

Type 3 surge protection device - PLT-SEC-T3-230-FM-UT - 2907919

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Type 2/3 surge protection, consisting of protective plug and base element with screw connection. For single-phase power supply network with integrated status indicator and remote signaling. Nominal voltage 230 V AC/DC.

Your advantages

- ✓ Increased service life and availability of the system, thanks to optimal protection of your industrial power supply
- ✓ 5-year warranty on your QUINT 4 power supply when installed together with PLT-SEC, see document in the download area
- ✓ Easy maintenance and testing of protective devices, thanks to pluggable connections



Key Commercial Data

| | |
|--------------|---|
| Packing unit | 5 pc |
| GTIN |  4 0 5 5 6 2 6 2 5 7 4 5 7 |
| GTIN | 4055626257457 |

Technical data

Dimensions

| | |
|------------------|---------------------------------|
| Height | 93.4 mm |
| Width | 17.7 mm |
| Depth | 74.5 mm (incl. DIN rail 7.5 mm) |
| Horizontal pitch | 1 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 (operating voltage remote contact ≤ 250 V) ≤ 6000 m (operating voltage remote contact ≤ 150 V) |
| Permissible humidity (operation) | 5 % ... 95 % |
| Shock (operation) | 30g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z) |

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Technical data

Ambient conditions

| | |
|-----------------------|-------------------------------------|
| Vibration (operation) | 5g (5 ... 500 Hz / 2.5 h / X, Y, Z) |
|-----------------------|-------------------------------------|

General

| | |
|--|---|
| EN type | T2 / T3 |
| IEC power supply system | TT |
| | TN-S |
| Number of ports | One |
| Mode of protection | L-N |
| | L-PE |
| | N-PE |
| Mounting type | DIN rail: 35 mm |
| Color | light grey RAL 7035 |
| | traffic grey A RAL 7042 |
| Housing material | PA 6.6-FR 20% GF |
| | PA 6.6-FR |
| Degree of pollution | 2 |
| Flammability rating 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 V AC (TN-S) |
| | 240 V AC (TT) |
| Nominal frequency f_N | 50 Hz (60 Hz) |
| Maximum continuous voltage U_C | 264 V AC |
| Rated load current I_L | 26 A (at 30 °C) |
| Residual current I_{PE} | $\leq 5 \mu\text{A}$ |
| Nominal discharge current I_n (8/20) μs | 5 kA |
| Standby power consumption P_C | $\leq 26.4 \text{ mVA}$ (at U_{REF}) |
| | $\leq 26.4 \text{ mVA}$ (at U_C) |
| Reference test voltage U_{REF} | 264 V AC |
| Max. discharge current I_{max} (8/20) μs | 10 kA |
| Combination wave U_{OC} | 6 kV |
| Voltage protection level U_p (L-N) | $\leq 1.25 \text{ kV}$ (at U_{OC}) |
| | $\leq 1.4 \text{ kV}$ (at I_n) |
| Voltage protection level U_p (L-PE) | $\leq 1.4 \text{ kV}$ |
| Voltage protection level U_p (N-PE) | $\leq 1.4 \text{ kV}$ |
| TOV behavior at U_T (L-N) | 400 V AC (5 s / withstand mode) |
| | 457 V AC (120 min / safe failure mode) |
| TOV behavior at U_T (L-PE) | 457 V AC (5 s / withstand mode) |

Type 3 surge protection device - PLT-SEC-T3-230-FM-UT - 2907919

Technical data

Protective circuit

| | |
|---|--|
| | 457 V AC (120 min / withstand mode) |
| | 1464 V AC (200 ms / safe failure mode) |
| TOV behavior at U_T (N-PE) | 1200 V AC (200 ms / safe failure mode) |
| Response time t_A (L-N) | ≤ 25 ns |
| Response time t_A (L-PE) | ≤ 100 ns |
| Response time t_A (N-PE) | ≤ 100 ns |
| Short-circuit current rating I_{SCCR} | 10 kA AC |
| Max. backup fuse with branch wiring | 32 A (gG / B / C) |
| Maximum backup fuse for through wiring | 25 A (gG / B / C) |

Additional technical data

| | |
|---|---|
| Short-circuit current rating I_{SCCR} | 0.25 kA DC (without additional backup fuse) |
| | 5 kA DC (for 20 A gG / B backup fuse) |
| Maximum continuous voltage U_C | 275 V AC |
| | 240 V DC |
| Mode of protection | (DC+) - (DC-) |
| | (DC+/DC-) - PE |
| IEC test classification (in accordance with IEC 61643-21) | D1 |
| Impulse durability (line-line) | D1 - 500 A |
| Impulse durability (line-earth) | D1 - 500 A |
| Pulse discharge current I_{imp} (10/350) μ s (line-line) | 0.5 kA |
| Pulse discharge current I_{imp} (10/350) μ s (line-earth) | 0.5 kA |

