

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

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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

The figure shows a 5-position version

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	50 pc
Minimum order quantity	50 pc
GTIN	
GTIN	4046356790840

Technical data

Item properties

Brief article description	Panel feed-through terminal block
Range of articles	PWO 16-POT
Pitch	12.1 mm
Number of positions	1
Connection method	Push-in spring connection
Number of connections	2
Number of potentials	1

Electrical parameters

Nominal current	76 A
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Technical data

Electrical parameters

Nom. voltage	1000 V
Rated voltage	400 V
Rated voltage (III/2)	500 V
Rated voltage (II/2)	800 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 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 mm ² ... 16 mm ²
Conductor cross section flexible	1.5 mm ² ... 16 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve	1.5 mm ² ... 16 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	1.5 mm ² ... 16 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	1.5 mm ² ... 4 mm ²
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 mm ² 16 mm ² 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
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

Width [w]	12 mm
Pitch	12.1 mm

Dimensions for mounting cutout

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Dimensions for mounting cutout

Plate thickness	1 mm ... 6 mm
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Packaging information

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

General product information

Type of note	Note on application
Note	To maintain the nominal voltage, align the cable lugs straight and centered, and cast the terminals on the inside.

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
	Test passed
Conductor cross section / conductor type / tensile force	1.5 mm ² / solid / > 40 N
	1.5 mm ² / flexible / > 40 N
	16 mm ² / solid / > 100 N
	16 mm ² / flexible / > 100 N

Mechanical tests according to standard

Test specification	IEC 60947-7-1 (following)
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Electrical tests

Rated current	76 A
Conductor cross section	16 mm ²
Rated voltage (III/2)	500 V
Rated surge voltage (III/2)	4 kV

Air clearances and creepage distances

Clearances and creepage distances	Internal part not molded DP-PWO 16-3 (width: 3 mm) IEC 60947-1:2007-06 + A1:2010-12
Application	Internal part not molded
	DP-PWO 16-3 (width: 3 mm)
Specification	IEC 60947-1:2007-06 + A1:2010-12
Minimum clearance - inhomogeneous field (III/3)	3 mm

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Technical data

Air clearances and creepage distances

Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	5 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	4 mm

Temperature-rise test

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

Current carrying capacity / derating curves

Caption	Type: PWO 16-POT(/S)
Specification	IEC 60947-7-1:2009-04
Number of positions	5
Reduction factor	1
Note	Representation based on IEC 60512-5-2:2002-02

Standards and Regulations

Connection in acc. with standard	UL
	IEC 60947-7-1
Flammability rating according to UL 94	V0
Safety note	<ul style="list-style-type: none"> • WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product. • The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product. • To maintain the nominal voltage, align the cable lugs straight and centered, and cast the terminals on the inside.

Vibration test

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
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
Result	Test passed
Temperature	960 °C

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Technical data

Glow-wire test

Time of exposure	30 s
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Needle flame test

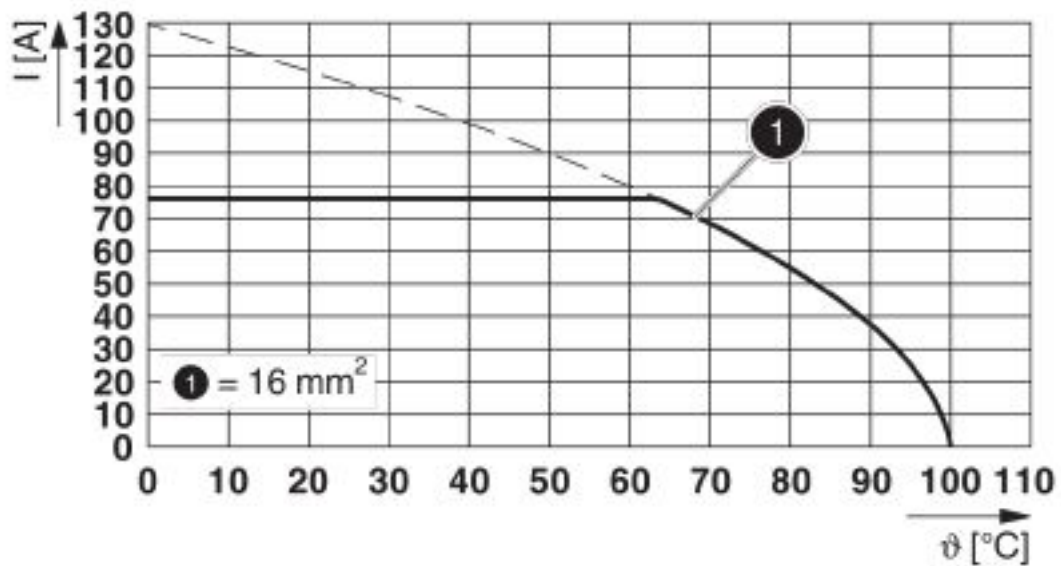
Specification	DIN EN 60695-11-5 (VDE 0471-11-5):2005-11
Result	Test passed
Time of exposure	30 s

