# Panel feed-through terminal block - PWO 16-POT - 1705653

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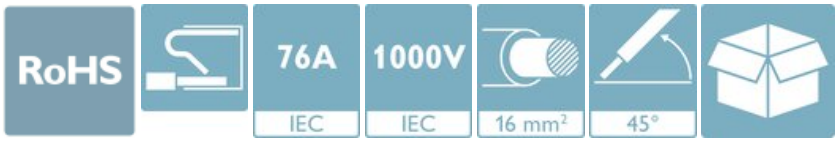
The figure shows a 5-position version

Panel feed-through terminal block, connection method: Push-in spring connection, Cable lug connection, 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
- Reliable seal even with low-viscosity molding compounds




## Key Commercial Data

| | |
|---|---|
| Packing unit | 1 pc |
| Minimum order quantity | 50 pc |
| GTIN | 4 046356 790840 |
| GTIN | 4046356790840 |
| Weight per Piece (excluding packing) | 29.200 g |
| Custom tariff number | 85369010 |
| Country of origin | China |

## Technical data

### Item properties

| | |
|---|---|
| Brief article description | Panel feed-through terminal block |
| Range of articles | PWO 16-POT |

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## Technical data

### Item properties

| | |
|---|---|
| Pitch | 12.1 mm |
| Number of positions | 1 |
| Number of connections | 2 |
| Number of potentials | 1 |

### Electrical parameters

| | |
|---|---|
| Nominal current | 76 A |
| Nom. voltage | 1000 V |
| Rated voltage (III/3) | 1000 V |
| Rated voltage (III/2) | 1000 V |
| Rated voltage (II/2) | 1000 V |
| Rated surge voltage (III/3) | 8 kV |
| Rated surge voltage (III/2) | 8 kV |
| Rated surge voltage (II/2) | 6 kV |

### Connection capacity, external

| | |
|---|---|
| Connection method | Push-in spring connection |
| Connection direction of the conductor to plug-in direction | 45 ° |
| Conductor cross section solid | 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 |

### Connection capacity, internal

| | |
|---|---|
| Connection method | Cable lug connection |
| Connection direction of the conductor to plug-in direction | 0 ° |
| Cable lug connection according to standard | DIN 46234:1980-03 1.5 mm² 16 mm² 5.3 mm 11 mm M5 2 Nm 2.5 Nm |

### 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

| | |
|---|---|
| Housing color | gray (7042) |
| Insulating material | PA |
| Insulating material group | I |

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## Technical data

### Material data - housing

| | |
|---|---|
| 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 |

### Dimensions for the product

| | |
|---|---|
| Caption | Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center |
| Width [ w ] | 12 mm |
| Pitch | 12.1 mm |

### Dimensions for mounting cutout

| | |
|---|---|
| Plate thickness | 1 mm ... 6 mm |

### Packaging information

| | |
|---|---|
| Type of packaging | packed in cardboard |
| Pieces per package | 50 |
| Denomination packing units | Pcs. |

### Ambient conditions

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

### Termination and connection method

| | |
|---|---|
| Test for conductor damage and slackening | IEC 60947-7-1:2009-04 |
| | Test passed |

### Pull-out test

| | |
|---|---|
| Pull-out test | IEC 60947-7-1:2009-04 |
| Conductor cross section / conductor type / tensile force | 1.5 mm² / solid / > 40 N |
| | 1.5 mm² / flexible / > 40 N |
| | 16 mm² / solid / > 100 N |
| | 16 mm² / flexible / > 100 N |

### Mechanical tests according to standard

| | |
|---|---|
| Test specification | IEC 60947-7-1 (following) |

### Electrical tests

| | |
|---|---|
| Rated current | 76 A |
| Conductor cross section | 16 mm² |

# Panel feed-through terminal block - PWO 16-POT - 1705653

## Technical data

### Electrical tests

| | |
|---|---|
| Rated voltage (III/2) | 1000 V |
| Rated surge voltage (III/2) | 8 kV |