Indicator/remote signaling

| | |
|----------------------------------|---|
| Switching function | PDT contact |
| Operating voltage | 250 V AC |
| | 125 V DC (200 mA DC) |
| Operating current | 0.5 A AC |
| | 0.5 A DC (75 V DC) |
| Connection method | Screw connection |
| Conductor cross section flexible | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section solid | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section AWG | 30 ... 12 |
| Screw thread | M3 |
| Tightening torque | 0.5 Nm |
| Stripping length | 10 mm |

Connection data

| | |
|----------------------------------|---|
| Connection method | Screw connection |
| Conductor cross section flexible | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross section solid | 0.2 mm ² ... 4 mm ² |
| Conductor cross section AWG | 24 ... 12 |

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Technical data

Connection data

| | |
|-------------------|--------|
| Screw thread | M3 |
| Tightening torque | 0.5 Nm |
| Stripping length | 10 mm |

UL specifications

| | |
|---|---------------|
| SPD Type | 4CA |
| Maximum continuous operating voltage MCOV | 264 V AC |
| | 240 V DC |
| Nominal voltage | 240 V DC |
| Rated load current I_L | 20 A |
| Mode of protection | L-N |
| | L-G |
| | N-G |
| | (DC+) - (DC-) |
| | (DC+) - G |
| | (DC-) - G |
| Power distribution system | Single phase |
| | DC |
| Nominal frequency | 50/60 Hz |
| Measured limiting voltage MLV (L-N) | 1150 V |
| Measured limiting voltage MLV (L-G) | 1180 V |
| Measured limiting voltage MLV (N-G) | 1180 V |
| Nominal discharge current I_n | 5 kA |

UL indicator/remote signaling

| | |
|-----------------------------|---|
| Operating voltage | 250 V AC (0.5 A) |
| | 12 V DC (4 A) |
| | 24 V DC (2 A) |
| | 48 V DC (1 A) |
| Tightening torque | 5 lb _f -in. ... 7 lb _f -in. |
| Conductor cross section AWG | 30 ... 12 |

UL connection data

| | |
|-----------------------------|--------------------------|
| Conductor cross section AWG | 16 ... 12 |
| Tightening torque | 4.4 lb _f -in. |

Standards and Regulations

| | |
|--------------------------|-------------------|
| Standards/specifications | IEC 61643-11 2011 |
| | EN 61643-11 2012 |

Environmental Product Compliance

| | |
|------------|--|
| China RoHS | Environmentally Friendly Use Period = 50 |
|------------|--|

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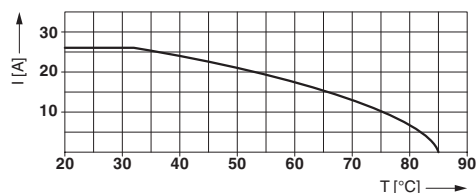
Technical data

Environmental Product Compliance

| | |
|--|---|
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |
|--|---|

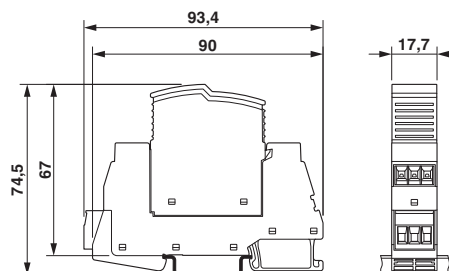
Drawings

Diagram

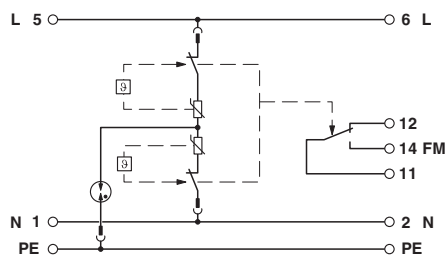


Nominal current depending on ambient temperature

Dimensional drawing



Circuit diagram



Approvals

Approvals

Approvals

DNV GL / CCA / UL Recognized / KEMA-KEUR / cUL Recognized / IECEE CB Scheme / EAC / CSA / cULus Recognized

Ex Approvals

UL Recognized / cUL Recognized / cULus Recognized

Approval details

| | | | |
|--------|--|---|------------|
| DNV GL | | http://exchange.dnv.com/tari/ | TAE00002U7 |
|--------|--|---|------------|

| | |
|-----|-------------|
| CCA | NTR-NL 7676 |
|-----|-------------|

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Approvals

| | | | |
|------------------|--|---|-------------------------|
| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 330181 |
| KEMA-KEUR | | http://www.dekra-certification.com | 71-103027 |
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 330181 |
| IECEE CB Scheme | | http://www.iecee.org/ | NL-51083 |
| EAC | | | RU C- DE.A*30.B01561 |
| CSA | | http://www.csagroup.org/services-industries/product-listing/ | 70194378 |
| cULus Recognized | | | |

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