# PWO 16-UW/S - Panel feed-through terminal block

1844390

https://www.phoenixcontact.com/us/products/1844390

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Panel feed-through terminal block, connection method: Push-in spring connection, Screw connection with tension sleeve, number of positions: 1, load current: 76 A, cross section: 1.5 mm² - 16 mm², connection direction of the conductor to plug-in direction: 45 °, width: 12 mm, color: gray

## Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Tool-free snap-in principle enables easy mounting on the device panel
- Automatic panel thickness compensation enables universal use

## Commercial data

| | |
|---|---|
| Item number | 1844390 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Sales key | AA28 |
| Product key | AA1DEA |
| GTIN | 4046356951326 |
| Weight per piece (including packing) | 37.21 g |
| Weight per piece (excluding packing) | 33.4 g |
| Customs tariff number | 85369010 |
| Country of origin | CN |

# Technical data

## Product properties

| | |
|---|---|
| Product type | Panel feed-through terminal block |
| Product family | PWO 16-UW |
| Number of positions | 1 |
| Pitch | 12.1 mm |
| Number of connections | 2 |
| Number of rows | 1 |
| Number of potentials | 1 |

### Insulation characteristics

| | |
|---|---|
| Overvoltage category | III |
| Degree of pollution | 3 |

### Fitting of components

| | |
|---|---|
| Partial assembly | No |

## Electrical properties

### Properties

| | |
|---|---|
| Nominal current $I_N$ | 76 A |
| Nominal voltage $U_N$ | 800 V |
| Rated voltage (III/3) | 800 V |
| Rated surge voltage (III/3) | 8 kV |
| Rated voltage (III/2) | 1000 V |
| Rated surge voltage (III/2) | 8 kV |
| Rated voltage (II/2) | 1000 V |
| Rated surge voltage (II/2) | 6 kV |

## Connection data

### Connection technology

| | |
|---|---|
| Connector system | UW 16 / PW 16 |
| Nominal cross section | 16 mm² |

### Conductor connection exterior

| | |
|---|---|
| Connection method | Push-in spring connection |
| Connection direction of the conductor to plug-in direction | 45 ° |
| Conductor cross-section rigid | 1.5 mm² ... 16 mm² |
| Conductor cross-section flexible | 1.5 mm² ... 16 mm² |
| Conductor cross-section, flexible, with ferrule, without plastic sleeve | 1.5 mm² ... 16 mm² |
| Conductor cross-section, flexible, with ferrule, with plastic sleeve | 1.5 mm² ... 16 mm² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 1.5 mm² ... 4 mm² |

| | |
|---|---|
| Stripping length | 18 mm |

Conductor connection interior

| | |
|---|---|
| Connection method | Screw connection with tension sleeve |
| Connection direction of the conductor to plug-in direction | 0 ° |
| Conductor cross-section rigid | 6 mm² ... 16 mm² |
| Single-conductor/terminal point multi-stranded | 6 mm² ... 25 mm² |
| Conductor cross-section flexible | 6 mm² ... 16 mm² |
| Conductor cross-section AWG | 10 ... 4 |
| Conductor cross-section, flexible, with ferrule, without plastic sleeve | 6 mm² ... 16 mm² |
| Conductor cross-section, flexible, with ferrule, with plastic sleeve | 6 mm² ... 16 mm² |
| 2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve | 4 mm² ... 6 mm² |
| Internal cylindrical gage | B7 |
| Stripping length | 16 mm |
| Tightening torque | 2 Nm ... 2.3 Nm |

## Mounting

| | |
|---|---|
| Panel thickness | 1 mm...6 mm |

## Material specifications

Material data - contact

| | |
|---|---|
| Note | WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201 |
| Contact material | Cu alloy |
| Surface characteristics | tin-plated |