Environmental Product Compliance

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

Drawings

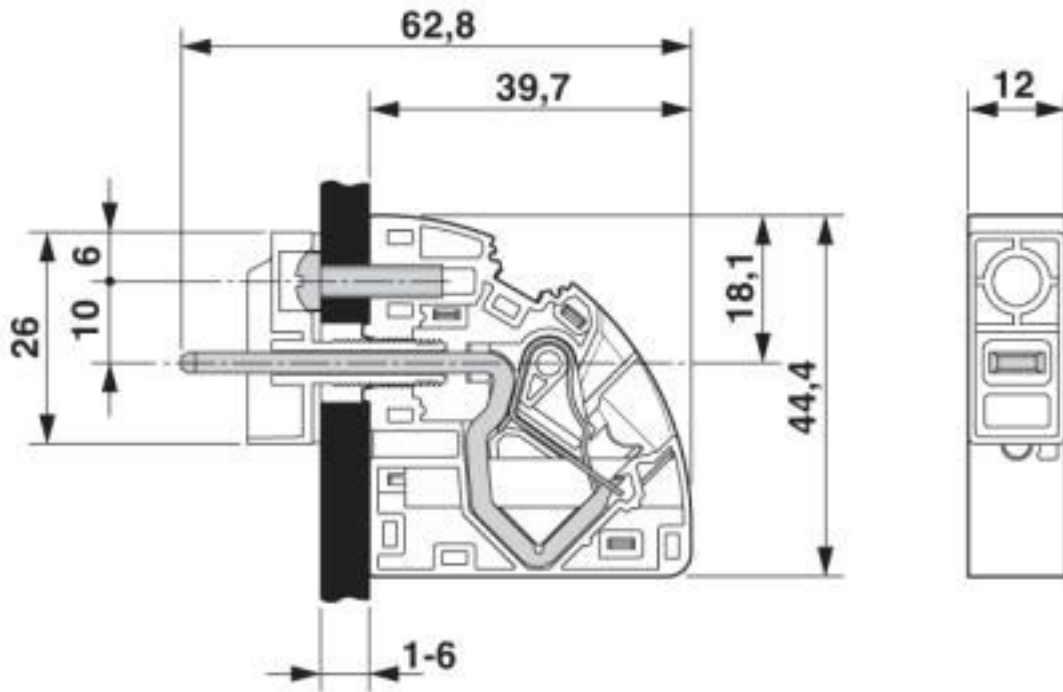
Diagram



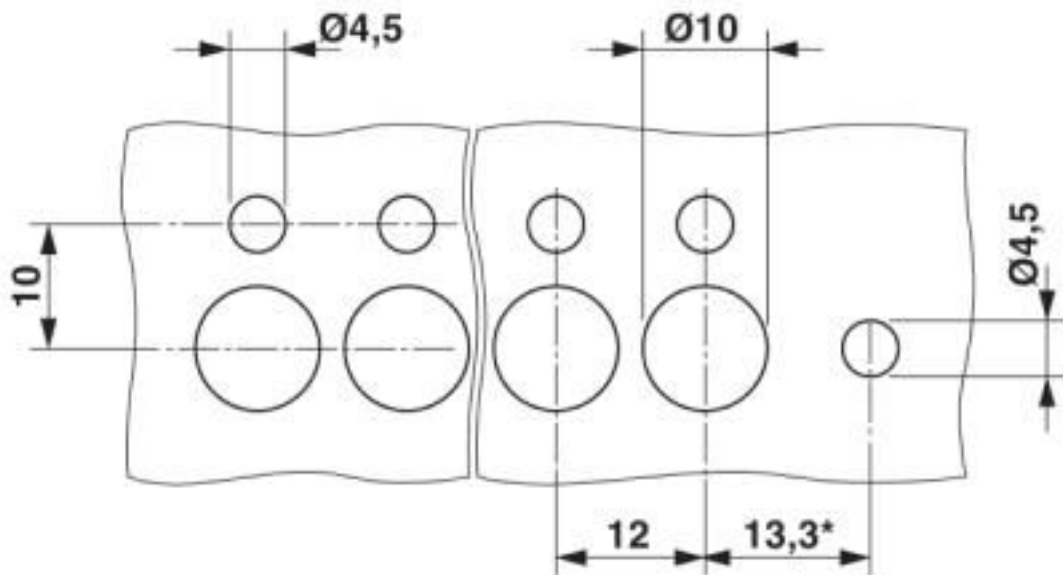
Type: PWO 16-POT(S)

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Dimensional drawing



Dimensional drawing



*Only when using the PWO 16-F flange plate

Classifications

eCl@ss

eCl@ss 10.0.1

27141134

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Classifications

eCl@ss

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 8.0	27141134
eCl@ss 9.0	27141134

ETIM

ETIM 3.0	EC001283
ETIM 4.0	EC001283
ETIM 5.0	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

CSA / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

Ex Approvals

Approval details

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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		
mm ² /AWG/kcmil	14-4		

VDE Gutachten mit Fertigungsüberwachung		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		
mm ² /AWG/kcmil	1.5-16		

EAC			B.01687
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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	
mm ² /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

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Accessories

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

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

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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

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

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

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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