

1713845

https://www.phoenixcontact.com/gb/products/1713845

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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: -90 °, 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
- · Reliable seal even with low-viscosity molding compounds

Commercial data

Item number	1713845
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	AA1FDD
Product key	AA1FDD
GTIN	4055626326023
Weight per piece (including packing)	72.59 g
Weight per piece (excluding packing)	68.3 g
Customs tariff number	85369010
Country of origin	CN



1713845

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Technical data

Product properties

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

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	The state	
Rated voltage (III/3) 800 V Rated surge voltage (III/3) 8 kV Rated voltage (III/2) 1000 V	Nominal current I _N	150 A
Rated surge voltage (III/3) 8 kV Rated voltage (III/2) 1000 V	Nominal voltage U_N	800 V
Rated voltage (III/2) 1000 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 surge voltage (III/2)	8 kV
Rated voltage (II/2) 1000 V	Rated voltage (II/2)	1000 V
Rated surge voltage (II/2) 6 kV	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	-90 °
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



1713845

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Conductor connection interior

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

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

Dimensions



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Dimensional drawing	
Pitch	18.8 mm
Width [w]	18.8 mm
External dimensions	
Width [w]	11.5 mm
Height [h1]	32 mm
Length [I1]	30 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

Rated insulation voltage (III/3)

minimum clearance value - non-homogenous field (III/3)

Rated surge voltage (III/3)

Specification IEC 60947-7-1:2009-04 Requirement temperature-rise test Increase in temperature ≤ 45 K Short-time withstand current 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	remperature-rise test	
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	Specification	IEC 60947-7-1:2009-04
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	Requirement temperature-rise test	Increase in temperature ≤ 45 K
Air clearances and creepage distances 1. Insulation coordination Specification IEC 60947-1:2007-06 + A1:2010-12 Insulating material group I	Short-time withstand current	
Specification IEC 60947-1:2007-06 + A1:2010-12 Insulating material group I	Specification	IEC 60947-7-1:2009-04
Insulating material group	Air clearances and creepage distances 1. Insulation coordination	
	Specification	IEC 60947-1:2007-06 + A1:2010-12
Comparative tracking index (IEC 60112) CTI 600	Insulating material group	I
	Comparative tracking index (IEC 60112)	CTI 600

800 V

8 kV

8 mm



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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

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

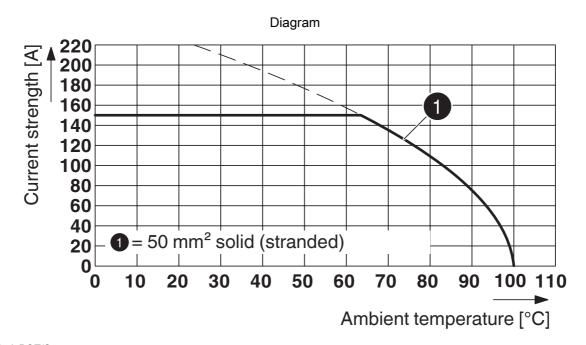
Type of packaging	packed in cardboard



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Drawings



Type: UWV 50-POT/S



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/gb/products/1713845

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	-

VDE approval of drawings 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

ECLASS				
	ECLASS-13.0	27141134		
ETIM				
	ETIM 9.0	EC001283		
UNSPSC				
	UNSPSC 21.0	39121400		



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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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PHOENIX CONTACT Ltd Halesfield 13, Telford Shropshire, TF7 4PG 01952 681700 info@phoenixcontact.co.uk