# VAL-SEC-T2-175-P - Type 2 surge protection plug

2905355

https://www.phoenixcontact.com/us/products/2905355

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Replacement plug for surge arresters from the VALVETRAB SEC product range for L-N and L-PEN paths.

## Your advantages

- Surge protection family for universal use with optimum energy coordination from the lightning current arrester to the device protection
- Easy to maintain due to consistently pluggable protection modules
- Excellent level of information provided by mechanical/visual status indicator and remote indication contact
- More space in the control cabinet due to the narrow overall width of just 12 mm per position and use without separate backup fuse up to 315 A gG

## Commercial data

| | |
|---|---|
| Item number | 2905355 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | CL01 |
| Product key | CL1351 |
| Catalog page | Page 56 (C-4-2019) |
| GTIN | 4046356948234 |
| Weight per piece (including packing) | 54.7 g |
| Weight per piece (excluding packing) | 50 g |
| Customs tariff number | 85363090 |
| Country of origin | DE |

## Technical data

### Product properties

| | |
|---|---|
| Product type | Replacement plug |
| Product family | SEC Family |
| IEC test classification | II |
| | T2 |
| EN type | T2 |
| IEC power supply system | TN |
| | TT |
| Type | Male |
| Number of positions | 1 |
| Surge protection fault message | optical |

Insulation characteristics

| | |
|---|---|
| Overvoltage category | III |
| Pollution degree | 2 |

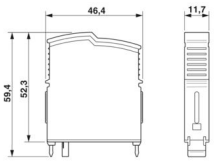
### Electrical properties

| | |
|---|---|
| Nominal frequency $f_N$ | 50 Hz (60 Hz) |

### Connection data

| | |
|---|---|
| Connection method | pluggable |

### Dimensions

| | |
|---|---|
| Dimensional drawing |   |
| Width | 11.7 mm |
| Height | 46.4 mm |
| Depth | 59.4 mm |
| Horizontal pitch | 0.6 Div. |

### Material specifications

| | |
|---|---|
| Color | light grey (RAL 7035) |
| | gray (RAL 7042) |
| Flammability rating according to UL 94 | V-0 |
| CTI value of material | 600 |
| Insulating material | PA6.6-FR 20% GF |
| | PBT-FR |
| Material group | I |

| | |
|---|---|
| Housing material | PA 6.6-FR 20 % GF |
| | PBT-FR |

## Protective circuit

| | |
|---|---|
| Mode of protection | L-N |
| | L-PEN |
| Direction of action | L-N / L-PEN |
| Nominal voltage $U_N$ | 120 V AC (TN) |
| | 120 V AC (TT) |
| Nominal frequency $f_N$ | 50 Hz (60 Hz) |
| Maximum continuous voltage $U_C$ | 175 V AC |
| Nominal discharge current $I_n$ (8/20) µs | 20 kA |
| Maximum discharge current $I_{max}$ (8/20) µs | 40 kA |
| Short-circuit current rating $I_{SCCR}$ | 25 kA (for a backup fuse of up to 315 A gG) |
| | 50 kA (for a backup fuse of up to 200 A gG) |
| Voltage protection level $U_p$ | ≤ 0.85 kV |
| Residual voltage $U_{res}$ | ≤ 0.85 kV (at $I_n$) |
| | ≤ 0.75 kV (at 10 kA) |
| | ≤ 0.65 kV (at 5 kA) |
| | ≤ 0.63 kV (at 4 kA) |
| | ≤ 0.57 kV (at 2 kA) |
| TOV behavior at $U_T$ | 240 V AC (5 s / withstand mode) |
| | 240 V AC (120 min / safe failure mode) |
| Response time $t_A$ | ≤ 25 ns |
| Max. backup fuse with branch wiring | 315 A (gG) |

## Environmental and real-life conditions

### 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) |
| 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) |

## Approvals

### UL specifications

| | |
|---|---|
| Maximum continuous operating voltage MCOV (L-N) | 175 V AC |
| Nominal discharge current $I_n$ (L-N) | 20 kA |
| Mode of protection | L-N |
| Nominal voltage | 125 V AC |
| Power distribution system | Single phase |

| | |
|---|---|
| Nominal frequency | 50/60 Hz |
| Measured limiting voltage MLV (L-N) | 1510 V |
| SPD Type | 4CA |

