

VAL-MS-T1/T2 335/12.5/4+0


Order No.: 2800645



<http://eshop.phoenixcontact.sk/phoenix/treeViewClick.do?UID=2800645>

Universal varistor-based plug-in lightning/surge arrester for 3-phase power supply networks with separate N and PE (5-conductor system: L1, L2, L3, N, PE).



Commercial data	
EAN	 4 046356 624770
Pack	1 pcs.
Customs tariff	85363030
Gross weight in pieces	0.71222 kg
Catalog page information	Page 34 (C-6-2013)

Product notes

WEEE/RoHS-compliant since:
28.09.2010



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Technical data	
Dimensions	
Height	90 mm
Width	71.2 mm
Depth	77.5 mm
Horizontal pitch	4 Div.

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C

General

IEC power supply system	TN-C
	TN-S
Housing material	PBT / PA
Inflammability class according to UL 94	V0
Color	black
Standards for air and creepage distances	EN 60664-1
	EN 61643-11
Mounting type	DIN rail: 35 mm
Type	DIN rail module, two-section, divisible
Number of positions	4
Surge protection fault message	Optical
Direction of action	4L-PEN

Protective circuit

IEC test classification	I / II
	T1 / T2
EN type	T1 / T2
Nominal voltage U_N	240 V AC (230/400 V AC ... 240/415 V AC)
Maximum continuous operating voltage U_C	335 V AC
Maximum continuous operating voltage U_C (L-PE)	335 V AC
Maximum continuous operating voltage U_C (N-PE)	335 V AC
U_T (TOV-proof)	415 V AC (5 s/L-PEN)
Nominal frequency f_N	50 Hz (60 Hz)
Rated load current I_L	80 A (with serial 16mm ² through wiring)
Residual current I_{PE}	≤ 0.8 mA (per phase)
Standby power consumption P_C	≤ 1.07 VA (per phase)
Max. discharge current I_{max} (8/20) μs maximum (L-PE)	150 kA (3 x L)
	50 kA
Max. discharge current I_{max} (8/20) μs maximum (N-PE)	50 kA

Nominal discharge current I_n (8/20) μs (L-PE)	37.5 kA (3 x L)
	12.5 kA
Nominal discharge current I_n (8/20) μs (N-PE)	12.5 kA
Impulse discharge current (10/350) μs charge	25 As
Impulse discharge current (10/350) $\square\mu\text{s}$, specific energy	625.00 kJ/ Ω
Impulse discharge current (10/350) $\square\mu\text{s}$, peak value I_{imp}	50 kA
Impulse discharge current (10/350) μs charge	6.25 As
Impulse discharge current (10/350) $\square\mu\text{s}$, specific energy	39.00 kJ/ Ω
Impulse discharge current (10/350) $\square\mu\text{s}$, peak value I_{imp}	12.5 kA (1-pos.)
Voltage protection level U_p	≤ 1.2 kV
Voltage protection level U_p (L-PE)	≤ 1.2 kV
	≤ 1.6 kV (30 kA - 8/20 μs)
Voltage protection level U_p (N-PE)	≤ 1.2 kV
	≤ 1.6 kV (30 kA - 8/20 μs)
Residual voltage (L-PE)	≤ 1.1 kV (at 10 kA)
	≤ 1 kV (at 5 kA)
	≤ 0.9 kV (at 3 kA)
	≤ 1.2 kV
Residual voltage (N-PE)	≤ 1.2 kV
	≤ 1.1 kV (at 10 kA)
	≤ 1 kV (at 5 kA)
	≤ 0.9 kV (at 3 kA)
Response time	≤ 25 ns
Response time (L-PEN)	≤ 25 ns
Max. required backup fuse with branch wiring	160 A (gL/gG)
Max. required backup fuse with V-type through wiring	80 A (gL/gG / with 16 mm ²)
Short-circuit resistance I_p with max. backup fuse (effective)	25 kA
Connection, protective circuit	
Connection method	Screw connection
Connection type IN	Biconnect screw terminal block
Connection type OUT	Biconnect screw terminal block

Connection method	Biconnect terminal block
Screw thread	M5
Tightening torque	4.5 Nm
Stripping length	16 mm
Conductor cross section stranded min.	1.5 mm ²
Conductor cross section stranded max.	25 mm ²
Conductor cross section solid min.	1.5 mm ²
Conductor cross section solid max.	35 mm ²
Conductor cross section AWG/kcmil min.	15
Conductor cross section AWG/kcmil max	2

Standards and Regulations

Standards/regulations	IEC 61643-1 2005
	EN 61643-11/A11 2007

Certificates



Certification

cULus Recognized, KEMA-KEUR, ÖVE, GL

Certifications applied for:

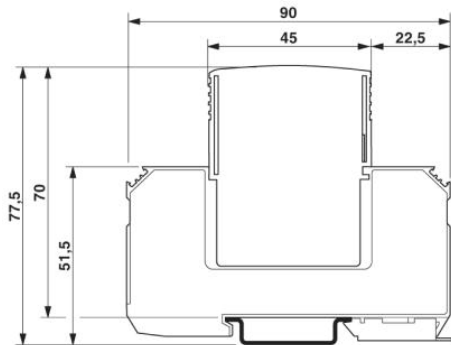
Certification Ex:

Accessories

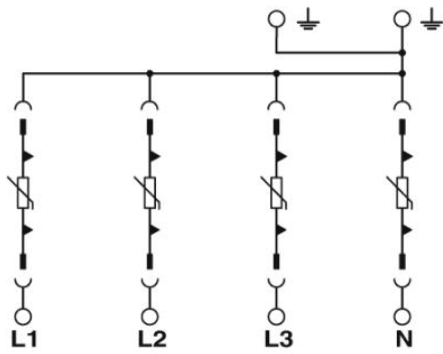
Item	Designation	Description
General		
2749880	DK-BIC-35	Feed-through terminal block for VAL and FLT applications
Marking		
1051993	B-STIFT	Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm
0800763	ZBN 18:SO/CMS	Zack marker strip, white, for terminal block width: 18 mm
2809128	ZBN 18:UNBEDRUCKT	Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 18 mm, Lettering field: 18 x 5 mm

Drawings

Dimensioned drawing



Circuit diagram



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