UW 50/S - Panel feed-through terminal block

1713709

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The figure shows the standard item

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

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

Commercial data

Item number	1713709
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	AA28
Product key	AA1FDA
GTIN	4055626325996
Weight per piece (including packing)	93.27 g
Weight per piece (excluding packing)	89.3 g
Customs tariff number	85369010
Country of origin	CN

Technical data

Product properties

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

Fitting of components

Partial assembly	No

Electrical properties

Properties

Nominal current I_N	150 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 50
Nominal cross section	50 mm²

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 mm² ... 50 mm²
Conductor cross-section flexible	16 mm² ... 50 mm²
Conductor cross-section, flexible, with ferrule, without plastic sleeve	10 mm² ... 50 mm²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	10 mm² ... 50 mm²
2 conductors with same cross section, rigid	6 mm² ... 16 mm²
2 conductors with same cross section, flexible	10 mm² ... 16 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	6 mm² ... 16 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	6 mm² ... 10 mm²
Internal cylindrical gage	A10 / B10

Stripping length	24 mm
Tightening torque	6 Nm ... 8 Nm

Conductor connection interior

Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	0 °
Single-conductor/terminal point multi-stranded	16 mm² ... 50 mm²
Conductor cross-section flexible	16 mm² ... 50 mm²
Conductor cross-section, flexible, with ferrule, without plastic sleeve	10 mm² ... 50 mm²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	10 mm² ... 50 mm²
2 conductors with same cross section, rigid	6 mm² ... 16 mm²
2 conductors with same cross section, flexible	10 mm² ... 16 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	6 mm² ... 16 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	6 mm² ... 10 mm²
Internal cylindrical gage	A10 / B10
Stripping length	24 mm
Tightening torque	6 Nm ... 8 Nm

Mounting

Panel 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

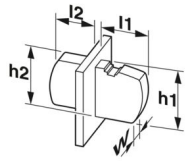
Notes

Notes on safety	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.

Dimensions

Dimensional drawing	
Pitch	18.8 mm
	18.8 mm
Width [w]	18.8 mm

External dimensions

Height [h1]	54 mm
Length [l1]	35 mm

Internal dimensions

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 mm² / stranded / > 100 N
	16 mm² / flexible / > 100 N
	50 mm² / stranded / > 236 N
	50 mm² / 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
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)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

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.)

Glow-wire test

Specification	IEC 60695-2-11:2014-02
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)

Ambient conditions

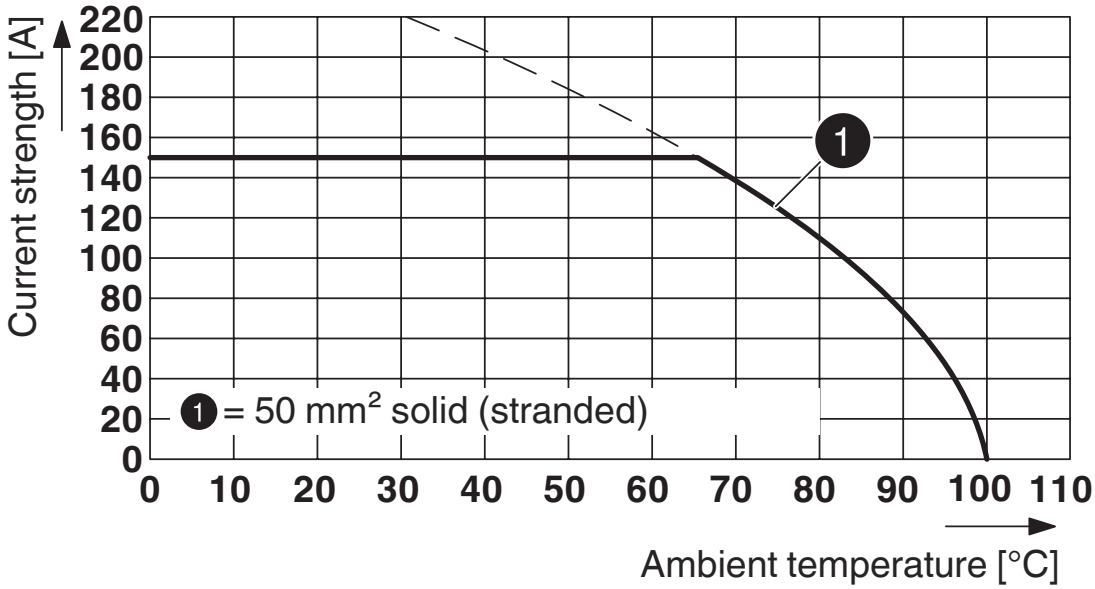
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard

Drawings

Diagram



Type: UW 50/S

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1713709

cULus Recognized
Approval ID: E60425-20171106

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	600 V	151 A	6 - 2/0	-
C				
	600 V	151 A	6 - 2/0	-

VDE approval of drawings
Approval ID: 40047737

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	1000 V	150 A	-	16 - 50

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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