

DATA SHEET

Compact Multi-pole SPD DVSB Class B Surge Protection Device Three Phase TNC Class I • Class II • Type 1 • Type 2

25 kA Series



Location of Use: Main Distribution Boards
Network Systems: TN-C
Mode of Protection: L-PEN
Surge Ratings: $I_{imp} = 25 \text{ kA}$ (10/350 μs)
 $I_n = 25 \text{ kA}$ (8/20 μs)
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

DVSBXXX1003TNC 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 μs)	I_n			25 kA	
Maximum Discharge Current (8/20 μs)	I_{max}			100 kA	
Impulse Discharge Current (10/350 μs)	I_{imp}			25 kA	
Total Discharge Current (10/350 μs)	I_{total}			75 kA	
Specific Energy	W/R			156 kJ/ Ω	
Charge	Q			12.5 As	
Voltage Protection Level	U_p	< 1.0 kV	< 1.5 kV	< 1.5 kV	< 1.9 kV
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 [3.0 Nm]			
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 [0.25 Nm]			

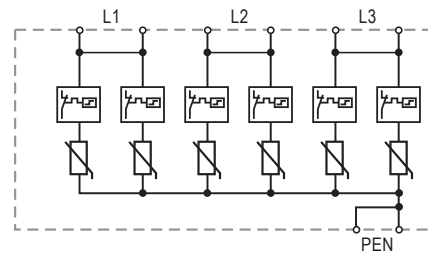
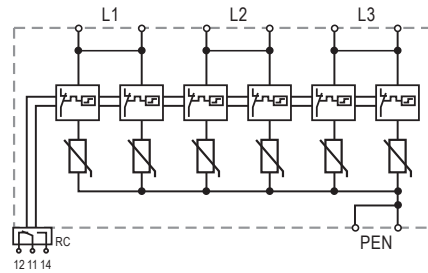
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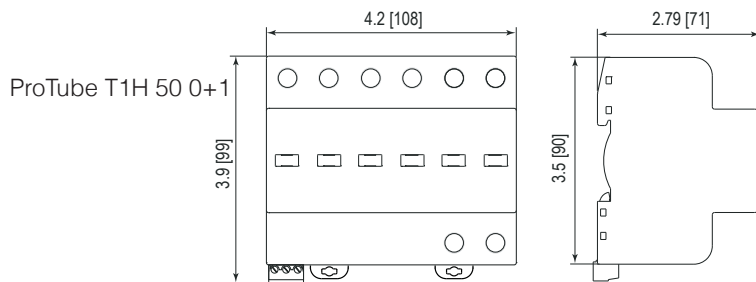
Internal Configuration

Legend

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



Dimensions & Packaging



Dimensions & Packaging

DVSBXXX1003TNC		150	275	400	440
Single Unit Weight	pounds	1.554	1.884	1.884	2.248
	grams	705	855	855	1020
Single Unit DIN 43880 Dimension		6 TE			
Packaging Dimensions (H x W x L)		4.2 x 3 x 4.4" [109 x 77 x 114mm]			
Minimum Order Quantity		3 Units			

inches
[mm]

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