Material data - housing

| | |
|---|---|
| Color (Housing) | gray (7042) |
| Insulating material | PA |
| Insulating material group | I |
| CTI according to IEC 60112 | 600 |
| Flammability rating according to UL 94 | V0 |
| Glow wire flammability index GWFI according to EN 60695-2-12 | 850 |
| Glow wire ignition temperature GWIT according to EN 60695-2-13 | 775 |
| Temperature for the ball pressure test according to EN 60695-10-2 | 125 °C |

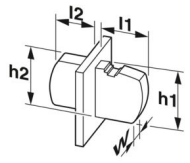
## Notes

Safety note

| | |
|---|---|
| Safety note | • Only electrically qualified personnel may install and operate the product.<br>To recognize and prevent danger, the qualified personnel must be familiar with the basics of electrical engineering. |
| | • Observe the technical data provided here and refer to the |

| | |
|---|---|
| | documents listed under “Downloads”. The download area contains important information, such as installation notes, technical drawings, and 3D data. |
| | • The cable entry funnel is not safe to touch. Never connect or disconnect the terminal when it is energized. Take appropriate steps to ensure touch protection. |

## Dimensions

| | |
|---|---|
| Dimensional drawing |  |
| Pitch | 12.1 mm |
| | 12.1 mm |
| Width [w] | 12 mm |

External dimensions

| | |
|---|---|
| Width [w] | 12 mm |
| Height [h1] | 44.4 mm |
| Length [l1] | 39.7 mm |

Internal dimensions

| | |
|---|---|
| Width [w] | 12 mm |
| Height [h2] | 38.3 mm |
| Length [l2] | 29.5 mm |

## Mechanical tests

Test for conductor damage and slackening

| | |
|---|---|
| Specification | IEC 60947-7-1:2009-04 |
| Result | Test passed |

Pull-out test

| | |
|---|---|
| Specification | IEC 60947-7-1:2009-04 |
| Conductor cross-section/conductor type/tractive force setpoint/actual value | 1.5 mm² / solid / > 40 N |
| | 1.5 mm² / flexible / > 40 N |
| | 16 mm² / solid / > 100 N |
| | 16 mm² / flexible / > 100 N |

## Electrical tests

Temperature-rise test

| | |
|---|---|
| Specification | IEC 60947-7-1:2009-04 |
| Requirement temperature-rise test | Increase in temperature ≤ 45 K |

Short-time withstand current

| | |
|---|---|
| Specification | IEC 60947-7-1:2009-04 |

Air clearances and creepage distances | 1. Insulation coordination

| | |
|---|---|
| Specification | IEC 60947-1:2007-06 + A1:2010-12 |
| Insulating material group | I |
| Comparative tracking index (IEC 60112) | CTI 600 |
| Rated insulation voltage (III/3) | 800 V |
| Rated surge voltage (III/3) | 8 kV |
| minimum clearance value - non-homogenous field (III/3) | 8 mm |
| minimum creepage distance (III/3) | 10 mm |
| Rated insulation voltage (III/2) | 1000 V |
| Rated surge voltage (III/2) | 8 kV |
| minimum clearance value - non-homogenous field (III/2) | 8 mm |
| minimum creepage distance (III/2) | 5 mm |
| Rated insulation voltage (II/2) | 1000 V |
| Rated surge voltage (II/2) | 6 kV |
| minimum clearance value - non-homogenous field (II/2) | 5.5 mm |
| minimum creepage distance (II/2) | 5 mm |

## Environmental and real-life conditions

Vibration test

| | |
|---|---|
| Specification | IEC 60068-2-6:2007-12 |
| Frequency | 10 - 150 - 10 Hz |
| Sweep speed | 1 octave/min |
| Amplitude | 0.35 mm (10 Hz ... 60.1 Hz) |
| Acceleration | 5g (60.1 Hz ... 150 Hz) |
| Test duration per axis | 2.5 h |
| Test directions | X-, Y- and Z-axis |

Glow-wire test

| | |
|---|---|
| Specification | IEC 60695-2-11:2000-10 |
| Temperature | 960 °C |
| Time of exposure | 30 s |

