

# HDFK 50/Z - Panel feed-through terminal block



0705017

<https://www.phoenixcontact.com/us/products/0705017>

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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, cross section: 16 mm<sup>2</sup> - 50 mm<sup>2</sup>, connection direction of the conductor to plug-in direction: 0 °, 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	0705017
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	AA28
Product key	AA1FAA
Catalog page	Page 617 (C-1-2013)
GTIN	4017918372743
Weight per piece (including packing)	125.09 g
Weight per piece (excluding packing)	124.65 g
Customs tariff number	85369010
Country of origin	GR

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## Technical data

### Product properties

Product type	Panel feed-through terminal block
Product family	HDFK 50
Number of positions	1
Pitch	18.8 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 $I_N$	150 A
Nominal voltage $U_N$	690 V
Degree of pollution	3
Rated voltage (III/3)	690 V
Rated surge voltage (III/3)	8 kV

### Connection data

#### Connection technology

Connector system	HDFK 50
Nominal cross section	50 mm <sup>2</sup>

#### Conductor connection exterior

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

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## Conductor connection interior

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

## Mounting

Plate thickness	1 mm ... 6 mm
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## 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

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

### Safety note

Safety note	<ul style="list-style-type: none"><li>• Only electrically qualified personnel may install and operate the product.</li></ul> To recognize and prevent danger, the qualified personnel must be familiar with the basics of electrical engineering.
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	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
	<ul style="list-style-type: none"> <li>• 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.</li> </ul>

## Dimensions

Dimensional drawing	
Pitch	18.8 mm
Width [w]	18.8 mm

### External dimensions

Width [w]	18.8 mm
Height [h1]	54 mm
Length [l1]	43 mm

### Internal dimensions

Width [w]	18.8 mm
Height [h2]	55 mm
Length [l2]	35 mm

## Electrical tests

### Air clearances and creepage distances | 1. Insulation coordination

Application	Metal wall 1.0 mm ... 6.0 mm
Specification	IEC 60947-7-1:2002-07
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	690 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	8 mm

### Air clearances and creepage distances | 2. Insulation coordination

Application	Plastic panel 1.0 ... 6.0 mm
Specification	IEC 60947-7-1:2002-07
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600

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Rated insulation voltage (III/3)	630 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	8 mm

## Air clearances and creepage distances | 3. Insulation coordination

Application	Plastic panel 1.0 ... 6.0 mm with DP-HDFK spacer plate
Specification	IEC 60947-7-1:2002-07
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	1000 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	12.5 mm

## Packaging specifications

Type of packaging	packed in cardboard
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## Classifications

### ECLASS

ECLASS-11.0	27141134
ECLASS-13.0	27141134
ECLASS-12.0	27141134

### ETIM

ETIM 9.0	EC001283
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### UNSPSC

UNSPSC 21.0	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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