## Standards and regulations

Air clearances and creepage distances

| | |
|---|---|
| Standards/regulations | DIN VDE 0110-1 / IEC 60664-1 / IEC 61643-11 / UL 1449 |
| Standards/specifications | IEC 61643-11 |
| Note | 2011 |

EN 61643-11

| | |
|---|---|
| Standards/specifications | EN 61643-11 |
| Note | 2012 |

## Mounting

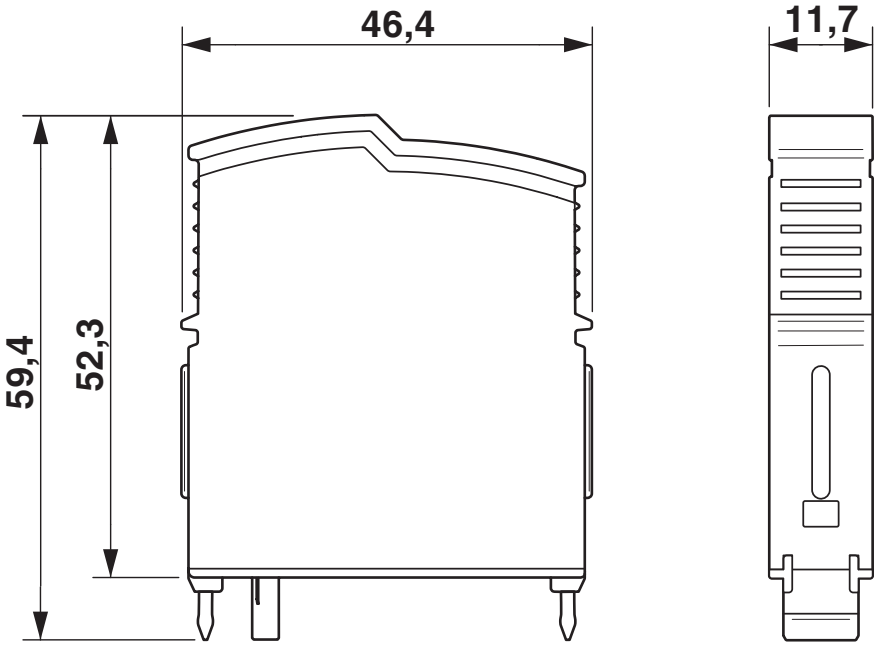
| | |
|---|---|
| Mounting type | on base element |

## Drawings

Circuit diagram



Dimensional drawing



## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2905355

**cUL Recognized**
Approval ID: FILE E 330181

**UL Recognized**
Approval ID: FILE E 330181

**IECEE CB Scheme**
Approval ID: NL-34356

**EAC**
Approval ID: RU C-DE.*09.B.00169

**CCA**
Approval ID: NTR-NL 7347

**KEMA-KEUR**
Approval ID: 2196453.01

**DNV GL**
Approval ID: TAE000023D

**UAE-RoHS**
Approval ID: 23-10-88707

**cULus Recognized**

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-11.0 | 27130890 |
| ECLASS-13.0 | 27171292 |

### ETIM

| | |
|---|---|
| ETIM 9.0 | EC002496 |

### UNSPSC

| | |
|---|---|
| UNSPSC 21.0 | 39121600 |

## Environmental product compliance

EU RoHS

| | |
|---|---|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |

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% |

## Accessories

### EML (20XE)R - Label

0803452

https://www.phoenixcontact.com/us/products/0803452



Label, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: continuous x 20 mm, Number of individual labels: 1

### EML (20XE)R YE - Label

0803453

https://www.phoenixcontact.com/us/products/0803453



Label, Roll, yellow, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: continuous x 20 mm, Number of individual labels: 1

## B-STIFT - Marker pen

1051993

https://www.phoenixcontact.com/us/products/1051993



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


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