

Type 2 surge arrester - VAL-CP-MCB-1S-350/40/FM - 2882763

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Combination of type 2 surge protection and arrester backup fuse, with monitoring of arrester and arrester backup fuse, in combination with a remote indication contact. Design: 3-conductor system (L1, N, PE), mounting on NS 35 DIN rail

Your advantages

- ✓ Plugs can be checked with CHECKMASTER
- ✓ Signaling to monitoring systems via remote indication contact in the event of an error
- ✓ Combinations of type 2 arresters with integrated arrester backup fuse
- ✓ Overload of the surge protection results in all-pos. disconnection from the mains
- ✓ Surge-proof arrester backup fuse
- ✓ Type 2 consistent plug-in surge arresters
- ✓ Optical, mechanical status indication for the individual arresters



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 175821
GTIN	4046356175821
Weight per Piece (excluding packing)	501.500 g
Custom tariff number	85363010
Country of origin	Hungary

Technical data

Dimensions

Height	101 mm
Width	72 mm
Depth	76 mm
Horizontal pitch	4 Div.

Ambient conditions

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Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %

General

IEC test classification	II
	T2
EN type	T2
IEC power supply system	TN-S
	TT
Mode of protection	L-N
	L-PE
	N-PE
Mounting type	DIN rail: 35 mm
Color	light grey RAL 7035
Housing material	PBT-FR
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	DIN rail module, two-section, divisible
Number of positions	2
Surge protection fault message	Optical, remote indicator contact

Protective circuit

Nominal voltage U_N	240 V AC (TN-S)
	240 V AC (TT)
Nominal frequency f_N	50 Hz (60 Hz)
Maximum continuous operating voltage U_C (L-N)	350 V AC
Maximum continuous operating voltage U_C (L-PE)	350 V AC
Maximum continuous voltage U_C (N-PE)	264 V AC
Residual current I_{PE}	≤ 1 μ A
Nominal discharge current I_n (8/20) μ s	20 kA
Maximum discharge current I_{max} (8/20) μ s	30 kA
Follow current interrupt rating I_{fi} (N-PE)	100 A
Short-circuit current rating I_{SCCR}	25 kA
Voltage protection level U_p (L-N)	≤ 2.5 kV
Voltage protection level U_p (N-PE)	≤ 1.7 kV
Residual voltage U_{res} (L-N)	≤ 2.3 kV (at I_n)
	≤ 1.6 kV (at 10 kA)
	≤ 1.3 kV (at 5 kA)

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Protective circuit

	$\leq 1 \text{ kV}$ (at 3 kA)
Residual voltage U_{res} (L-PE)	$\leq 2.5 \text{ kV}$ (at I_n)
	$\leq 2 \text{ kV}$ (at 10 kA)
	$\leq 1.5 \text{ kV}$ (at 5 kA)
	$\leq 1.1 \text{ kV}$ (at 3 kA)
Residual voltage U_{res} (N-PE)	$\leq 1.2 \text{ kV}$ (at 10 kA)
	$\leq 0.8 \text{ kV}$ (at 5 kA)
	$\leq 0.5 \text{ kV}$ (at 4 kA)
	$\leq 0.3 \text{ kV}$ (at 3 kA)
TOV behavior at U_T (L-N)	415 V AC (5 s / withstand mode)
	457 V AC (120 min / safe failure mode)
TOV behavior at U_T (N-PE)	1200 V AC (200 ms / withstand mode)
Response time t_A (L-N)	$\leq 25 \text{ ns}$
Response time t_A (L-PE)	$\leq 100 \text{ ns}$
Response time t_A (N-PE)	$\leq 100 \text{ ns}$
Max. backup fuse with V-type through wiring	40 A (gG)

Indicator/remote signaling

Switching function	PDT contact
Operating voltage	250 V AC
	250 V DC
Operating current	1 mA AC ... 2 A AC
	1 mA DC ... 50 mA DC
Connection method	Pluggable screw connection
Screw thread	M2
Tightening torque	0.25 Nm
Stripping length	7 mm
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section solid	0.14 mm ² ... 1.5 mm ²
Conductor cross section AWG	28 ... 16

