

## Type 2 surge arrester - VAL-CP-3C-350 - 2859547

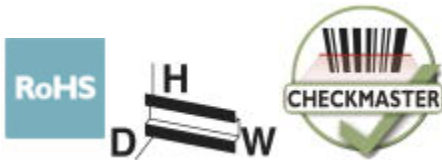
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Plug-in surge arrester for 3-phase power supply networks with N and PE in a common conductor (4-conductor system: L1, L2, L3, PEN), with remote indication contact.

### Your advantages

- ✓ Plugs can be checked with CHECKMASTER
- ✓ With or without floating remote indication contact
- ✓ High continuous voltage of 350 V AC for 230/400 V AC networks with high voltage fluctuations
- ✓ Modular arrester blocks with ultra-narrow design
- ✓ Use of varistors with a low leakage current
- ✓ Mechanical coding of all slots
- ✓ Optical, mechanical status indication for the individual arresters
- ✓ Disconnect device on each individual plug
- ✓ Type 2 consistent plug-in surge arresters



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 960827
GTIN	4017918960827
Weight per Piece (excluding packing)	323.900 g
Custom tariff number	85363030
Country of origin	Germany

### Technical data

#### Dimensions

# Type 2 surge arrester - VAL-CP-3C-350 - 2859547

## Technical data

### Dimensions

Height	98 mm
Width	37.25 mm
Depth	71.5 mm
Horizontal pitch	2 Div.

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (10 ... 500 Hz / 2.5 h / X, Y, Z)

### General

IEC test classification	II
	T2
EN type	T2
IEC power supply system	TN-C
Mode of protection	L-PEN
Mounting type	DIN rail: 35 mm
Color	gray/blue
	black
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	3
Surge protection fault message	Optical, remote indicator contact

### Protective circuit

Nominal voltage $U_N$	240/415 V AC (TN-C)
Nominal frequency $f_N$	50 Hz (60 Hz)
Maximum continuous operating voltage $U_C$ (L-PEN)	350 V AC
Rated load current $I_L$	40 A (Biconnect M4 fork-type cable lug 6 mm <sup>2</sup> )
	63 A (TWIN ferrule 2 x 10 mm <sup>2</sup> )
Nominal discharge current $I_n$ (8/20) $\mu$ s (L-PEN)	20 kA
Maximum discharge current $I_{max}$ (8/20) $\mu$ s (L-PEN)	40 kA
Short-circuit current rating $I_{SCCR}$	25 kA

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#### Protective circuit

Voltage protection level $U_p$ (L-PEN)	$\leq 1.5$ kV
Residual voltage $U_{res}$ (L-PEN)	$\leq 1.5$ kV (at $I_n$ )
	$\leq 1.3$ kV (at 10 kA)
	$\leq 1.2$ kV (at 5 kA)
	$\leq 1.1$ kV (at 4 kA)
	$\leq 1$ kV (at 2 kA)
TOV behavior at $U_T$ (L-PEN)	415 V AC (5 s / withstand mode)
	440 V AC (120 min / safe failure mode)
Response time $t_A$ (L-PEN)	$\leq 25$ ns
Max. backup fuse with V-type through wiring	40 A (gG / Biconnect M4 fork-type cable lug, 6 mm <sup>2</sup> )
	63 A (gG / TWIN ferrule 2x 10mm <sup>2</sup> )
Max. backup fuse with branch wiring	315 A (gG)

#### 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 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

#### UL specifications

SPD Type	4CA
Maximum continuous operating voltage MCOV (L-L)	700 V AC

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### Technical data

#### UL specifications

Maximum continuous operating voltage MCOV (L-N)	350 V AC
Nom. voltage	277/480 V AC
Mode of protection	L-L
	L-N
Power distribution system	Wye
Nominal frequency	50/60 Hz
Measured limiting voltage MLV (L-L)	3280 V
Measured limiting voltage MLV (L-N)	2000 V
Nominal discharge current $I_n$ (L-L)	20 kA
Nominal discharge current $I_n$ (L-N)	20 kA

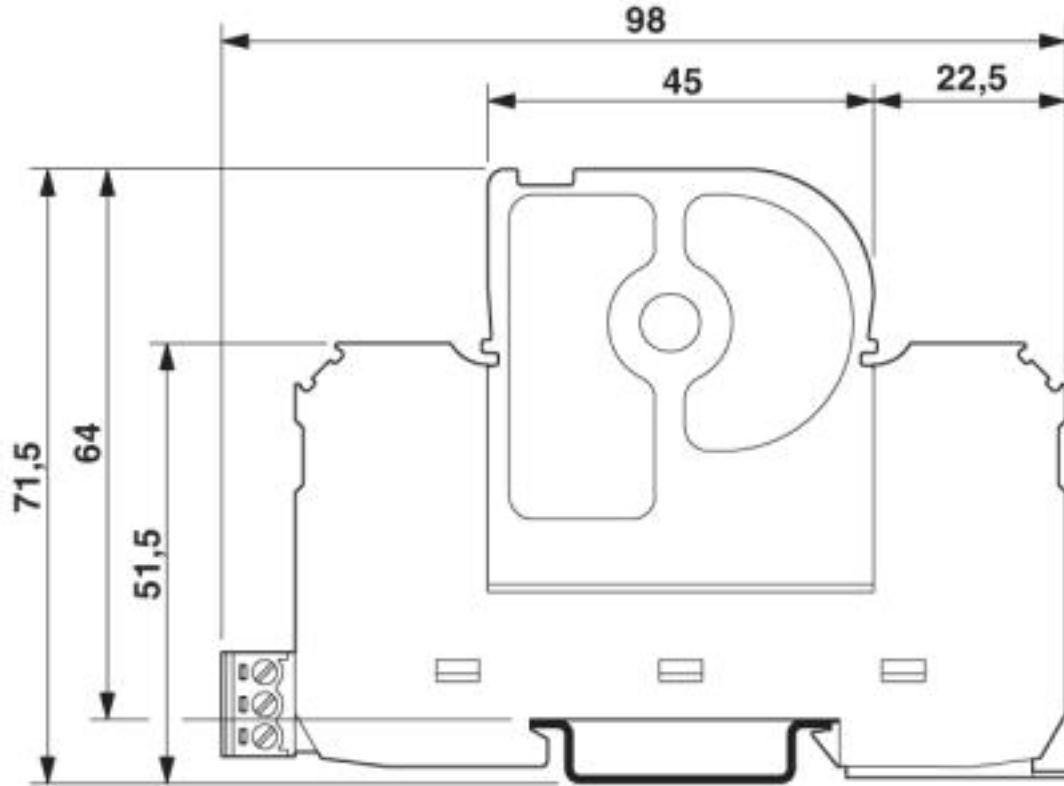
#### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

