

Type 2 surge arrester - VAL-CP-MCB-3S-350/40/FM



2882750

<https://www.phoenixcontact.com/us/products/2882750>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



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: 5-conductor system (L1, L2, L3, N, PE), mounting on NS 35 DIN rail

Your advantages

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

Commercial Data

Item number	2882750
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	CL1314
Catalog Page	Page 74 (C-4-2019)
GTIN	4046356175845
Weight per Piece (including packing)	914 g
Weight per Piece (excluding packing)	914 g
Country of origin	HU

Type 2 surge arrester - VAL-CP-MCB-3S-350/40/FM



2882750

<https://www.phoenixcontact.com/us/products/2882750>

Technical Data

Product properties

IEC test classification	II
	T2
EN type	T2
IEC power supply system	TN-S
	TT
Type	DIN rail module, two-section, divisible
Product type	Surge arrester
Number of positions	4
Surge protection fault message	Optical, remote indicator contact

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)
-------------------------	---------------

Indicator/remote signaling

Connection name	Remote fault indicator contact
Switching function	Changeover contact
Operating voltage	250 V AC
	250 V DC
Operating current	1 mA AC ... 2 A AC
	1 mA DC ... 50 mA DC

Connection data

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

Protective ground connection

Connection method	Screw connection
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

Type 2 surge arrester - VAL-CP-MCB-3S-350/40/FM



2882750

<https://www.phoenixcontact.com/us/products/2882750>

Conductor cross section AWG	12 ... 4
Remote fault indicator contact	
Connection method	Pluggable screw connection
Screw thread	M2
Tightening torque	0.25 Nm
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

Dimensions

Dimensional drawing	
Width	131.5 mm
Height	101 mm
Depth	76 mm
Horizontal pitch	7.5 Div.

Material specifications

Color	light grey RAL 7035
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PBT-FR
Material group	I
Housing material	PBT-FR

Protective circuit

Mode of protection	L-N
	L-PE
	N-PE
Direction of action	3L-N & N-PE
Nominal voltage U_N	240/415 V AC (TN-S)
	240/415 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 operating voltage U_C (N-PE)	264 V AC
Residual current I_{PE}	$\leq 1 \mu A$
Nominal discharge current I_n (8/20) μs (L-N)	15 kA
Nominal discharge current I_n (8/20) μs (L-PE)	15 kA
Nominal discharge current I_n (8/20) μs (N-PE)	20 kA
Maximum discharge current I_{max} (8/20) μs	30 kA

Type 2 surge arrester - VAL-CP-MCB-3S-350/40/FM



2882750

<https://www.phoenixcontact.com/us/products/2882750>

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)
	≤ 1 kV (at 3 kA)
Residual voltage U_{res} (L-PE)	≤ 2.5 kV (at I_n)
	≤ 2 kV (at 10 kA)
	≤ 1.5 kV (at 5 kA)
	≤ 1.1 kV (at 3 kA)
Residual voltage U_{res} (N-PE)	≤ 1.2 kV (at 10 kA)
	≤ 0.8 kV (at 5 kA)
	≤ 0.5 kV (at 4 kA)
	≤ 0.3 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)	≤ 25 ns
Response time t_A (L-PE)	≤ 100 ns
Response time t_A (N-PE)	≤ 100 ns
Max. backup fuse with V-type through wiring	40 A (gG)

Environmental and real-life conditions

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 %

Standards and regulations

Standards/specifications	IEC 61643-11
Standards/specifications	EN 61643-11
Standards/specifications	IEC 60364-4-443
Standards/specifications	IEC 60364-5-534

