

Type 2 surge arrester - VAL-CP-2C-350 - 2859589

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Plug-in surge arrester for 2-phase power supply networks with N and PE in a common conductor (3-conductor system: L1, L2, PEN), with remote indication contact.

Product Features

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



Key commercial data

| | |
|--------------------------------------|-----------|
| Packing unit | 1 pc |
| Weight per Piece (excluding packing) | 228.3 GRM |
| Custom tariff number | 85363010 |
| Country of origin | Germany |

Technical data

Dimensions

| | |
|--------|---------|
| Height | 98.5 mm |
| Width | 25.3 mm |
| Depth | 70 mm |

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Technical data

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 sinus / 11 ms / 3x ±X, ±Y, ±Z) |
| Vibration (operation) | 5g (10 ... 500 Hz / 2.5 h / X, Y, Z) |

General

| | |
|---|---|
| Standards/specifications | IEC 61643-11 2011 |
| | EN 61643-11 2012 |
| IEC test classification | II |
| | T2 |
| EN type | T2 |
| IEC power supply system | TN-C |
| Number of ports | One |
| SPD design | Voltage-limiting type |
| Mode of protection | L-PEN |
| Mounting type | DIN rail: 35 mm |
| Color | gray/blue |
| | black |
| Housing material | PBT-FR |
| Pollution degree | 2 |
| Inflammability class according to UL 94 | V-0 |
| Type | DIN rail module, two-section, divisible |
| Number of positions | 2 |
| 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 ²) |
| | 63 A (TWIN ferrule 2 x 10 mm ²) |
| Standby power consumption P_C | ≤ 200 mVA |
| Nominal discharge current I_n (8/20) μs (L-PEN) | 20 kA |
| Maximum discharge current I_{max} (8/20) μs (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) | ≤ 1.5 kV |
| Residual voltage U_{res} (L-PEN) | ≤ 1.5 kV (at I_n) |
| | ≤ 1.3 kV (at 10 kA) |
| | ≤ 1.2 kV (at 5 kA) |
| | ≤ 1.1 kV (at 4 kA) |
| | ≤ 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) | ≤ 25 ns |
| Max. backup fuse with branch wiring | 315 A AC (gG) |
| Max. backup fuse with V-type through wiring | 40 A AC (gG / Biconnect M4 fork-type cable lug, 6 mm ²) |
| | 63 A AC (gG / TWIN ferrule 2x 10mm ²) |

Indicator/remote signaling

| | |
|---------------------------------------|--|
| Connection name | Remote fault indicator contact |
| Switching function | PDT contact |
| Operating voltage | 5 V AC ... 250 V AC |
| | 125 V AC (UL) |
| | 125 V DC (200 mA DC) |
| Operating current | 5 mA AC ... 1 A AC |
| | 1 A AC (UL) |
| | 1 A DC (30 V DC) |
| Connection method | Pluggable screw connection |
| Screw thread | M2 |
| Tightening torque | 0.25 Nm |
| | 2 lb _f -in. ... 4 lb _f -in. (UL) |
| Stripping length | 7 mm |
| Conductor cross section flexible min. | 0.14 mm ² |
| Conductor cross section flexible max. | 1.5 mm ² |
| Conductor cross section solid min. | 0.14 mm ² |
| Conductor cross section solid max. | 1.5 mm ² |
| AWG conductor cross section | 28 ... 16 |
| | 30 ... 14 (UL) |

Connection data

| | |
|---------------------------------------|---------------------|
| Connection method | Screw connection |
| Conductor cross section flexible min. | 2.5 mm ² |
| Conductor cross section flexible max. | 16 mm ² |

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Connection data

| | |
|------------------------------------|--|
| Conductor cross section solid min. | 2.5 mm ² |
| Conductor cross section solid max. | 25 mm ² |
| AWG conductor cross section | 12 ... 4 |
| | 14 ... 2 (Solid - UL) |
| | 14 ... 4 (Stranded - UL) |
| Screw thread | M5 |
| Tightening torque | 4.5 Nm |
| | 40 lb _f -in. ... 50 lb _f -in. (UL) |
| Stripping length | 16 mm |

UL specifications

| | |
|---|------------------------------------|
| UL class | Type 4 SPD for Type 2 applications |
| Maximum continuous operating voltage MCOV (L-L) | 700 V AC |
| Maximum continuous operating voltage MCOV (L-G) | 350 V AC |
| Nom. voltage | 277/480 V AC |
| Mode of protection | L-L |
| | L-G |
| Power distribution system | 3Y |
| Nominal frequency | 50/60 Hz |
| Voltage protection rating VPR (L-L) | 2 kV |
| Voltage protection rating VPR (N-G) | 1.2 kV |
| Nominal discharge current I _n (L-L) | 20 kA |
| Nominal discharge current I _n (L-G) | 20 kA |

Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27140201 |
| eCl@ss 4.1 | 27130801 |
| eCl@ss 5.0 | 27130801 |
| eCl@ss 5.1 | 27130801 |
| eCl@ss 6.0 | 27130805 |
| eCl@ss 7.0 | 27130805 |
| eCl@ss 8.0 | 27130805 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000941 |
| ETIM 3.0 | EC000941 |

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ETIM

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| ETIM 4.0 | EC000941 |
| ETIM 5.0 | EC000941 |

UNSPSC

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

Approvals

Approvals


Approvals

UL Recognized / KEMA-KEUR / cUL Recognized / IECCE CB Scheme / CCA / EAC / EAC / cULus Recognized


Ex Approvals

Approvals submitted

Approval details

UL Recognized 

KEMA-KEUR 

cUL Recognized 

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Approvals

IECEE CB Scheme

CCA

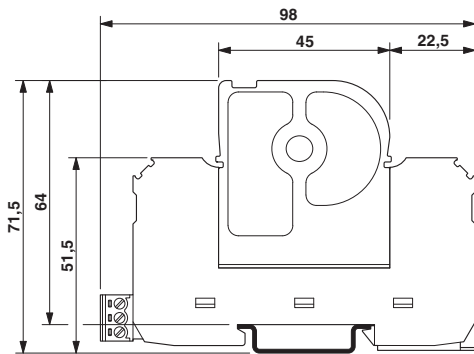
EAC

EAC

cULus Recognized

Drawings

Dimensional drawing



Circuit diagram