Connection data

Connection name	Connection protective circuit
Connection method	Screw connection
Tightening torque	3.5 Nm
Stripping length	14 mm
Conductor cross section flexible	4 mm ² ... 25 mm ²
Conductor cross section solid	4 mm ² ... 35 mm ²
Conductor cross section AWG	18 ... 2
Connection name	Protective ground connection
Connection method	Screw connection

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Technical data

Connection data

Screw thread	M5
Tightening torque	4.5 Nm
Stripping length	16 mm
Conductor cross section flexible	2.5 mm ² ... 16 mm ²
Conductor cross section solid	2.5 mm ² ... 25 mm ²
Conductor cross section AWG	12 ... 4

Standards and Regulations

Standards/regulations	IEC 61643-11 2011
	EN 61643-11 2012
	IEC 60364-4-443
	IEC 60364-5-534

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

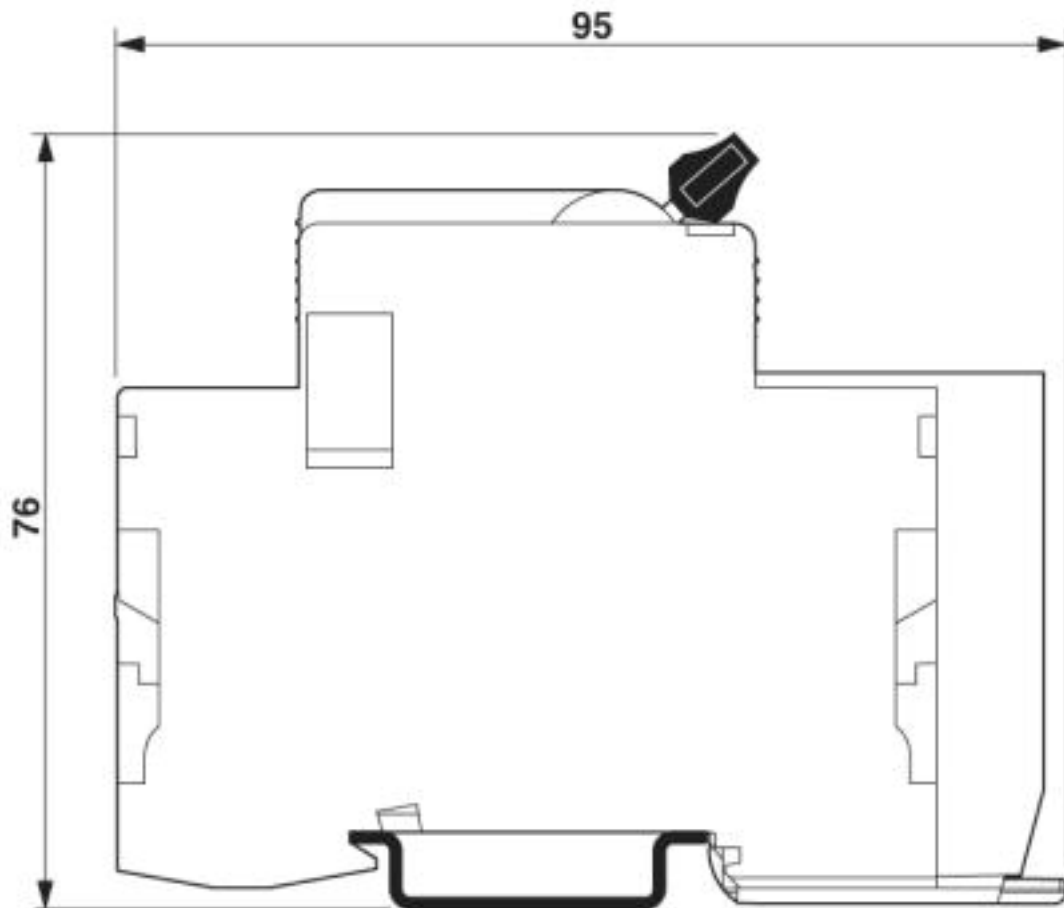
Type 2 surge arrester - VAL-CP-MCB-1S-350/40/FM - 2882763

