Type 2 surge protection device - VAL-MS 350/10/3+1-FM - 2803603

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Surge arrester for 5-conductor power supply systems (L1, L2, L3, N, PE), consisting of a base element with remote indication contact and protective connectors, for mounting on NS 35.

Your advantages

- With or without floating remote indication contact
- Solutions for the low performance class
- Mechanical coding of all slots
- Multi-channel type 2 arresters
- Disconnect device on each individual plug
- Optical, mechanical status indication for the individual arresters
- Type 2 consistent plug-in surge arresters

Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 301978
GTIN	4046356301978

Technical data

Dimensions

Height	99 mm
Width	71.2 mm
Depth	65.5 mm
Horizontal pitch	4 Div.

Ambient conditions

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

General

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Technical data

General

IEC power supply system	TT
	TN-C
	TN-S
Housing material	PBT/PA
Flammability rating according to UL 94	V0
Color	black
Standards for cearances and creepage distances	DIN 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, remote indicator contact
Direction of action	3L-N & N-PE

Protective circuit

IEC test classification	II
EN type	T2
Maximum continuous operating voltage U_C	350 V AC
Maximum continuous operating voltage U_C (L-N)	350 V AC
Maximum continuous operating voltage U_C (N-PE)	260 V AC
U_T (TOV-proof)	415 V AC (5 s / L-N)
	1200 V AC (200 ms / N-PE)
Nominal frequency f_N	50 Hz (60 Hz)
Residual current I_{PE}	≤ 3 µA
Standby power consumption P_C	≤ 360 mVA
Max. discharge current I_{max} (8/20) µs	10 kA (per channel L-N)
Max. discharge current I_{max} (8/20) µs maximum (L-N)	30 kA (all channels)
	10 kA (per channel)
Max. discharge current I_{max} (8/20) µs maximum (N-PE)	30 kA
Nominal discharge current I_n (8/20) µs (L-N)	15 kA (all channels)
	5 kA (per channel)
Nominal discharge current I_n (8/20) µs (N-PE)	20 kA
Front of wave sparkover voltage at 6 kV (1.2/50) µs (N-PE)	≤ 1.5 kV
Voltage protection level U_p (L-N)	≤ 1.2 kV
Voltage protection level U_p (N-PE)	≤ 1.5 kV
Residual voltage (L-N)	≤ 1.2 kV
	≤ 1.1 kV (at 3 kA)
Residual voltage (L-PE)	≤ 1.3 kV
	≤ 1.2 kV (at 3 kA)
Residual voltage (N-PE)	≤ 150 V (at 5 kA)

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Protective circuit

	≤ 100 V (at 3 kA)
Response time t_A (L-N)	≤ 25 ns
Response time (L-PE)	≤ 100 ns
Response time t_A (N-PE)	≤ 100 ns
Max. backup fuse with branch wiring	125 A (gL/gG)
Short-circuit withstand capability I_P with max. backup fuse (r.m.s.)	25 kA
Follow current quenching capacity I_{fi} (N-PE)	100 A

Connection, protective circuit

Connection method	Screw connection
Connection method IN	Biconnect screw terminal block
Connection method OUT	Biconnect screw terminal block
Screw thread	M5
Tightening torque	4.5 Nm
Stripping length	16 mm
Conductor cross section flexible min.	1.5 mm²
Conductor cross section flexible max.	25 mm²
Conductor cross section solid min.	1.5 mm²
Conductor cross section solid max.	35 mm²
Conductor cross section AWG min.	15
Conductor cross section AWG max.	2

Remote indication contact

Connection name	Remote fault indicator contact
Switching function	PDT, 1-pos.
Connection method	Screw connection
Screw thread	M2
Tightening torque	0.25 Nm
Stripping length	7 mm
Conductor cross section flexible min.	0.14 mm²
Conductor cross section flexible max.	1.5 mm²
Conductor cross section solid min.	0.14 mm²
Conductor cross section solid max.	1.5 mm²
Conductor cross section AWG min.	28
Conductor cross section AWG max.	16
Maximum operating voltage $U_{max.}$ AC	250 V AC
Max. operating current I_{max}	0.75 A AC (250 V AC)
	3 A (125 V AC)
	2 A (30 V DC)

Standards and Regulations

Standards/regulations	IEC 61643-1 2005

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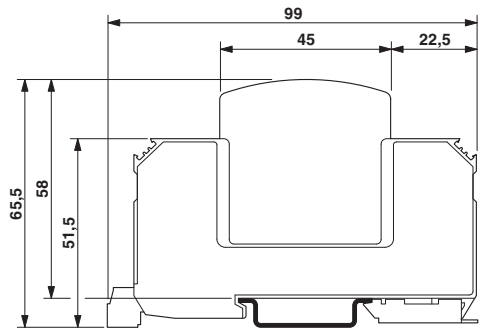
Standards and Regulations

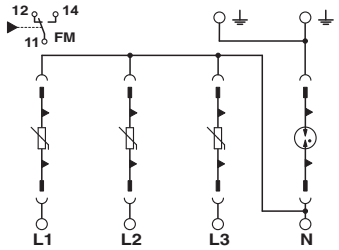
	EN 61643-11/A11 2007

Drawings

Dimensional drawing



Circuit diagram



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