

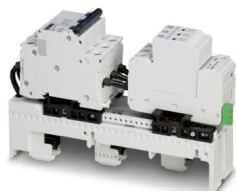
VAL-CP-MOSO 60-3C-FM - Type 2 surge arrester



2804416

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

- Tool-free mounting on 5 and 10 mm busbars
- Disconnect device on each individual plug
- Excellent level of information provided by visual status indicator and remote indication contact
- Type 2 consistent plug-in surge arresters

Commercial data

Item number	2804416
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	CL1313
GTIN	4046356317832
Weight per piece (including packing)	1,310.6 g
Weight per piece (excluding packing)	1,200 g
Country of origin	DE

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Technical data

Product properties

Product type	Surge arrester
IEC test classification	II
	T2
EN type	T2
IEC power supply system	TN-C
	TT
Type	Module for 60 mm system technology
Number of positions	3
Surge protection fault message	Optical, remote indicator contact
Number of ports	One

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Nominal frequency f_N	50 Hz (60 Hz)
Nominal voltage U_N	240 V AC (230/400 V AC ... 240/415 V AC)

Indicator/remote signaling

Connection name	Remote fault indicator contact
Switching function	Changeover 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 data

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 ² ... 16 mm ²
Conductor cross-section rigid	2.5 mm ² ... 25 mm ²
Conductor cross-section AWG	12 ... 4

Phase conductor connection

Connection method	60 mm power rail system
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Remote fault indicator contact

Connection method	Pluggable screw connection
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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 rigid	0.14 mm ² ... 1.5 mm ²
Conductor cross-section AWG	28 ... 16

Dimensions

Dimensional drawing	
Width	54 mm
Height	220 mm
Depth	134 mm

Material specifications

Color	light gray (RAL 7035)
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PBT, PA6, PA66
Material group	I
Housing material	PBT PA 6 PA 6.6

Protective circuit

Mode of protection	L-PEN
Direction of action	3L-PEN
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 operating voltage U_C	350 V AC
Nominal discharge current I_n (8/20) μ s	20 kA
Maximum discharge current I_{max} (8/20) μ 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)

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	440 V AC (120 min / safe failure mode)
Response time t_A	≤ 25 ns
Max. backup fuse with branch wiring	not required

Environmental and real-life conditions

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)
Permissible humidity (operation)	5 % ... 95 %

Standards and regulations

Air clearances and creepage distances

Standards/regulations	DIN VDE 0110-1 / IEC 60664-1 / IEC 61643-11
Standards/specifications	IEC 61643-11
Note	2011
Standards/specifications	EN 61643-11
Note	2012

Mounting

Mounting type	60 mm system technology (power rail)
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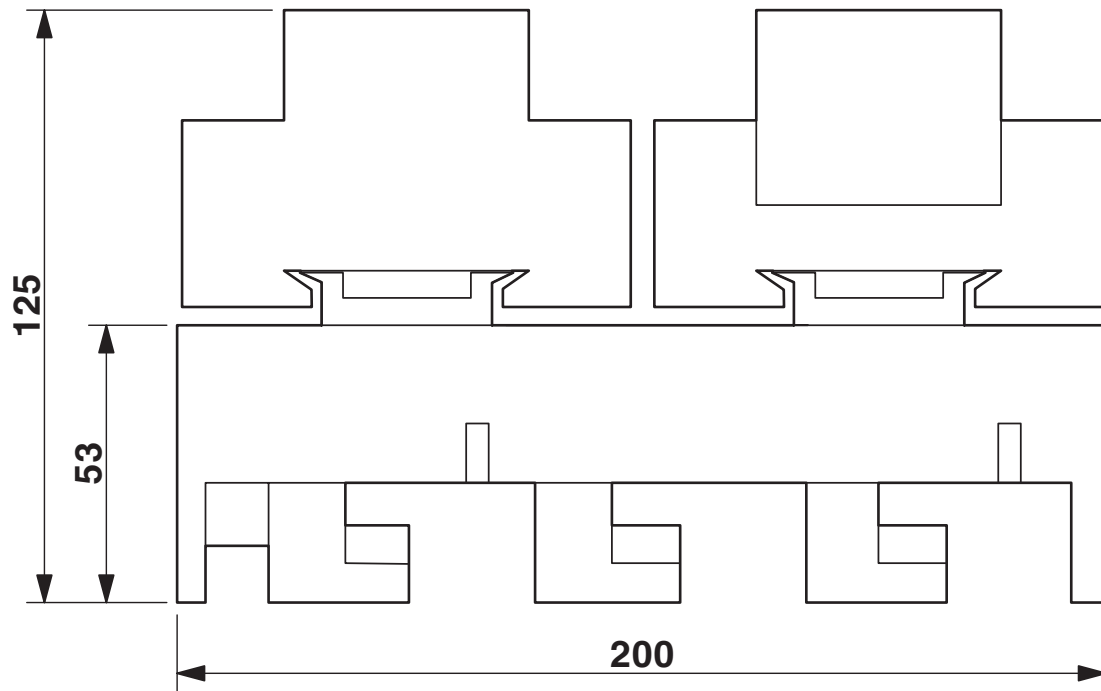


