

HDFKV 50-VP - Panel feed-through terminal block



0708580

<https://www.phoenixcontact.com/us/products/0708580>

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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, cross section: 16 mm² - 50 mm², 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	0708580
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	AA28
Product key	AA1FAE
Catalog page	Page 619 (C-1-2013)
GTIN	4017918004699
Weight per piece (including packing)	98.4 g
Weight per piece (excluding packing)	98.4 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	HDFKV 50-VP
Number of positions	1
Pitch	18.8 mm
Number of connections	2
Number of rows	1
Number of potentials	1

Data management status

Article revision	05
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Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Nominal current I_N	150 A
Nominal voltage U_N	690 V
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 ²

Conductor connection exterior

Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	-90 °
Conductor cross section rigid	16 mm ² ... 50 mm ²
Conductor cross section flexible	16 mm ² ... 50 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve	10 mm ² ... 50 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	10 mm ² ... 50 mm ²
2 conductors with same cross section, solid	6 mm ² ... 16 mm ²
2 conductors with same cross section, flexible	10 mm ² ... 16 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	6 mm ² ... 16 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	6 mm ² ... 10 mm ²
Internal cylindrical gage	B10
Stripping length	24 mm

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Tightening torque	6 Nm ... 8 Nm
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	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">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.
	<ul style="list-style-type: none">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.
	<ul style="list-style-type: none">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.
	<ul style="list-style-type: none">To maintain the nominal voltage, align the cable lugs straight and centered, and cast the terminals on the inside.
	<ul style="list-style-type: none">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.

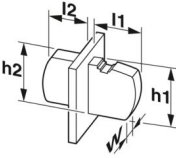
Dimensions

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Dimensional drawing	
Pitch	18.8 mm
Width [w]	18.8 mm

External dimensions	
Height [h1]	56 mm
Length [l1]	55 mm

Internal dimensions	
Height [h2]	37.02 mm
Length [l2]	35.1 mm

Electrical tests

Air clearances and creepage distances 1. Insulation coordination	
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

Environmental and real-life conditions

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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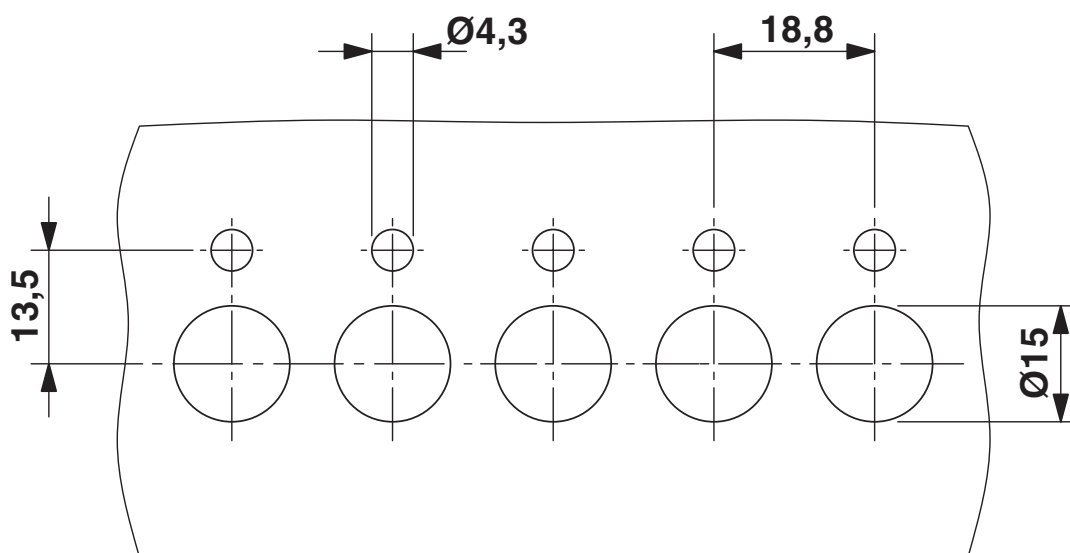
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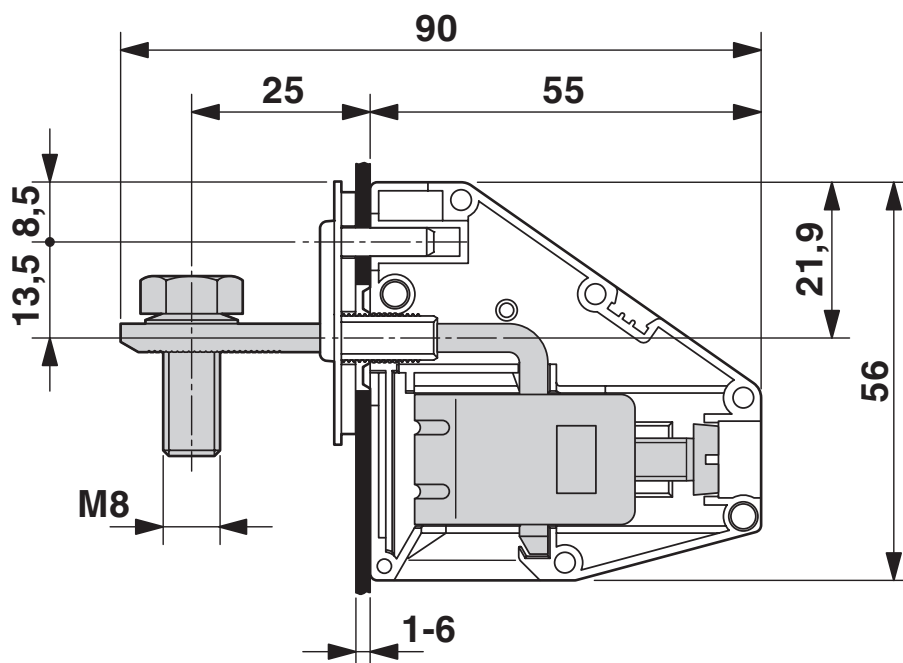
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Drawings

Dimensional drawing



Dimensional drawing



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/0708580>

 CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	125 A	6 - 1/0	-
Use group C				
	600 V	125 A	6 - 1/0	-

 UL Recognized Approval ID: E60425-19890329				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	170 A	6 - 2/0	-
Use group C				
	600 V	170 A	6 - 2/0	-

 KEMA-KEUR Approval ID: 2169260.01				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	690 V	150 A	-	- 50

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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

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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Accessories

SZS 1,2X8,0 VDE - Screwdriver

1205082

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



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

UKH 50 EP - Insertion profile

3009228

<https://www.phoenixcontact.com/us/products/3009228>



Insertion profile, color: silver

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UC-TM 16 - Marker for terminal blocks

0819217

<https://www.phoenixcontact.com/us/products/0819217>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 16 mm, lettering field size: 15.45 x 10.5 mm, Number of individual labels: 32

UC-TM 16 CUS - Marker for terminal blocks

0824621

<https://www.phoenixcontact.com/us/products/0824621>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 16 mm, lettering field size: 15.45 x 10.5 mm, Number of individual labels: 32

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ZB 16:UNPRINTED - Zack marker strip

0827461

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Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 16 mm, lettering field size: 16 x 10.5 mm, Number of individual labels: 50

ZBF 16 CUS - Zack Marker strip, flat

0827465

<https://www.phoenixcontact.com/us/products/0827465>



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: 16 mm, lettering field size: 5.15 x 16 mm, Number of individual labels: 5

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ZB 12:UNPRINTED - Zack marker strip

0812120

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Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 12.2 mm, lettering field size: 12 x 10.5 mm, Number of individual labels: 5

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