Mounting

Mounting type	DIN rail: 35 mm
---------------	-----------------

Type 2 surge arrester - VAL-CP-MCB-3S-350/40/FM

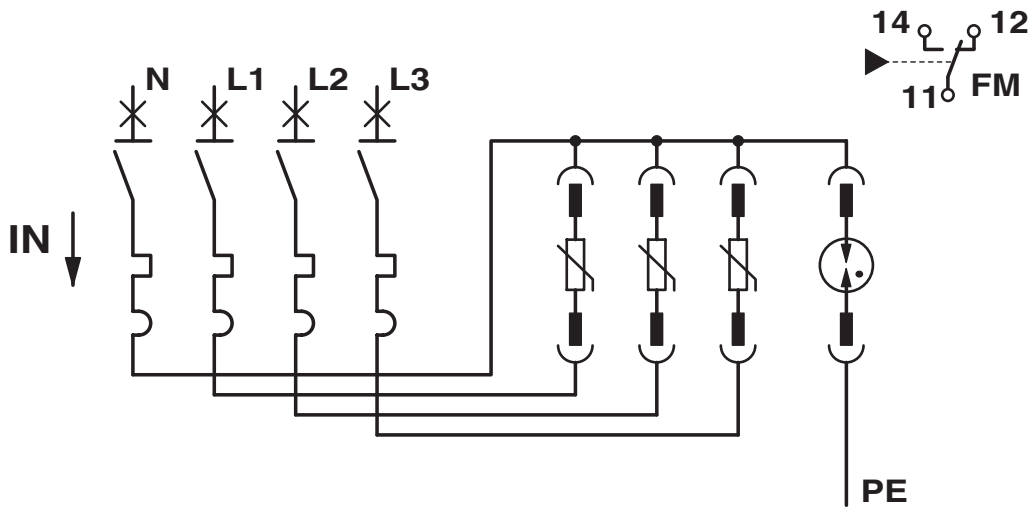


2882750

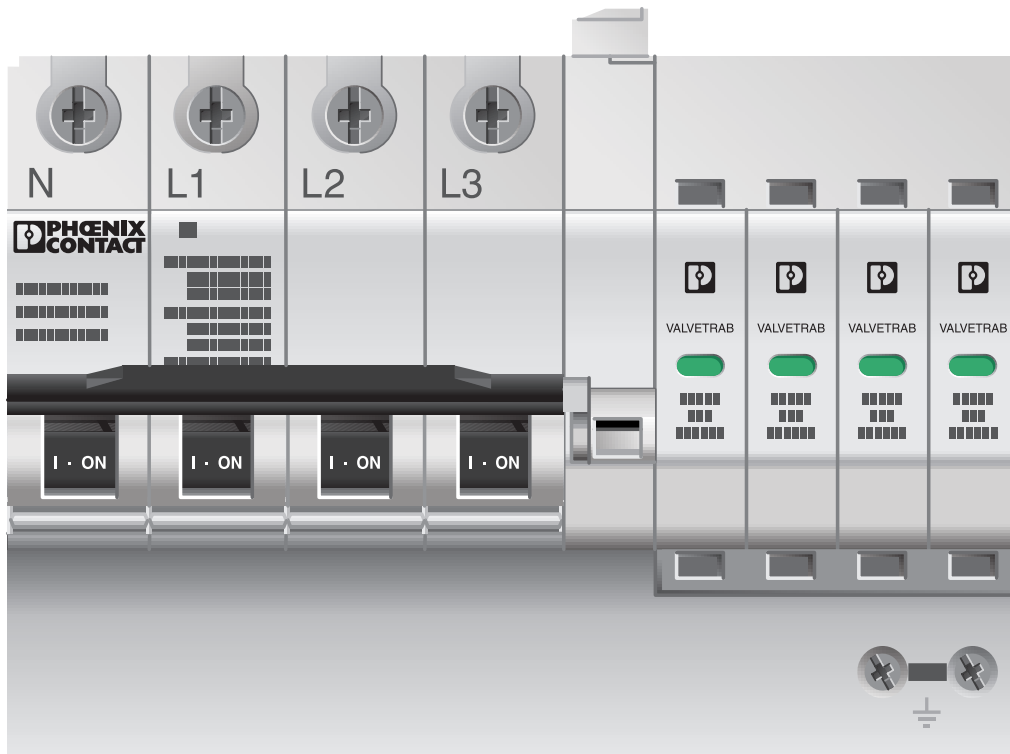
<https://www.phoenixcontact.com/us/products/2882750>