Ambient conditions

| | |
|---|---|
| Ambient temperature (storage/transport) | -40 °C ... 70 °C |
| Relative humidity (storage/transport) | 30 % ... 70 % |
| Ambient temperature (assembly) | -5 °C ... 100 °C |
| Ambient temperature (operation) | -40 °C ... 100 °C (Depending on the current carrying capacity/derating curve) |

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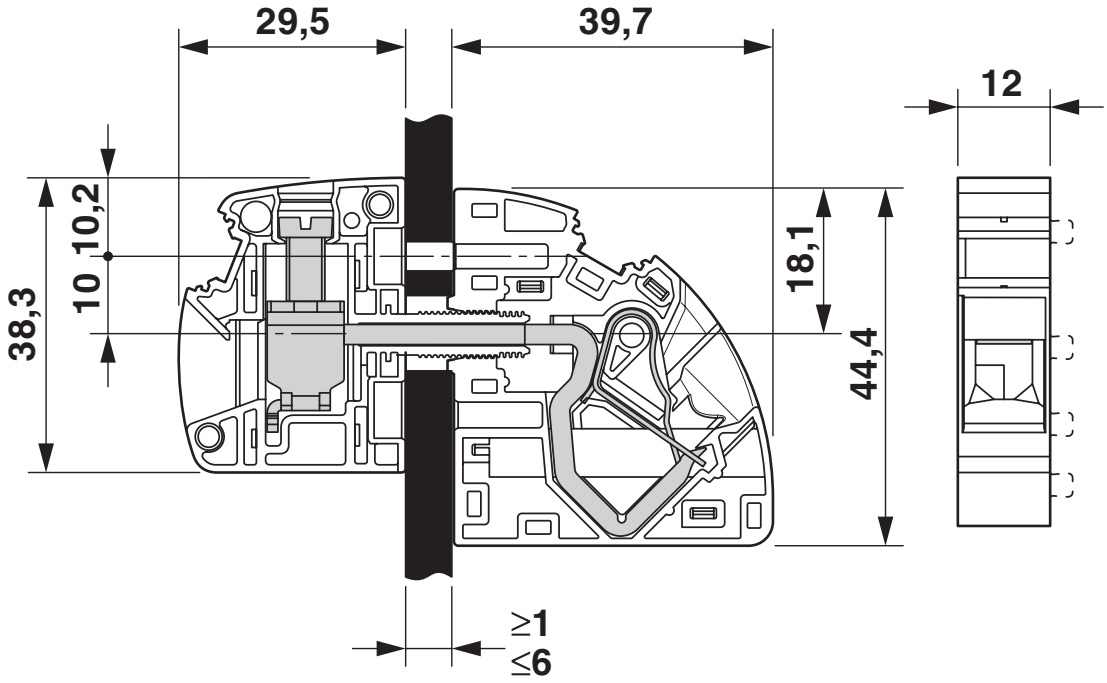
| | |
|---|---|
| Ambient temperature (actuation) | -5 °C ... 100 °C |

## Packaging specifications

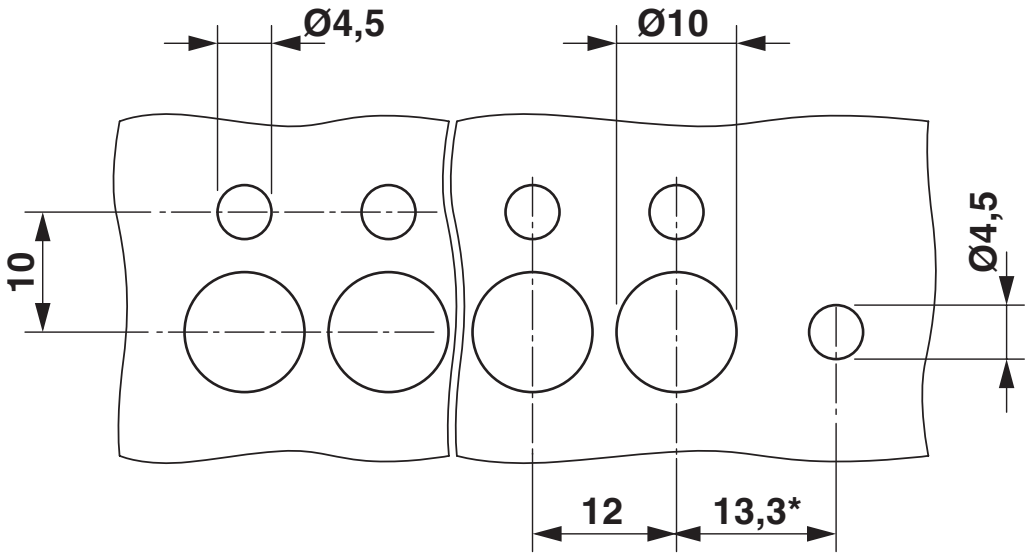
| | |
|---|---|
| Type of packaging | packed in cardboard |

