

## Type 2 surge arrester - VAL-CP-2S-350 VF - 2859592

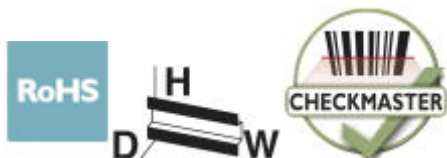
Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Plug-in type 2 arrester (surge arrester) free of leakage current for 2-phase power supply networks with separate N and PE (4-conductor system: L1, L2, N, PE), with remote indication contact.

### Your advantages

- ✓ High continuous voltage of 350 V AC for 230/400 V AC networks with high voltage fluctuations
- ✓ With floating remote indication contact
- ✓ Mechanical coding of all slots
- ✓ Versions free of leakage current through series connection of varistor and surge arrester
- ✓ Modular arrester blocks with ultra-narrow design
- ✓ Disconnect device on each individual plug
- ✓ Optical, mechanical status indication for the individual arresters
- ✓ Type 2 consistent plug-in surge arresters



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 980580
GTIN	4017918980580

### Technical data

#### Dimensions

Height	98.5 mm
Width	37.25 mm
Depth	70 mm

#### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C

#### General

## Type 2 surge arrester - VAL-CP-2S-350 VF - 2859592

### Technical data

#### General

IEC power supply system	TN-S
	TT
Housing material	PBT
Flammability rating according to UL 94	V0
Color	gray
Standards for clearances and creepage distances	DIN VDE 0110-1
	IEC 60664-1
	IEC 61643-1
Overvoltage category	III
Degree of pollution	2
Mounting type	DIN rail: 35 mm
Type	DIN rail module, two-section, divisible
Number of positions	3
Surge protection fault message	Optical, remote indicator contact
Direction of action	2L-N & N-PE

#### Protective circuit

IEC test classification	II
	T2
EN type	T2
Maximum continuous operating voltage $U_C$ (L-N)	350 V AC
Maximum continuous operating voltage $U_C$ (N-PE)	264 V AC
$U_T$ (TOV-proof)	350 V AC (5 s)
	1200 V AC (200 ms / N-PE)
Nominal frequency $f_N$	50 Hz
	60 Hz
Rated load current $I_L$	40 A (biconnect, 6 mm <sup>2</sup> )
	63 A (2x 10 mm <sup>2</sup> )
Residual current $I_{PE}$	$\leq 1 \mu\text{A}$ (Residual current $I_{PE}$ )
Standby power consumption $P_C$	$\leq 0.35 \text{ mW}$
Max. discharge current $I_{max}$ (8/20) $\mu\text{s}$ maximum (L-N)	40 kA (all channels)
Max. discharge current $I_{max}$ (8/20) $\mu\text{s}$ maximum (N-PE)	40 kA
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$ (L-N)	20 kA (all channels)
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$ (N-PE)	20 kA
Front of wave sparkover voltage at 6 kV (1.2/50) $\mu\text{s}$ (L-N)	$\leq 1.5 \text{ kV}$
Front of wave sparkover voltage at 6 kV (1.2/50) $\mu\text{s}$ (N-PE)	$\leq 1.5 \text{ kV}$
Voltage protection level $U_p$ (L-N)	$\leq 1.5 \text{ kV}$
Voltage protection level $U_p$ (N-PE)	$\leq 1.5 \text{ kV}$
Residual voltage (L-N)	$\leq 1.1 \text{ kV}$ (at $I_n$ )
	$\leq 1 \text{ kV}$ (at 5 kA)

## Type 2 surge arrester - VAL-CP-2S-350 VF - 2859592

### Technical data

#### Protective circuit

	≤ 0.9 kV (at 3 kA)
Residual voltage (L-PE)	≤ 1.3 kV (at $I_n$ )
	≤ 1.1 kV (at 5 kA)
	≤ 1 kV (at 3 kA)
Residual voltage (N-PE)	≤ 0.3 kV (at $I_n$ )
	≤ 0.25 kV (at 5 kA)
	≤ 0.2 kV (at 3 kA)
Response time $t_A$ (L-N)	≤ 100 ns
Response time (L-PE)	100 ns
Response time $t_A$ (N-PE)	≤ 100 ns
Max. backup fuse with branch wiring	125 A (gL/gG)
Max. backup fuse with V-type through wiring	40 A (gL/gG)
Short-circuit withstand capability $I_P$ with max. backup fuse (r.m.s.)	25 kA
Follow current quenching capacity $I_{fi}$ (N-PE)	100 A

#### Connection, protective circuit

Connection method	Screw connection
Connection method IN	Biconnect screw terminal block
Connection method OUT	Biconnect screw terminal block
Connection technology	Biconnect terminal block
Screw thread	M5
Tightening torque	4.5 Nm
Stripping length	16 mm
Conductor cross section flexible min.	2.5 mm <sup>2</sup>
Conductor cross section flexible max.	16 mm <sup>2</sup>
Conductor cross section solid min.	2.5 mm <sup>2</sup>
Conductor cross section solid max.	25 mm <sup>2</sup>
Conductor cross section AWG min.	12
Conductor cross section AWG max.	4

#### Remote indication contact

Connection name	Remote fault indicator contact
Switching function	PDT contact
Connection method	Pluggable screw connection
Screw thread	M2
Tightening torque	0.25 Nm
Stripping length	7 mm
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	1.5 mm <sup>2</sup>
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>

# Type 2 surge arrester - VAL-CP-2S-350 VF - 2859592

## Technical data

### Remote indication contact

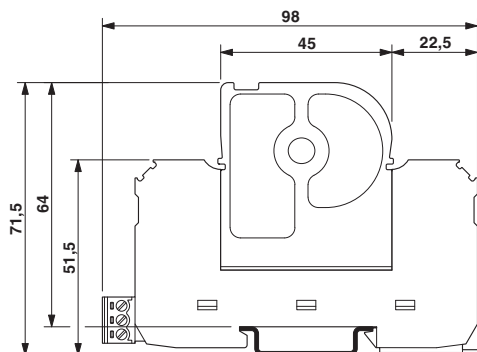
Conductor cross section AWG min.	28
Conductor cross section AWG max.	16
Maximum operating voltage $U_{max}$ AC	250 V AC
Maximum operating voltage $U_{max}$ DC	125 V DC
Max. operating current $I_{max}$	1 A AC (inductive)
	1 A AC (ohmic)
	30 mA DC (inductive)
	200 mA DC (ohmic)

### Standards and Regulations

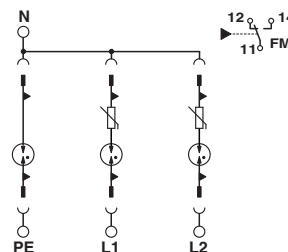
Standards/regulations	IEC 61643-1 2005
	DIN EN 61643-11 2002
	DIN EN 61643-11/A11 2007
	IEEE C62.1 / C62.34 / C62.45
	UL 1449

## Drawings

Dimensional drawing



Circuit diagram



Phoenix Contact 2018 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
 Flachsmarktstr. 8  
 32825 Blomberg  
 Germany  
 Tel. +49 5235 300  
 Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[2859592](#)