### Air clearances and creepage distances

| | |
|---|---|
| Clearances and creepage distances | Internal part molded Control cabinet panel 1 - 4 mm IEC 60947-1:2007-06 + A1:2010-12 |
| Application | Internal part molded |
| | Control cabinet panel 1 - 4 mm |
| Specification | IEC 60947-1:2007-06 + A1:2010-12 |
| Minimum clearance - inhomogeneous field (III/3) | 8 mm |
| Minimum clearance - inhomogeneous field (III/2) | 8 mm |
| Minimum clearance - inhomogeneous field (II/2) | 5.5 mm |
| Minimum creepage distance value (III/3) | 12.5 mm |
| Minimum creepage distance value (III/2) | 8 mm |
| Minimum creepage distance value (II/2) | 5.5 mm |

### Temperature-rise test

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

### Current carrying capacity / derating curves

| | |
|---|---|
| Caption | Type: PWO 16-POT(/S) |

### Standards and Regulations

| | |
|---|---|
| Connection in acc. with standard | UL |
| | IEC 60947-7-1 |
| Flammability rating according to UL 94 | V0 |
| Safety note | • Only electrically qualified personnel may install and operate the product. 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. |
| | • To maintain the nominal voltage, align the cable lugs straight and centered, and cast the terminals on the inside. |
| | • 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. |

### Vibration test

| | |
|---|---|
| Specification | IEC 60068-2-6:2007-12 |
| Frequency | 10 - 150 - 10 Hz |
| Sweep speed | 1 octave/min |

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## Technical data

### Vibration test

| | |
|---|---|
| Amplitude | 0.35 mm (10 - 60.1 Hz) |
| Acceleration | 5 g (60.1 - 150 Hz) |
| Test duration per axis | 2.5 h |

### Glow-wire test

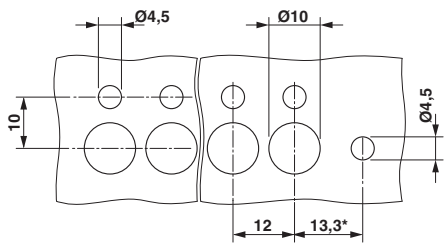
| | |
|---|---|
| Specification | IEC 60695-2-11:2000-10 |
| Temperature | 960 °C |
| Time of exposure | 30 s |

### Environmental Product Compliance

| | |
|---|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

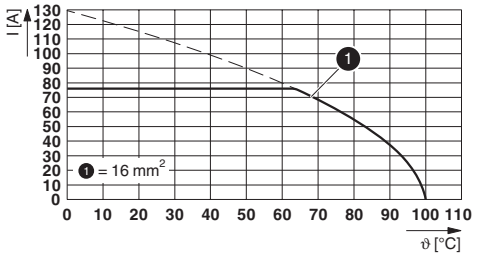
## Drawings

Dimensional drawing




*Only when using the PWO 16-F flange plate

Diagram




Type: PWO 16-POT(/S)

## Classifications

### eCl@ss

| | |
|---|---|
| eCl@ss 10.0.1 | 27141134 |
| eCl@ss 11.0 | 27141134 |
| eCl@ss 4.0 | 27141100 |
| eCl@ss 4.1 | 27141100 |
| eCl@ss 5.0 | 27141100 |
| eCl@ss 5.1 | 27141100 |
| eCl@ss 6.0 | 27141100 |
| eCl@ss 7.0 | 27141134 |
| eCl@ss 9.0 | 27141134 |

