

1713709

https://www.phoenixcontact.com/us/products/1713709

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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 $^{\circ}$, 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

Commercial data

Item number	1713709
Packing unit	1 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



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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

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 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, solid	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



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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, solid	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

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

Material data Troubing	
Color (Housing)	gray (7042)
Insulating material	PA
Insulating material group	1
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	



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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	h2 h1
Pitch	18.8 mm
Width [w]	18.8 mm
External dimensions	
Width [w]	18.8 mm
Height [h1]	54 mm
Length [I1]	35 mm
Internal dimensions	
Width [w]	18.8 mm
Height [h2]	54 mm
Length [I2]	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



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Requirement temperature-rise test	Increase in temperature ≤ 45 K
ort-time withstand current	
Specification	IEC 60947-7-1:2009-04
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

Vih	ration	test
VID	ιαιιστι	ισοι

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)



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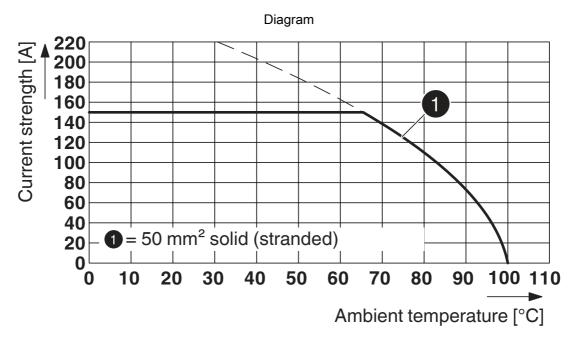
	Ambient temperature (storage/transport)	-40 °C 70 °C
	Relative humidity (storage/transport)	30 % 70 %
	Ambient temperature (assembly)	-5 °C 100 °C
Pa	ckaging specifications	
	Type of packaging	packed in cardboard



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Drawings



Type: UW 50/S



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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	
Use group B					
	600 V	151 A	6 - 2/0	-	
Use group C					
	600 V	151 A	6 - 2/0	-	

EHC	EAC
LIIL	Approval ID: B.01687

VDE Zeichengenehmigung Approval ID: 40047737					
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		1000 V	150 A	-	16 - 50



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Classifications

UNSPSC 21.0

ECLASS

27141134
27141134
27141134
EC001283

39121400



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Environmental product compliance

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



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Accessories

SZS 1,2X8,0 VDE - Screwdriver

1205082

https://www.phoenixcontact.com/us/products/1205082



Screwdriver, slot-headed, VDE insulated, size: $1.2 \times 8.0 \times 175$ mm, 2-component grip, with non-slip grip

SZK PZ2 VDE - Screwdriver

1206463

https://www.phoenixcontact.com/us/products/1206463



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



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CRIMPFOX 50R - Crimping pliers

1212041

https://www.phoenixcontact.com/us/products/1212041



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, $35~\text{mm}^2$... $50~\text{mm}^2$, lateral entry, WM crimp

CRIMPFOX 25R - Crimping pliers

1212039

https://www.phoenixcontact.com/us/products/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, $10~\text{mm}^2$... $25~\text{mm}^2$, lateral entry, WM crimp



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ZB 15:UNBEDRUCKT - Zack marker strip

0811972

https://www.phoenixcontact.com/us/products/0811972



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 15.2 mm, lettering field size: 10.5 x 15.1 mm, Number of individual labels: 5

ZB 15 CUS - Zack marker strip

0824945

https://www.phoenixcontact.com/us/products/0824945



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 15.2 mm, lettering field size: 10.5 x 15.1 mm, Number of individual labels: 5



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ZBF 15 CUS - Zack Marker strip, flat

0825019

https://www.phoenixcontact.com/us/products/0825019



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 15 mm, lettering field size: 5.15 x 15.1 mm, Number of individual labels: 5

ZBF 15:UNBEDRUCKT - Zack Marker strip, flat

0811202

https://www.phoenixcontact.com/us/products/0811202



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 15 mm, lettering field size: 15 x 5.2 mm, Number of individual labels: 5

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