## Drawings

Dimensional drawing

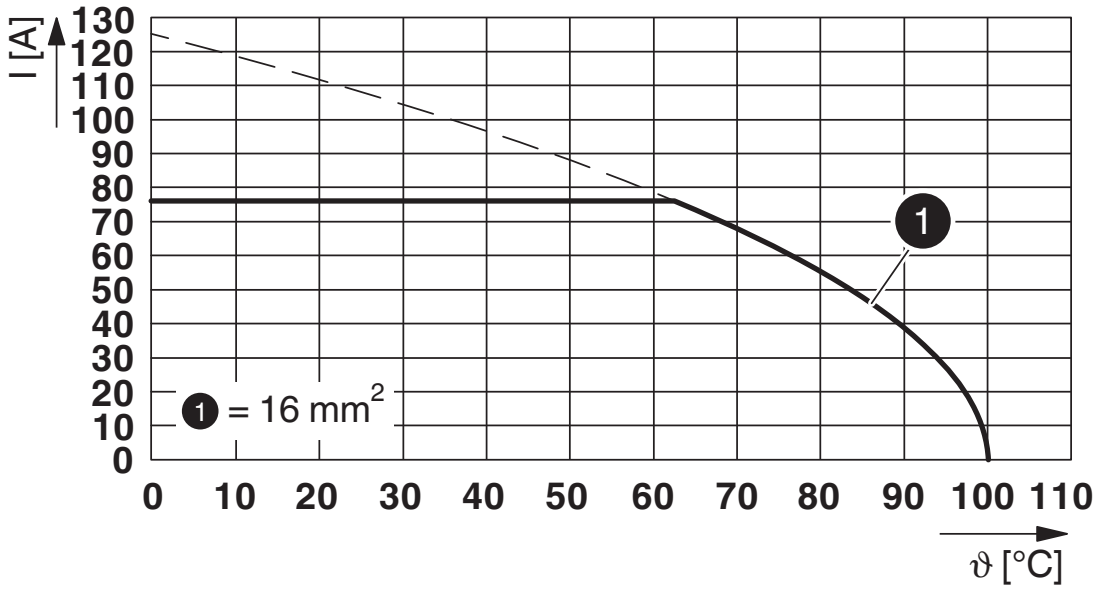



Dimensional drawing




*Only when using the PWO 16-F flange plate

Diagram




Type: PWO 16-UW(/S)

## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1844390

**CSA**
Approval ID: 13631

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| B | | | | |
| | 600 V | 66 A | 14 - 4 | - |
| C | | | | |
| | 600 V | 66 A | 14 - 4 | - |

**cULus Recognized**
Approval ID: E60425-20100423

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| B | | | | |
| | 600 V | 66 A | 14 - 4 | - |
| C | | | | |
| | 600 V | 66 A | 14 - 4 | - |

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-13.0 | 27141134 |
| ECLASS-15.0 | 27141134 |

### ETIM

| | |
|---|---|
| ETIM 10.0 | EC001283 |

### UNSPSC

| | |
|---|---|
| UNSPSC 21.0 | 39121400 |

## 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% |


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