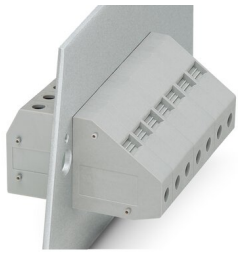
Panel feed-through terminal block - HDFKV 16 BU

0717704

https://www.phoenixcontact.com/us/products/0717704

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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: 76 A, cross section: 0.5 mm^2 - 25 mm^2, connection direction of the conductor to plug-in direction: -90 °, width: 12.1 mm, color: blue

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	0717704
Packing unit	50 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Product Key	AA1DAD
GTIN	4017918983512
Weight per Piece (including packing)	41.4 g
Weight per Piece (excluding packing)	41.4 g
Customs tariff number	85369010
Country of origin	GR

Technical Data

Product properties

Product type	Panel feed-through terminal block
Number of positions	1
Pitch	12.1 mm
Number of connections	2
Number of rows	1
Number of potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Nominal current I_N	76 A
Nominal voltage U_N	500 V
Pollution degree	3
Rated voltage (III/3)	500 V
Rated surge voltage (III/3)	6 kV

Connection data

Connection technology

Connector system	HDFK 16
Nominal cross section	16 mm²

Conductor connection exterior

Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	-90 °
Conductor cross section solid	0.5 mm² ... 25 mm²
Conductor cross section flexible	0.5 mm² ... 16 mm²
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm² ... 16 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm² ... 16 mm²
2 conductors with same cross section, solid	0.5 mm² ... 6 mm²
2 conductors with same cross section, flexible	0.5 mm² ... 6 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm² ... 6 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 6 mm²
Internal cylindrical gage	B7
Stripping length	16 mm
Torque	2 Nm ... 2.3 Nm

Conductor connection interior

Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	-90 °
Conductor cross section solid	0.5 mm² ... 25 mm²
Conductor cross section flexible	0.5 mm² ... 16 mm²
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm² ... 16 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm² ... 16 mm²
2 conductors with same cross section, solid	0.5 mm² ... 6 mm²
2 conductors with same cross section, flexible	0.5 mm² ... 6 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm² ... 6 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 6 mm²
Internal cylindrical gage	B7
Stripping length	16 mm
Torque	2 Nm ... 2.3 Nm

Material specifications

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	blue (5015)
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

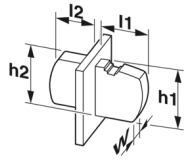
Notes

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.
	☐ There is no electrical contact to the housing. Make sure that protective grounding is provided for green/yellow color variants and articles marked with PE.

Dimensions

Dimensional drawing	
Pitch	12.1 mm
Width [w]	12.1 mm
Height [h]	39.7 mm

External dimensions

Width [w]	12.1 mm
Height [h1]	39.7 mm
Length [l1]	38.1 mm

Internal dimensions

Width [w]	12.1 mm
Height [h2]	38.1 mm
Length [l2]	26.5 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	0.5 mm² / solid / > 20 N
	0.5 mm² / flexible / > 20 N
	25 mm² / solid / > 135 N
	16 mm² / flexible / > 100 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

Application	Metal wall 1□mm
Specification	IEC 60947-7-1:2002-07
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	500 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	6.3 mm

Air clearances and creepage distances | 2. Insulation coordination

Application	Metal panel 4□mm
Specification	IEC 60947-7-1:2002-07
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	500 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	6.3 mm

Air clearances and creepage distances | 3. Insulation coordination

Application	Metal panel 6□mm
Specification	IEC 60947-7-1:2002-07
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	400 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	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 - 60.1 Hz)
Sweep speed	5g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Glow-wire test

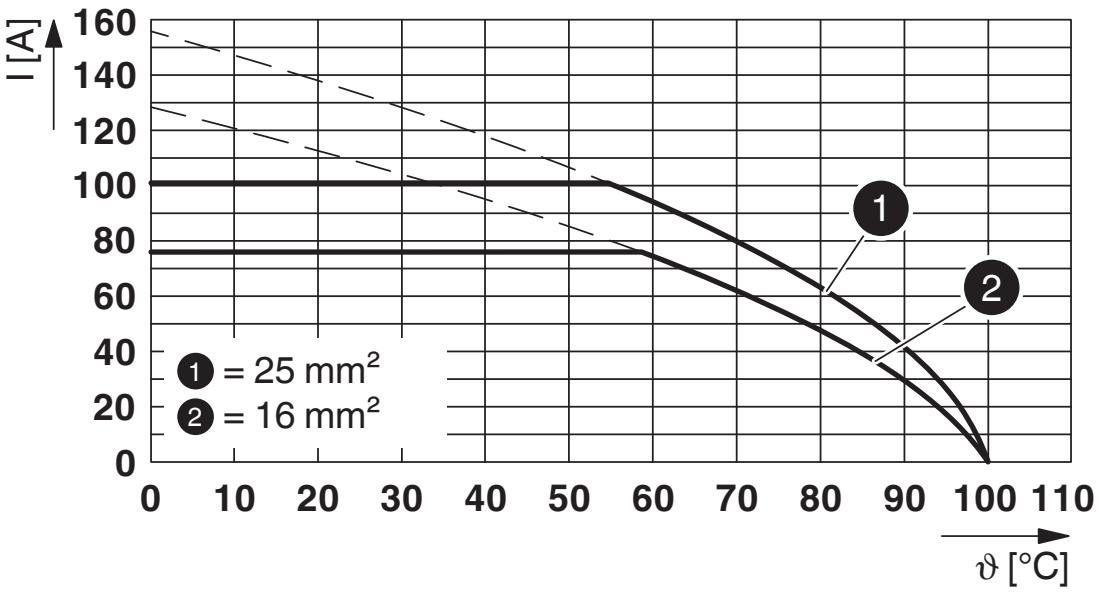
Specification	IEC 60695-2-11:2014-02
Temperature	960 °C
Time of exposure	30 s

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

Drawings

Diagram



Type: HDFKV 16

Approvals

IECEE CB Scheme
Approval ID: NL-29947

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	500 V	76 A	-	- 16

EAC
Approval ID: B.01687

cULus Recognized
Approval ID: E60425-19870911

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	300 V	85 A	20 - 4	-
Use group C				
	150 V	85 A	20 - 4	-
Use group D				
	300 V	10 A	20 - 4	-

KEMA-KEUR
Approval ID: 2169260.01

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	500 V	76 A	-	- 16

Classifications

ECLASS

ECLASS-9.0	27141134
ECLASS-10.0.1	27141134
ECLASS-11.0	27141134

ETIM

ETIM 8.0	EC001283

UNSPSC

UNSPSC 21.0	39121400

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1

China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer’s declaration available under “Downloads”

Accessories

Screwdriver

Screwdriver - SZS 1,0X4,0 VDE - 1205066

https://www.phoenixcontact.com/us/products/1205066



Screwdriver, slot-headed, VDE insulated, size: 1.0 x 4.0 x 100 mm, 2-component grip, with non-slip grip

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