# Panel feed-through terminal block - PWO 16-POT - 1705653

## Classifications

### ETIM

| | |
|---|---|
| ETIM 3.0 | EC001283 |
| ETIM 4.0 | EC001283 |
| ETIM 6.0 | EC001283 |
| ETIM 7.0 | EC001283 |

### UNSPSC

| | |
|---|---|
| UNSPSC 6.01 | 30211811 |
| UNSPSC 7.0901 | 39121410 |
| UNSPSC 11 | 39121410 |
| UNSPSC 12.01 | 39121410 |
| UNSPSC 13.2 | 39121410 |
| UNSPSC 18.0 | 39121410 |
| UNSPSC 19.0 | 39121410 |
| UNSPSC 20.0 | 39121410 |
| UNSPSC 21.0 | 39121410 |

## Approvals

### Approvals

Approvals

VDE Gutachten mit Fertigungsüberwachung / CSA / EAC / cULus Recognized

Ex Approvals

### Approval details

| | | | |
|---|---|---|---|
| VDE Gutachten mit Fertigungsüberwachung | VDE | http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx | 40039989 |

| | |
|---|---|
| Nominal voltage UN | 1000 V |
| Nominal current IN | 76 A |
| mm²/AWG/kcmil | 1.5-16 |

# Panel feed-through terminal block - PWO 16-POT - 1705653

## Approvals

| | | | |
|---|---|---|---|
| CSA | | http://www.csagroup.org/services-industries/product-listing/ | 2618381-2017-03-13 |

| | C |
|---|---|
| Nominal voltage UN | 600 V |
| Nominal current IN | 66 A |
| mm²/AWG/kcmil | 14-4 |

| | | |
|---|---|---|
| EAC | | B.01687 |

| | | | |
|---|---|---|---|
| cULus Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | E60425-20100423 |

| | B | C |
|---|---|---|
| Nominal voltage UN | 600 V | 600 V |
| Nominal current IN | 66 A | 66 A |
| mm²/AWG/kcmil | 14-4 | 14-4 |

## Accessories

### Accessories

### Crimping tool

Crimping pliers - CRIMPFOX 6 - 1212034

Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

Crimping pliers - CRIMPFOX 25R - 1212039

Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 10 mm² ... 25 mm², lateral entry, WM crimp

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## Accessories

### Filler plug

Blind rivet - RVT-AL/ST 3/12 - 3240507

Blind rivets, Ø 3.0 mm, 12 mm sleeve length, aluminum sleeve, zinc-plated steel pin, flat head, standard version similar to DIN 7337 A, also for UW/RW/PW 10 and 16

### Labeled terminal marker

Zack marker strip - ZB 12,LGS:L1-N,PE - 0812146

Zack marker strip, Strip, white, labeled, printed horizontally: L1, L2, L3, N, PE, mounting type: snap into tall marker groove, for terminal block width: 12.2 mm, lettering field size: 10.5 x 12.15 mm, Number of individual labels: 5

Marker for terminal blocks - TMT 10 R CUS - 0824500

Marker for terminal blocks, can be ordered: by line, white, labeled according to customer specifications, mounting type: snap into universal marker groove, snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 6.35 x 10.15 mm

### Screwdriver tools

Screwdriver - SZF 2-0,8X4,0 - 1204520

Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.8 x 4.0 x 100 mm, 2-component grip, with non-slip grip

# Panel feed-through terminal block - PWO 16-POT - 1705653

## Accessories

Philips screwdriver - SZK PZ2 VDE - 1206463

Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 mm, 2-component grip, with non-slip grip

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### Terminal marking

Zack Marker strip, flat - ZBF 12:UNBEDRUCKT - 0809735

Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 12 mm, lettering field size: 5.15 x 12.15 mm, Number of individual labels: 5

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Zack marker strip - ZB 12:UNPRINTED - 0812120

Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 12.2 mm, lettering field size: 12 x 10.5 mm, Number of individual labels: 5

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Marker for terminal blocks - TMT 10 R - 0816210

Marker for terminal blocks, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, THERMOMARK S1.1, perforated, mounting type: snap into universal marker groove, snap into flat marker groove, for terminal block width: 10.2 mm, lettering field size: 6.35 x 10.15 mm, Number of individual labels: 10000

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