

# UW 50-POT/S - Panel feed-through terminal block



1713843

<https://www.phoenixcontact.com/us/products/1713843>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Panel feed-through terminal block, connection method: Screw connection with tension sleeve, Cable lug connection, number of positions: 1, load current: 150 A, connection direction of the conductor to plug-in direction: 0 °, width: 18.8 mm

## Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- 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

## Commercial data

Item number	1713843
Packing unit	25 pc
Minimum order quantity	25 pc
Sales key	AA28
Product key	AA1FDB
GTIN	4055626326016
Weight per piece (including packing)	68.384 g
Weight per piece (excluding packing)	68.384 g
Customs tariff number	85369010
Country of origin	CN

# UW 50-POT/S - Panel feed-through terminal block



1713843

<https://www.phoenixcontact.com/us/products/1713843>

## Technical data

### Product properties

Product type	Panel feed-through terminal block
Product family	UW 50-POT
Number of positions	1
Pitch	18.8 mm
Number of connections	2
Number of potentials	1

### Electrical properties

Nominal current $I_N$	150 A
Nominal voltage $U_N$	800 V
Degree of pollution	3
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 50
Nominal cross section	50 mm <sup>2</sup>

#### Conductor connection exterior

Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	0 °
Single-conductor/terminal point multi-stranded	16 mm <sup>2</sup> ... 50 mm <sup>2</sup>
Conductor cross section flexible	16 mm <sup>2</sup> ... 50 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve	10 mm <sup>2</sup> ... 50 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	10 mm <sup>2</sup> ... 50 mm <sup>2</sup>
2 conductors with same cross section, solid	6 mm <sup>2</sup> ... 16 mm <sup>2</sup>
2 conductors with same cross section, flexible	10 mm <sup>2</sup> ... 16 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	6 mm <sup>2</sup> ... 16 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	6 mm <sup>2</sup> ... 10 mm <sup>2</sup>
Internal cylindrical gage	A10 / B10
Stripping length	24 mm
Tightening torque	6 Nm ... 8 Nm

#### Conductor connection interior

# UW 50-POT/S - Panel feed-through terminal block



1713843

<https://www.phoenixcontact.com/us/products/1713843>

Connection method	Cable lug connection
Connection direction of the conductor to plug-in direction	0 °

## Mounting

Plate thickness	1 mm ... 4 mm
-----------------	---------------

## Material specifications

### Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Al 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

General	The cable entry funnel is not touch-proof. Never connect or disconnect the terminal when it is energized. Take appropriate steps to ensure touch proofness.
---------	---

### Safety note

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.
	• 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.
	• To maintain the nominal voltage, align the cable lugs straight and centered, and cast the terminals on the inside.

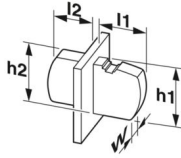
## Dimensions

# UW 50-POT/S - Panel feed-through terminal block



1713843

<https://www.phoenixcontact.com/us/products/1713843>

Dimensional drawing	
Pitch	18.8 mm
Width [w]	18.8 mm

## External dimensions

Width [w]	11.5 mm
Height [h1]	32 mm
Length [l1]	30 mm

## Internal dimensions

Width [w]	18.8 mm
Height [h2]	54 mm
Length [l2]	45.3 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	16 mm <sup>2</sup> / stranded / > 100 N
	16 mm <sup>2</sup> / flexible / > 100 N
	50 mm <sup>2</sup> / stranded / > 236 N
	50 mm <sup>2</sup> / flexible / > 236 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

# UW 50-POT/S - Panel feed-through terminal block



1713843

<https://www.phoenixcontact.com/us/products/1713843>

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)	8 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)	5.5 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)
Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

### Glow-wire test

Specification	IEC 60695-2-11:2014-02
Temperature	960 °C
Time of exposure	30 s

### Shocks

Specification	IEC 60068-2-27:2008-02
Pulse shape	Semi-sinusoidal
Acceleration	50g
Shock duration	11 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)

### Ambient conditions

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

## Packaging specifications

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

# UW 50-POT/S - Panel feed-through terminal block



1713843

<https://www.phoenixcontact.com/us/products/1713843>

## Classifications

### ECLASS

ECLASS-11.0	27141134
ECLASS-12.0	27141134
ECLASS-13.0	27141134

### ETIM

ETIM 9.0	EC001283
----------	----------

### UNSPSC

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

# UW 50-POT/S - Panel feed-through terminal block



1713843

<https://www.phoenixcontact.com/us/products/1713843>

## Environmental product compliance

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

Phoenix Contact 2024 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)