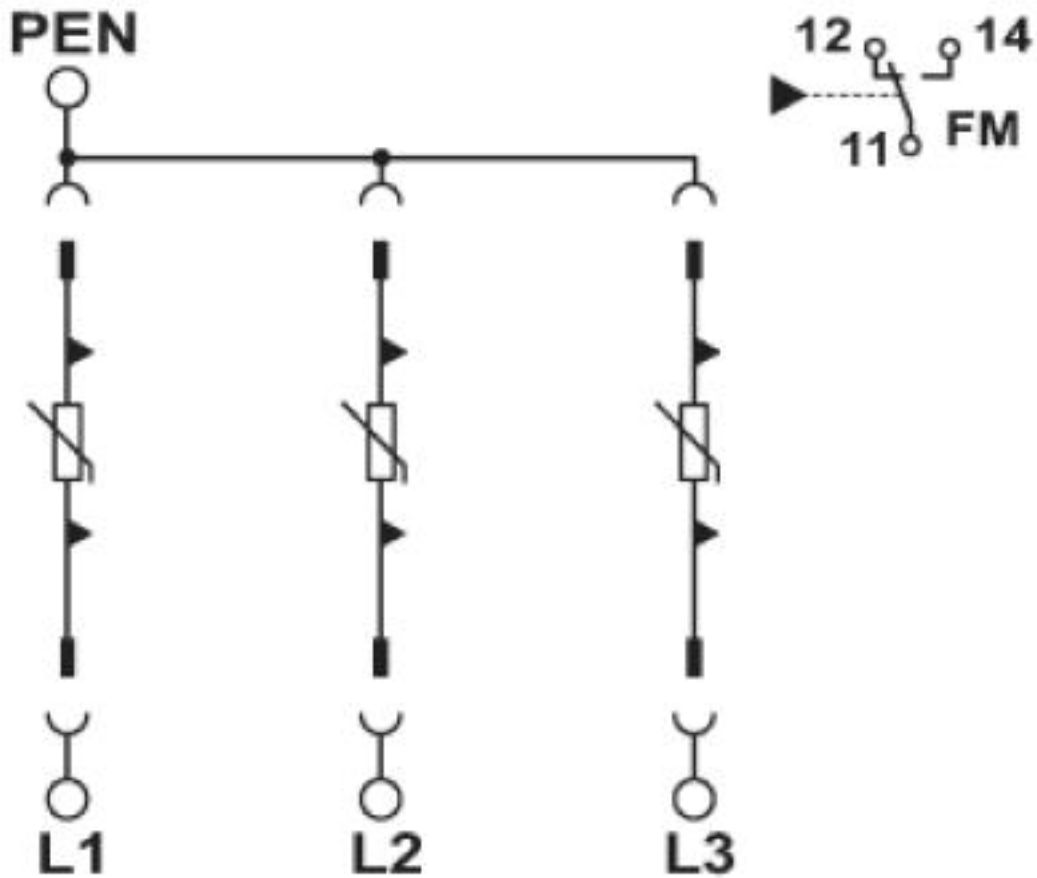
# Type 2 surge arrester - VAL-CP-3C-350 - 2859547

Dimensional drawing



# Type 2 surge arrester - VAL-CP-3C-350 - 2859547

Circuit diagram



## Classifications

eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
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
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## Classifications

### ETIM

ETIM 3.0	EC000941
ETIM 4.0	EC000941
ETIM 5.0	EC000941
ETIM 6.0	EC000941

### UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

## Accessories

### Accessories

#### Bridge

Wiring bridge - MPB SET VAL-CP-3S - 2880684



Wiring bridge set, consisting of three flexible bridges 15 cm black, 1 bridge 27 cm blue.

### Device marking

Zack marker strip - ZBN 18:UNBEDRUCKT - 2809128



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

### Feed-through terminal block

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### Accessories

Feed-through terminal block - DK-BIC-35 - 2749880



Feed-through terminal block for VAL and FLT applications

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### Labeled device marker

Marker for terminal blocks - ZBN 18,LGS:ERDE - 2749589



Marker for terminal blocks, Strip, white, labeled, Horizontal: Grounding symbol, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

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Marker for terminal blocks - ZBN 18,LGS:L1-N,ERDE - 2749576



Marker for terminal blocks, Strip, white, labeled, Horizontal: L1, L2, L3, N, GND, mounting type: snap into tall marker groove, for terminal block width: 18 mm, lettering field size: 18 x 5 mm, Number of individual labels: 5

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### Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

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### Spare parts



## Type 2 surge arrester - VAL-CP-3C-350 - 2859547

### Accessories

Type 2 surge protection plug - VAL-CP-350-ST - 2859602



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