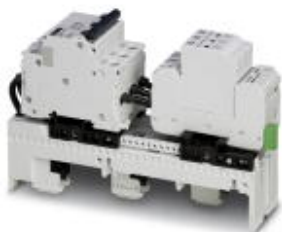


## Type 2 surge arrester - VAL-CP-MOSO 60-3C-FM - 2804416

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Combination of type 2 surge protection and arrester backup fuse, with arrester monitoring, in combination with a diagnostic and status indicator and remote indication contact. Design: 4-conductor system (L1, L2, L3, PEN), mounting on 60 mm system technology (power rail system)

### Your advantages

- ✔ Plugs can be checked with CHECKMASTER
- ✔ For 60 mm system technology
- ✔ Tool-free mounting on 5 and 10 mm busbars
- ✔ Surge-proof arrester backup fuse tailored to type 2 arresters
- ✔ Multi-channel type 2 surge arresters and integrated arrester backup fuses
- ✔ Signaling to monitoring systems via remote indication contact in the event of an error
- ✔ Optical, mechanical status indication for the individual arresters
- ✔ Type 2 consistent plug-in surge arresters
- ✔ Disconnect device on each individual plug



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 317832
GTIN	4046356317832
Weight per Piece (excluding packing)	1,200.000 g
Custom tariff number	85363010
Country of origin	Germany

### Technical data

#### Dimensions

Height	220 mm
Width	54 mm
Depth	134 mm

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## Technical data

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 75 °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-C
	TT
Mode of protection	L-PEN
Mounting type	60 mm system technology (power rail)
Color	blue-gray
	jet black RAL 9005
Housing material	PBT
	PA 6
	PA 6.6
Degree of pollution	2
Flammability rating according to UL 94	V-0
Type	Module for 60 mm system technology
Number of positions	3
Surge protection fault message	Optical, remote indicator contact

### Protective circuit

Nominal voltage $U_N$	240/415 V AC (TN-C)
	240/415 V AC (TT)
Nominal frequency $f_N$	50 Hz (60 Hz)
Maximum continuous voltage $U_C$	350 V AC
Nominal discharge current $I_n$ (8/20) $\mu$ s	20 kA
Maximum discharge current $I_{max}$ (8/20) $\mu$ s	25 kA
Short-circuit current rating $I_{SCCR}$	25 kA
Voltage protection level $U_p$	≤ 2.5 kV
Residual voltage $U_{res}$	≤ 2.1 kV (at $I_n$ )
	≤ 1.9 kV (at 10 kA)
	≤ 1.8 kV (at 5 kA)
	≤ 1.7 kV (at 3 kA)
TOV behavior at $U_T$	415 V AC (5 s / withstand mode)
	440 V AC (120 min / safe failure mode)
Response time $t_A$	≤ 25 ns

# Type 2 surge arrester - VAL-CP-MOSO 60-3C-FM - 2804416

## Technical data

### Protective circuit

Max. backup fuse with branch wiring	not required
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### Indicator/remote signaling

Switching function	PDT contact
Operating voltage	5 V AC ... 250 V AC
	125 V DC (200 mA DC)
Operating current	5 mA AC ... 1 A AC
	1 A DC (30 V 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 <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section solid	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section AWG	28 ... 16

### Connection data

Connection name	PEN conductor connection
Connection method	Screw connection
Screw thread	M5
Tightening torque	4.5 Nm
Stripping length	16 mm
Conductor cross section flexible	2.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Conductor cross section solid	2.5 mm <sup>2</sup> ... 25 mm <sup>2</sup>
Conductor cross section AWG	12 ... 4
Connection name	Phase conductor connection
Connection method	60 mm power rail system

