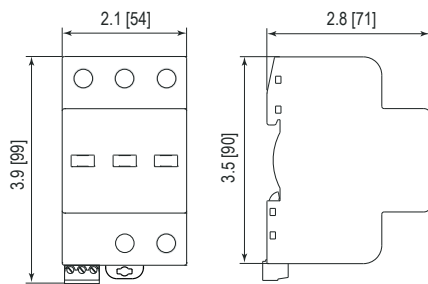
Internal Configuration

Legend

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



Dimensions & Packaging



Dimensions & Packaging

DVSBXXX653TNC		150	275	400	440
Single Unit Weight	pounds	.661	.727	.727	1.080
	grams	300	330	330	490
Single Unit DIN 43880 Dimension			3 TE		
Packaging Dimensions (H×W×L)			4.2 × 3 × 2.3" [109 × 77 × 60mm]		
Minimum Order Quantity			5 Units		

inches
[mm]

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



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