

DVSB Class B Surge Protection Device Three Phase & Neutral TT

Class I • Class II • Type 1 • Type 2



Location of Use: Main Distribution Boards
 Network Systems: TN-S, TT
 Mode of Protection: L-N, N-PE
 Surge Ratings: $I_{imp} = 25 \text{ kA} / 100 \text{ kA} (10/350 \mu\text{s})$
 $I_n = 25 \text{ kA} / 100 \text{ kA} (8/20 \mu\text{s})$
 IEC/EN Category: Class I, II / Type 1, 2
 Protective Elements: High Energy MOV and GDT
 Housing: Compact Design
 Compliance: IEC 61643-11:2011
 EN 61643-11:2012

Technical Data

DVSBXXX1004TT Class B Surge

Protection Device Three Phase TT 100KA

275

400

Electrical

Nominal AC Voltage (50/60Hz)	U_o	230 V	230 V
Maximum Continuous Operating Voltage (AC)	(L-N) U_c	275 V	320 V
	(N-PE) U_c		255 V
Nominal Discharge Current (8/20 μ s)	(L-N)/(N-PE) I_n		25 kA / 100 kA
Maximum Discharge Current (8/20 μ s)	(L-N)/(N-PE) I_{max}		100 kA / 100 kA
Impulse Discharge Current (10/350 μ s)	(L-N)/(N-PE) I_{imp}		25 kA / 100 kA
Total Discharge Current (10/350 μ s)	I_{total}		100 kA
Specific Energy	(L-N)/(N-PE) W/R		156 kJ/ Ω / 2.5 MJ/ Ω
Charge	(L-N)/(N-PE) Q		12.5 As / 50 As
Voltage Protection Level	(L-N)/(N-PE) U_p	< 1.5 kV / < 1.5 kV	< 1.5 kV / < 1.5 kV
Follow Current Interrupt Rating	(N-PE) I_{fi}		100 A _{RMS}
Response Time	(L-N)/(N-PE) t_A		< 25 ns / < 100 ns
Back-Up Fuse (if mains > 250 A)	(L-N)		250 A gG
Short-Circuit Current Rating (AC)	I_{SCCR}		50 kA
TOV Withstand 5s	(L-N) U_T	334 V	334 V
TOV Safe Fail 120min	(L-N) U_T	438 V	438 V
TOV Withstand 200ms	(N-PE) U_T		1200 V / 300 A
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 (max)	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	(L-N)/(N-PE)	Yes/No
Fault Indication	(L-N)/(N-PE)	Red Flag/No
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]

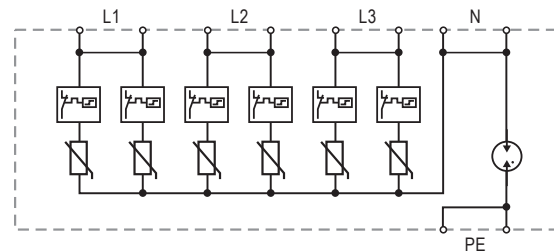
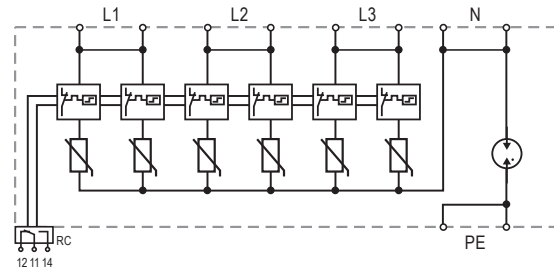
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25kA Series

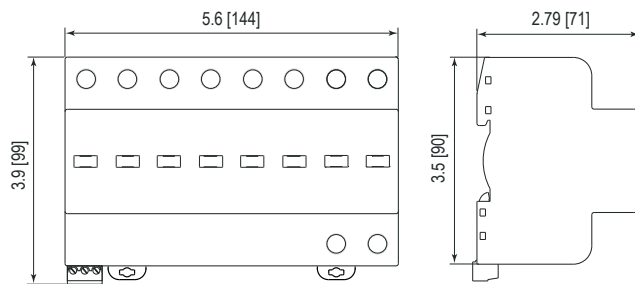
Internal Configuration

Legend

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



Dimensions & Packaging



Dimensions & Packaging

DVSBXXX1004TT		275	400
Single Unit Weight	pounds	2.53	2.53
	grams	1150	1150
Single Unit DIN 43880 Dimension		8 TE	
Packaging Dimensions (H x W x L)		4.2 x 3 x 5.8" [109 x 77 x 148mm]	
Minimum Order Quantity		2 Units	

inches
[mm]

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