Drawings

Circuit diagram



Product drawing



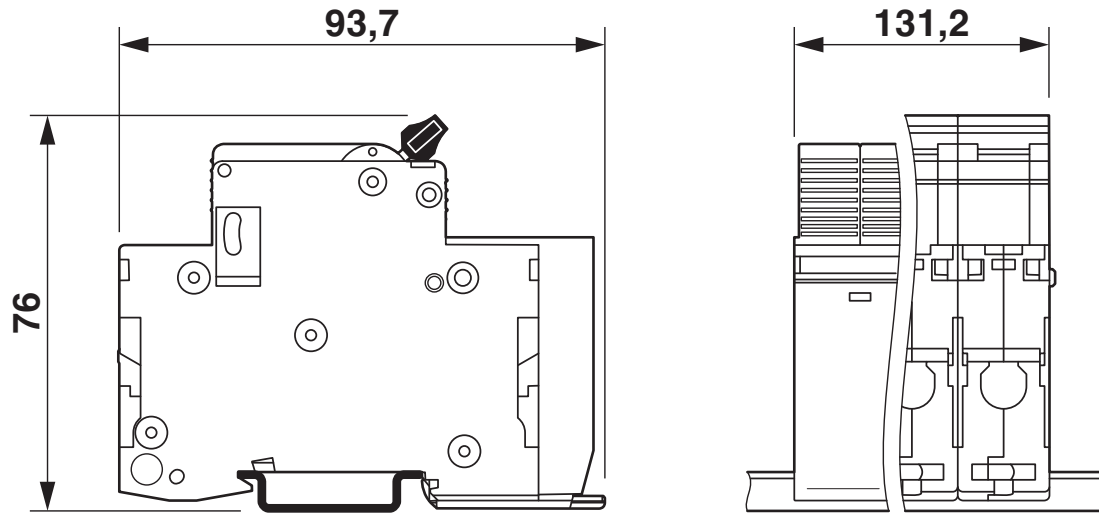
Type 2 surge arrester - VAL-CP-MCB-3S-350/40/FM



2882750

<https://www.phoenixcontact.com/us/products/2882750>

Dimensional drawing



Type 2 surge arrester - VAL-CP-MCB-3S-350/40/FM



2882750

<https://www.phoenixcontact.com/us/products/2882750>

Approvals



IECEE CB Scheme

Approval ID: NL-71431



EAC

Approval ID: EAC-Zulassung

CCA

Approval ID: NTR-NL 7873

Nominal Voltage U_N

Nominal Current I_N

Cross Section AWG

Cross Section mm^2

-

-



KEMA-KEUR

Approval ID: 71-117871



EAC

Approval ID: RU C-DE.*09.B.00169

Type 2 surge arrester - VAL-CP-MCB-3S-350/40/FM



2882750

<https://www.phoenixcontact.com/us/products/2882750>

Classifications

ECLASS

ECLASS-9.0	27130805
ECLASS-10.0.1	27130805
ECLASS-11.0	27130805
ECLASS-12.0	27171202

ETIM

ETIM 8.0	EC000941
----------	----------

UNSPSC

UNSPSC 21.0	39121600
-------------	----------

Type 2 surge arrester - VAL-CP-MCB-3S-350/40/FM



2882750

<https://www.phoenixcontact.com/us/products/2882750>

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Type 2 surge arrester - VAL-CP-MCB-3S-350/40/FM



2882750

<https://www.phoenixcontact.com/us/products/2882750>

Accessories

Type 2 surge protection plug

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

<https://www.phoenixcontact.com/us/products/2882718>



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

Type 2 surge protection plug

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

<https://www.phoenixcontact.com/us/products/2882734>



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

Phoenix Contact 2022 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com