Product drawing

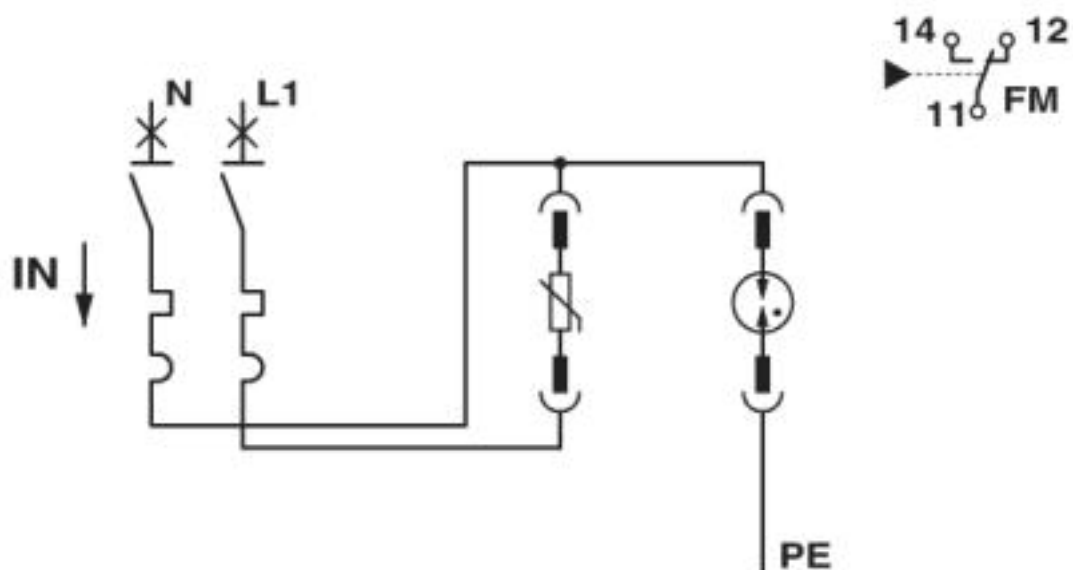


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Dimensional drawing



Circuit diagram



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Classifications

eCl@ss

eCl@ss 4.0	27130800
eCl@ss 4.1	27130800
eCl@ss 5.0	27130800
eCl@ss 5.1	27130800
eCl@ss 6.0	27130800
eCl@ss 7.0	27130805
eCl@ss 8.0	27130805
eCl@ss 9.0	27130805

ETIM

ETIM 2.0	EC000941
ETIM 3.0	EC000941
ETIM 4.0	EC000941
ETIM 5.0	EC000941
ETIM 6.0	EC000941
ETIM 7.0	EC000941

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620
UNSPSC 18.0	39121620
UNSPSC 19.0	39121620
UNSPSC 20.0	39121620
UNSPSC 21.0	39121620

Approvals

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CCA / KEMA-KEUR / IEC CB Scheme / ÖVE / EAC

Ex Approvals

Approval details

CCA	NTR-NL 7285
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Approvals

KEMA-KEUR		http://www.dekra-certification.com	2161502.05
IECEE CB Scheme		http://www.iecee.org/	NL-31928
ÖVE		https://www.ove.at/zertifizierung-pz/zertifizierungsregister/	18583-005-08
EAC			RU C- DE.A*30.B01561

Accessories

Spare parts

Type 2 surge protection plug - VAL-CP-350-ST-GY - 2882718



Replacement plug for VAL-CP surge protective device with high-capacity varistor with a low leakage current.

Type 2 surge protection plug - VAL-CP-N/PE-350-ST-GY - 2882734



Replacement plug for VAL-CP surge arrester with N-PE spark gap.