### Standards and Regulations

Standards/regulations	IEC 61643-11 2011
	EN 61643-11 2012

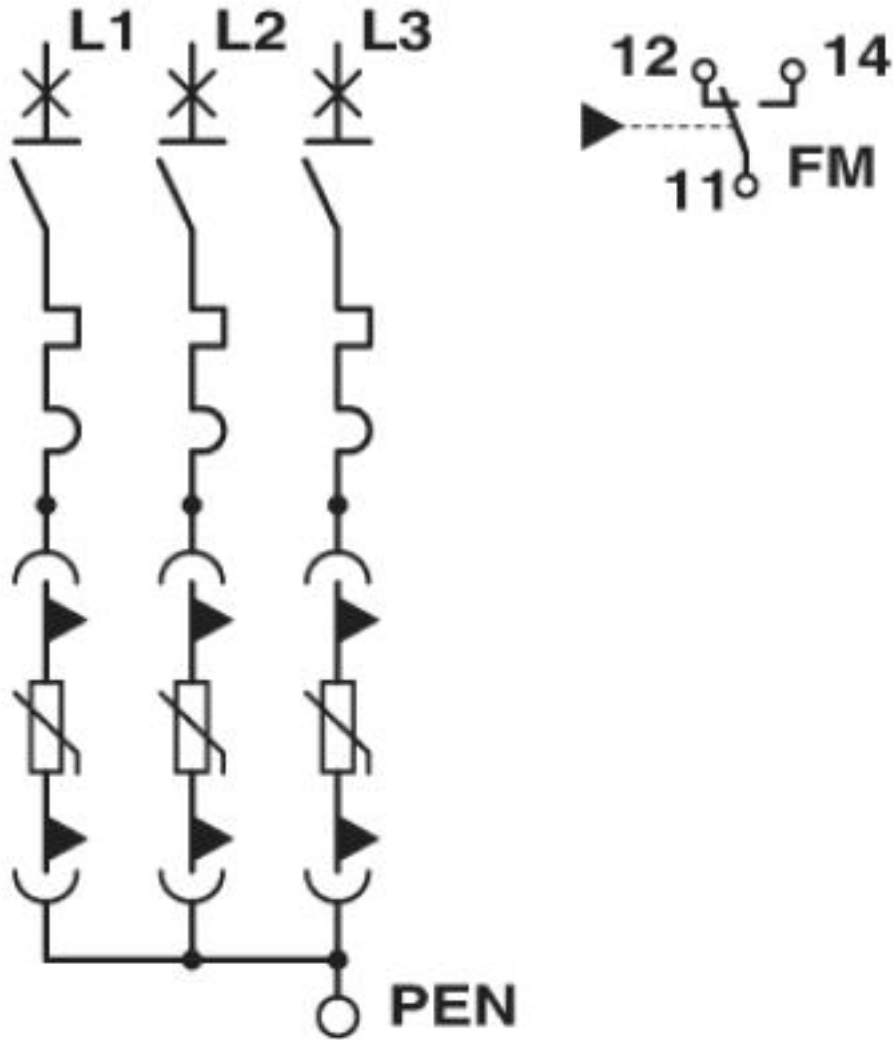
### Environmental Product Compliance

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