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Drawings

Dimensional drawing



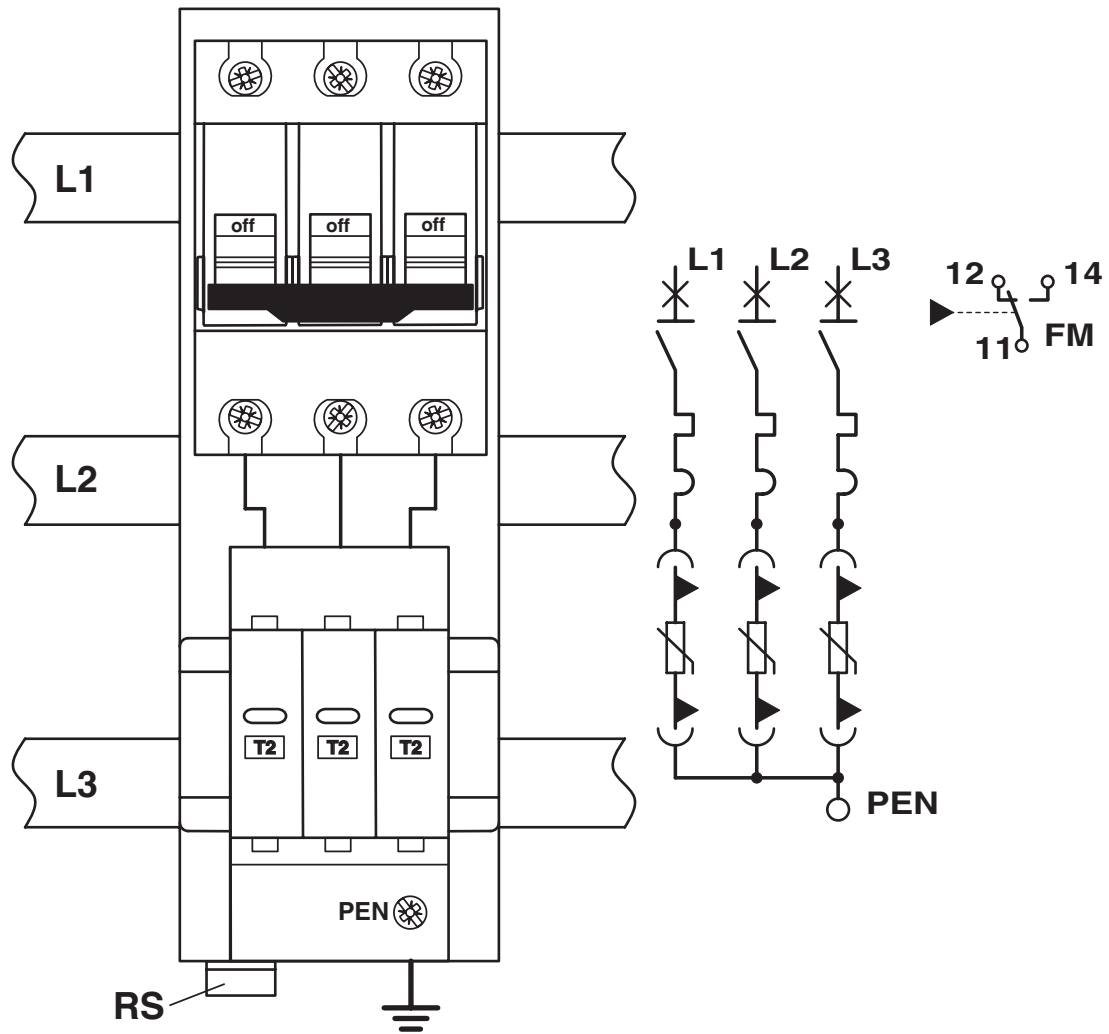
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Application drawing

