

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's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Panel feed-through terminal block, connection method: Screw connection with tension sleeve, Screw connection with tension sleeve, number of positions: 1, load current: 57 A, cross section: 0.5 mm² - 16 mm², connection direction of the conductor to plug-in direction: 0 °, width: 10.1 mm, color: gray

The figure shows a 1-pos. version of the product

Product Description

External part, with current bar

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



Key Commercial Data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	4 0 4 6 3 5 6 1 4 8 6 1 0
GTIN	4046356148610

Technical data

Item properties

Brief article description	Panel feed-through terminal block
Range of articles	HDFK 10
Pitch	10.1 mm
Number of positions	1
Connection method	Screw connection with tension sleeve

Electrical parameters



Technical data

Electrical parameters

Nominal current	57 A
Nom. voltage	400 V (With metal panels of 1 mm 2.5 mm)
Rated voltage	400 V
Rated voltage (III/2)	500 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	6 kV
Rated surge voltage (III/2)	6 kV
Rated surge voltage (II/2)	6 kV

Connection capacity, external

Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	0 °
Conductor cross section solid	0.5 mm ² 16 mm ²
Conductor cross section flexible	0.5 mm ² 10 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm ² 10 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm ² 10 mm ²
2 conductors with same cross section, solid	0.5 mm ² 4 mm ²
2 conductors with same cross section, flexible	0.5 mm² 4 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm² 2.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 6 mm²
Internal cylindrical gage	B6
Stripping length	10 mm
Torque	1.5 Nm 1.8 Nm

Connection capacity, internal

Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	0 °
Conductor cross section solid	0.5 mm² 16 mm²
Conductor cross section flexible	0.5 mm ² 10 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm ² 10 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm ² 10 mm ²
2 conductors with same cross section, solid	0.5 mm ² 4 mm ²
2 conductors with same cross section, flexible	0.5 mm ² 4 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm² 2.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 6 mm²
Internal cylindrical gage	B6
Stripping length	10 mm
Torque	1.5 Nm 1.8 Nm



Technical data

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	gray (7042)
Insulating material	РА
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

Dimensions for the product

Width [w]	10.1 mm
Pitch	10.1 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

General product information

Type of note	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.

Termination and connection method

Test for conductor damage and slackening	IEC 60947-7-1:2009-04
	Test passed

Pull-out test

Pull-out test	IEC 60947-7-1:2009-04
	Test passed
Conductor cross section / conductor type / tensile force	0.5 mm² / solid / > 20 N
	0.5 mm² / flexible / > 20 N
	16 mm² / solid / > 100 N
	10 mm² / flexible / > 90 N

Mechanical tests according to standard

Test specification	IEC 60947-7-1
--------------------	---------------



Technical data

Electrical tests

Rated current	57 A
Conductor cross section	10 mm ²
Rated voltage (III/2)	500 V
Rated surge voltage (III/2)	6 kV

Air clearances and creepage distances

Clearances and creepage distances	Metal wall 1.0 mm 2.5 mm IEC 60947-1:2007-06 + A1:2010-12
Application	Metal wall 1.0 mm 2.5 mm
Specification	IEC 60947-1:2007-06 + A1:2010-12
Minimum clearance - inhomogeneous field (III/3)	5.5 mm
Minimum clearance - inhomogeneous field (III/2)	5.5 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	5.5 mm
Minimum creepage distance value (III/2)	5.5 mm
Minimum creepage distance value (II/2)	5.5 mm

Temperature-rise test

Specification	IEC 60947-7-1:2009-04
Result	Test passed
Requirement temperature-rise test	Increase in temperature \leq 45 K

Current carrying capacity / derating curves

Caption	Type: HDFK 10
Specification	IEC 60947-7-1:2009-04
Number of positions	5
Reduction factor	1
Note	Representation based on IEC 60512-5-2:2002-02

Standards and Regulations

Connection in acc. with standard	CSA
Safety note	• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	• The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.
	• 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. Ensure protective grounding is established for green-yellow color versions.

Vibration test



Technical data

Vibration test

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Glow-wire test

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

Needle flame test

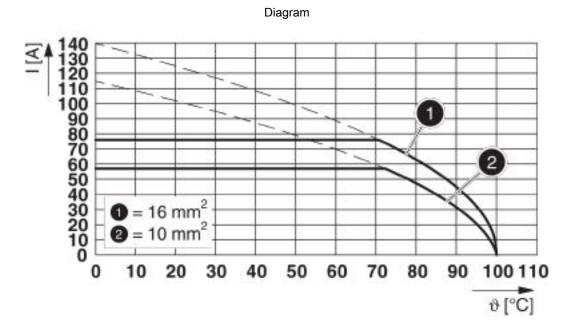
Specification	IEC 60947-7-1:2009-04
Result	Test passed
Time of exposure	30 s

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings





Type: HDFK 10

Classifications

eCl@ss

eCl@ss 10.0.1	27141134
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141134
eCl@ss 8.0	27141134
eCl@ss 9.0	27141134

ETIM

ETIM 3.0	EC001283
ETIM 4.0	EC001283
ETIM 5.0	EC001283
ETIM 6.0	EC001283
ETIM 7.0	EC001283

UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410



Classifications

UNSPSC

UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

Approvals

Approvals

Approvals

CSA / EAC / cULus Recognized

Ex Approvals

Approval details

CSA	()	http://www.csagroup.org/services-industries/product-listing/		13631
Nominal voltage UN			300 V	
Nominal current IN			65 A	
mm²/AWG/kcmil			22-6	

EAC	EAC	B.01687

cULus Recognized http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-19870911					
	В	С	D		
Nominal voltage UN	300 V	150 V	300 V		
Nominal current IN	65 A	65 A	10 A		
mm²/AWG/kcmil	24-6	24-6	24-6		



Accessories

Accessories

Screwdriver tools

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



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

Phoenix Contact 2020 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany Tel. +49 5235 300 Fax +49 5235 3 41200 http://www.phoenixcontact.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Phoenix Contact: 0717814