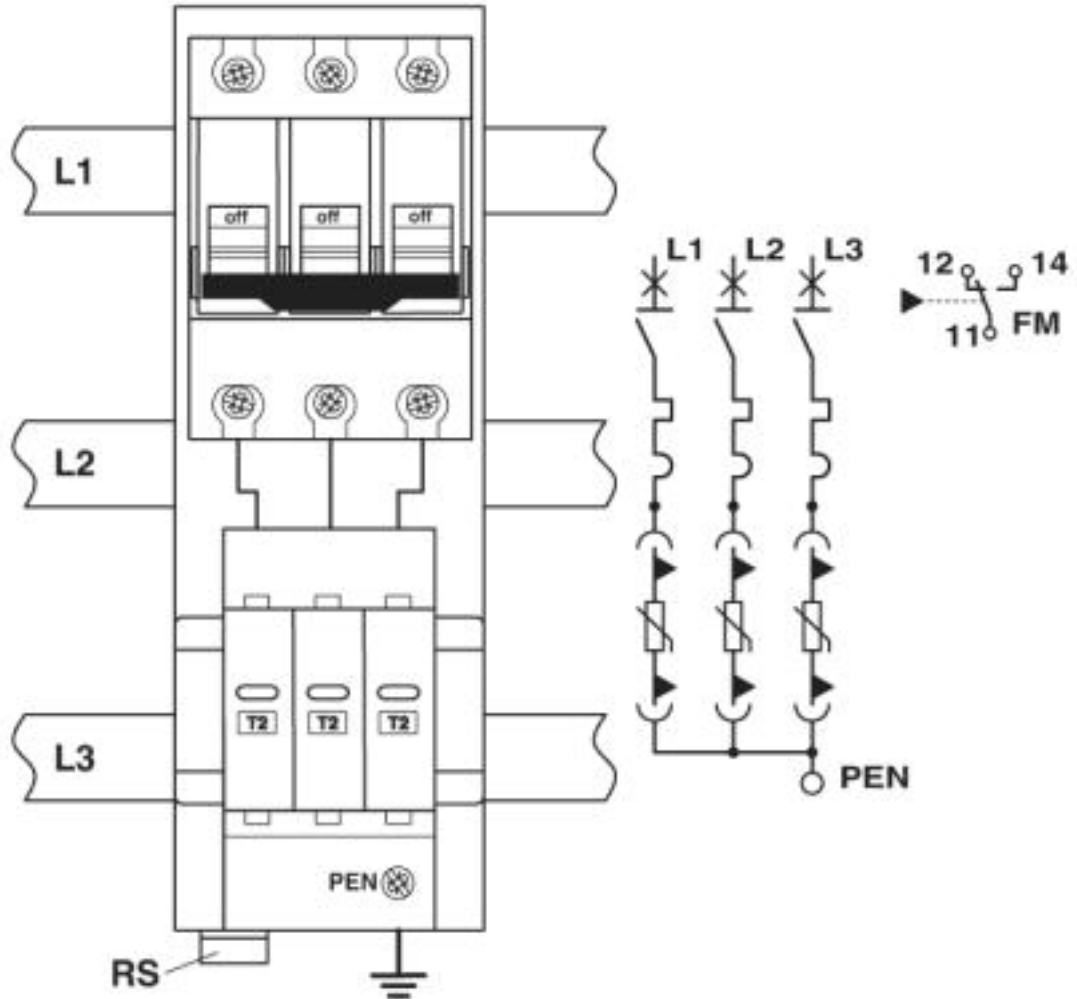
# Type 2 surge arrester - VAL-CP-MOSO 60-3C-FM - 2804416

Circuit diagram



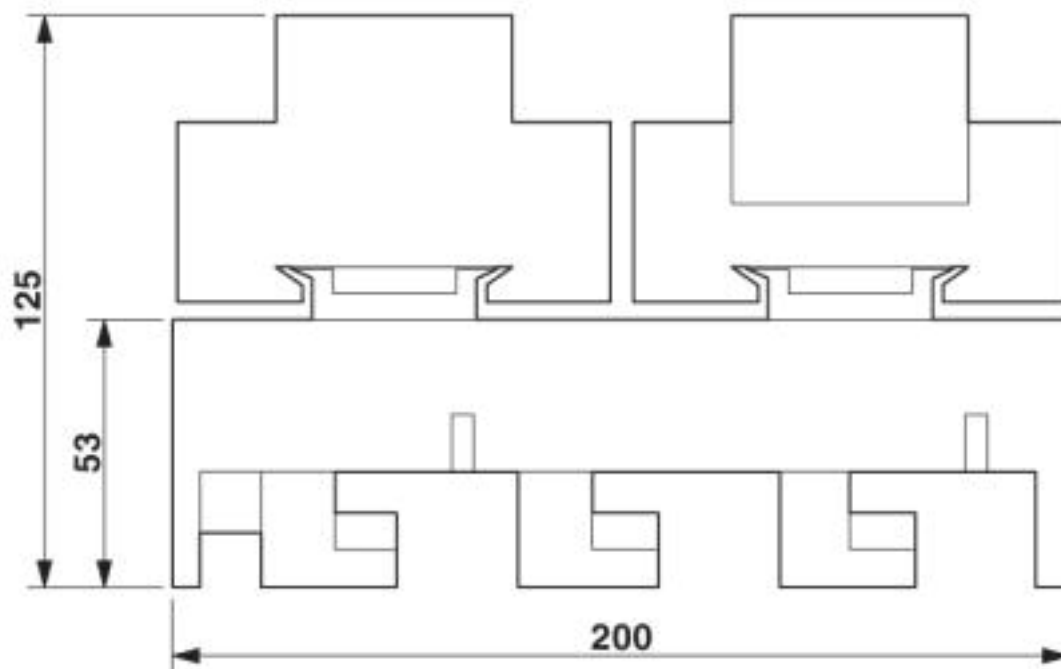
# Type 2 surge arrester - VAL-CP-MOSO 60-3C-FM - 2804416