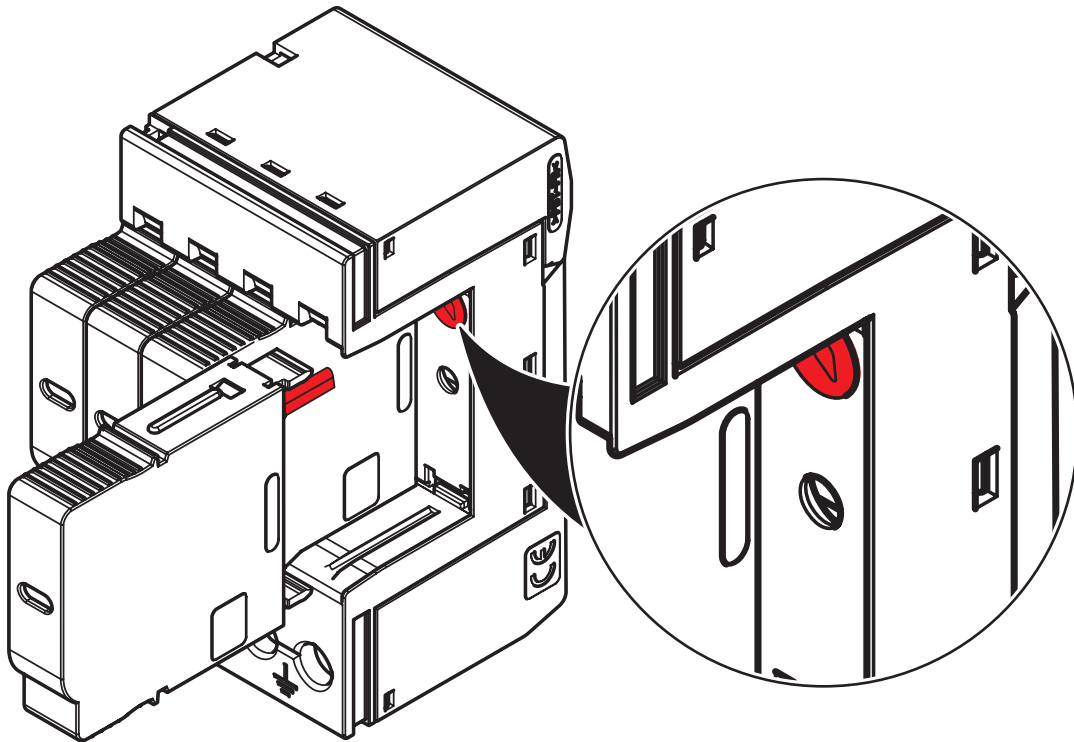


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Schematic diagram



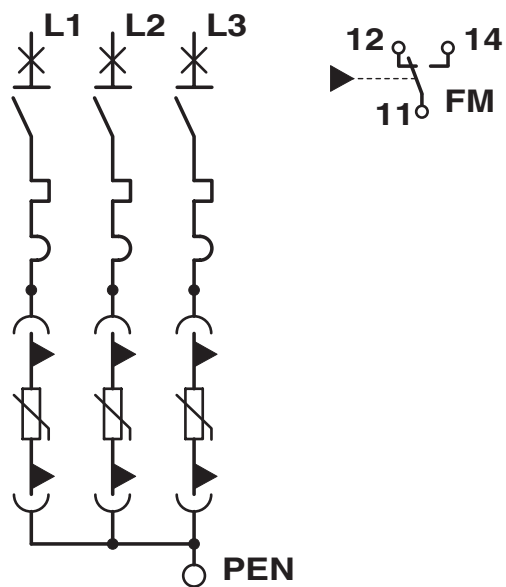
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Circuit diagram



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Classifications

ECLASS

ECLASS-13.0	27171202
ECLASS-15.0	27171202

ETIM

ETIM 10.0	EC000941
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UNSPSC

UNSPSC 21.0	39121600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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