Application drawing

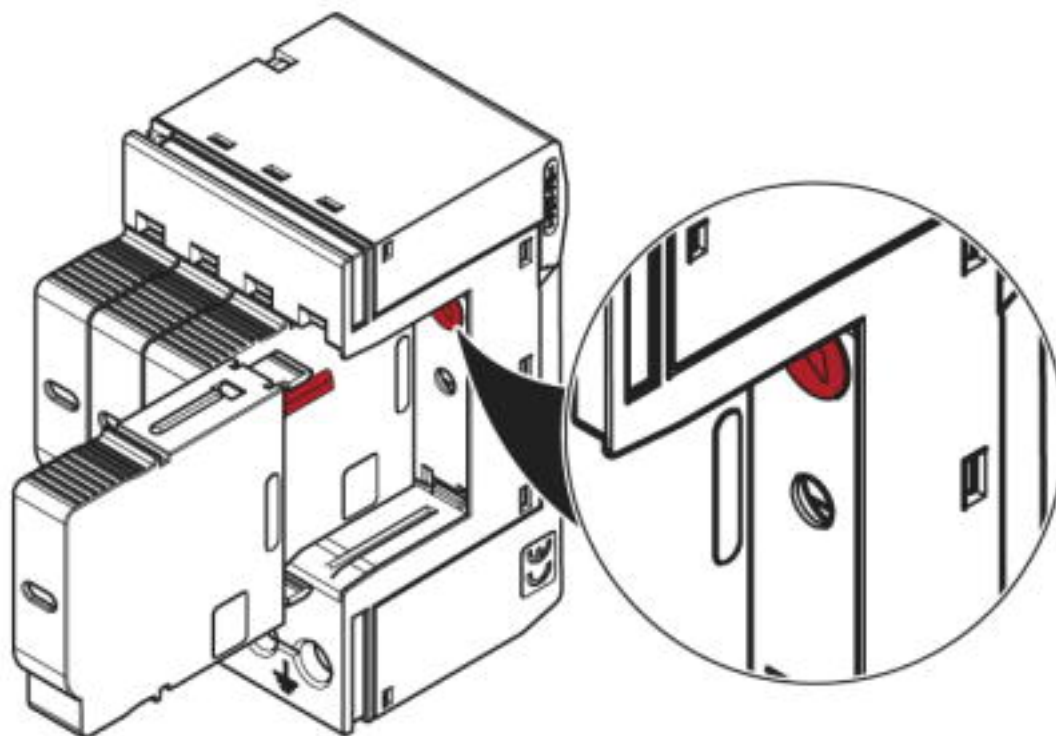


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Dimensional drawing



Schematic diagram



# Type 2 surge arrester - VAL-CP-MOSO 60-3C-FM - 2804416

## 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

### Approvals

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Approvals

EAC

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Ex Approvals

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### Approval details

# Type 2 surge arrester - VAL-CP-MOSO 60-3C-FM - 2804416

## Approvals

EAC		RU C- DE.A*30.B01561
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## Accessories

### Accessories

#### Marker pen

Marker pen - X-PEN 0,35 - 0811228



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

#### Terminal marking

Zack Marker strip, flat - ZBF 12:UNBEDRUCKT - 0809735



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 12 mm, lettering field size: 5.15 x 12.15 mm, Number of individual labels: 5

Flat zack marker sheet - ZBFM 5/WH:UNBEDRUCKT - 0803595



Flat zack marker sheet, Sheet, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into flat marker groove, for terminal block width: 5.2 mm, lettering field size: 5 x 4.5 mm, Number of individual labels: 120

## 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.



