

0709039

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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: 101 A, cross section: 6 mm² - 35 mm², connection direction of the conductor to plug-in direction: -90 °, width: 15.1 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

Commercial data

Item number	0709039
Packing unit	25 pc
Minimum order quantity	1 pc
Sales key	AA28
Product key	AA1EAD
Catalog page	Page 632 (CC-2009)
GTIN	4017918004897
Weight per piece (including packing)	70.45 g
Weight per piece (excluding packing)	70.01 g
Customs tariff number	85369010
Country of origin	GR

HDFKV 25 - Panel feed-through terminal block



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Technical data

Product properties

Product type	Panel feed-through terminal block
Product family	HDFKV 25
Number of positions	1
Pitch	15.1 mm
Number of connections	2
Number of rows	1
Number of potentials	1

Data management status

Article revision	04
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Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Nominal current I_N	101 A
Nominal voltage U_N	500 V
Rated voltage (III/3)	500 V
Rated surge voltage (III/3)	6 kV

Connection data

Connection technology

Connector system	HDFK 25
Nominal cross section	25 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	6 mm ² ... 35 mm ²
Conductor cross section flexible	10 mm ² ... 25 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve	4 mm ² ... 25 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	4 mm ² ... 25 mm ²
2 conductors with same cross section, solid	2.5 mm ² ... 10 mm ²
2 conductors with same cross section, flexible	4 mm ² ... 10 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	2.5 mm ² ... 10 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	2.5 mm ² ... 10 mm ²
Internal cylindrical gage	B8
Stripping length	19 mm

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Tightening torque	4 Nm ... 4.5 Nm
Conductor connection interior	
Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	-90 °
Conductor cross section rigid	6 mm² ... 35 mm²
Conductor cross section flexible	10 mm² ... 25 mm²
Conductor cross section flexible, with ferrule without plastic sleeve	4 mm² ... 25 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	4 mm² ... 25 mm²
2 conductors with same cross section, solid	2.5 mm² ... 10 mm²
2 conductors with same cross section, flexible	4 mm² ... 10 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	2.5 mm² ... 10 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	2.5 mm² ... 10 mm²
Internal cylindrical gage	B8
Stripping length	19 mm
Tightening torque	4 Nm ... 4.5 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

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	• 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
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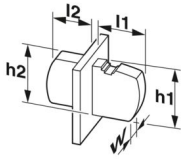


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	contains important information, such as installation notes, technical drawings, and 3D data.
	• The cable entry funnel is not safe to touch. Never connect or disconnect the terminal when it is energized. Take appropriate steps to ensure touch protection.
	• 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	15.1 mm
Width [w]	15.1 mm
Height [h]	53.6 mm

External dimensions

Width [w]	15.1 mm
Height [h1]	53.6 mm
Length [l1]	44.5 mm

Internal dimensions

Width [w]	15.1 mm
Height [h2]	45 mm
Length [l2]	30 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	6 mm² / solid / > 80 N
	10 mm² / flexible / > 90 N
	35 mm² / stranded / > 190 N
	25 mm² / flexible / > 135 N

Electrical tests

Temperature-rise test

Specification	IEC 60947-7-1:2009-04
Requirement temperature-rise test	Increase in temperature ≤ 45 K

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Short-time withstand current

Specification	IEC 60947-7-1:2009-04
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Air clearances and creepage distances | 1. Insulation coordination

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

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

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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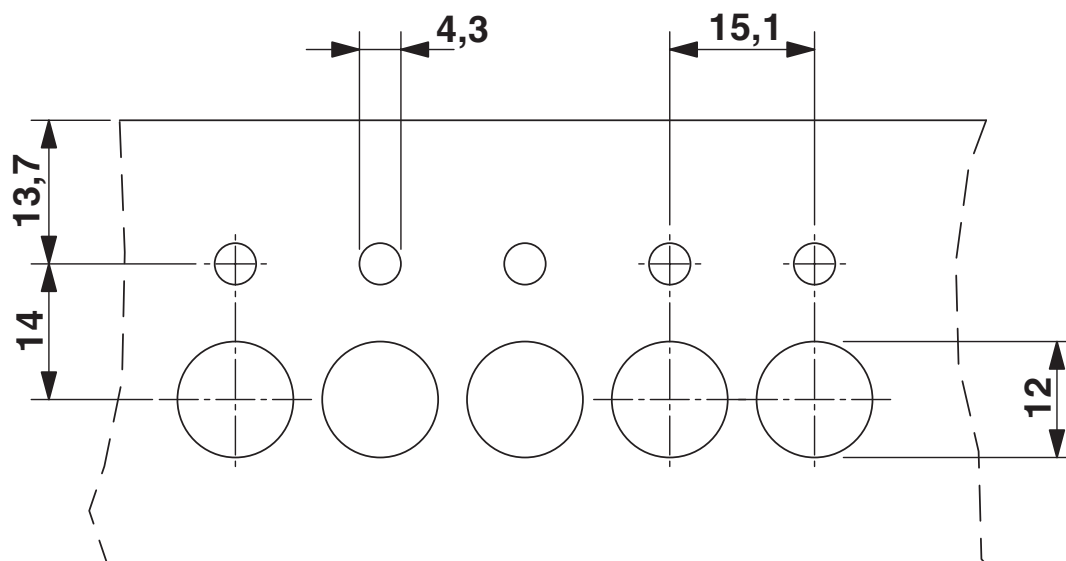


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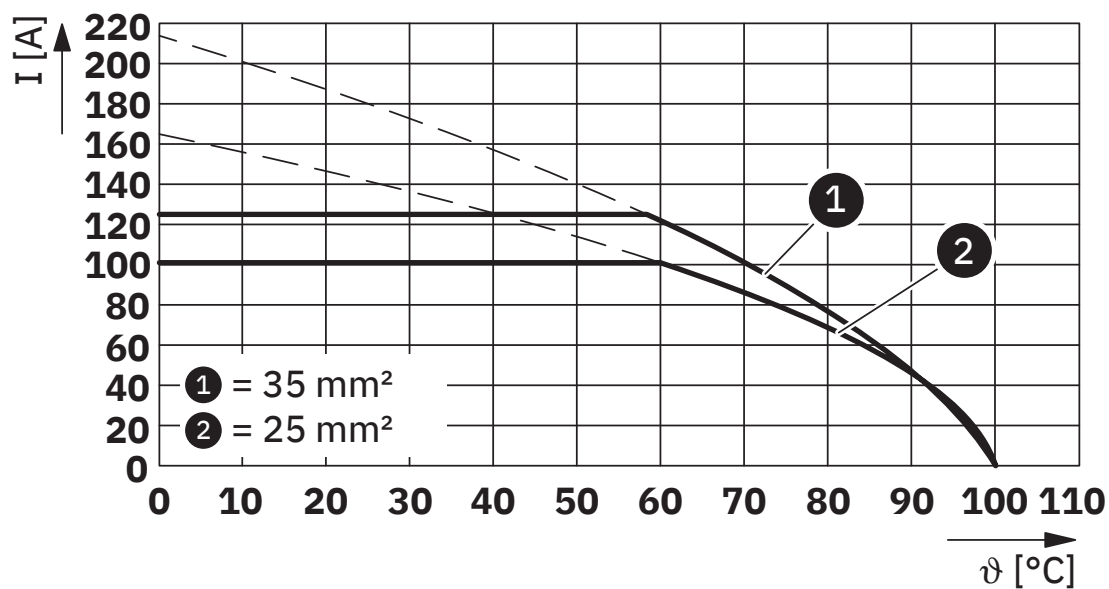
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Drawings

Dimensional drawing



Diagram

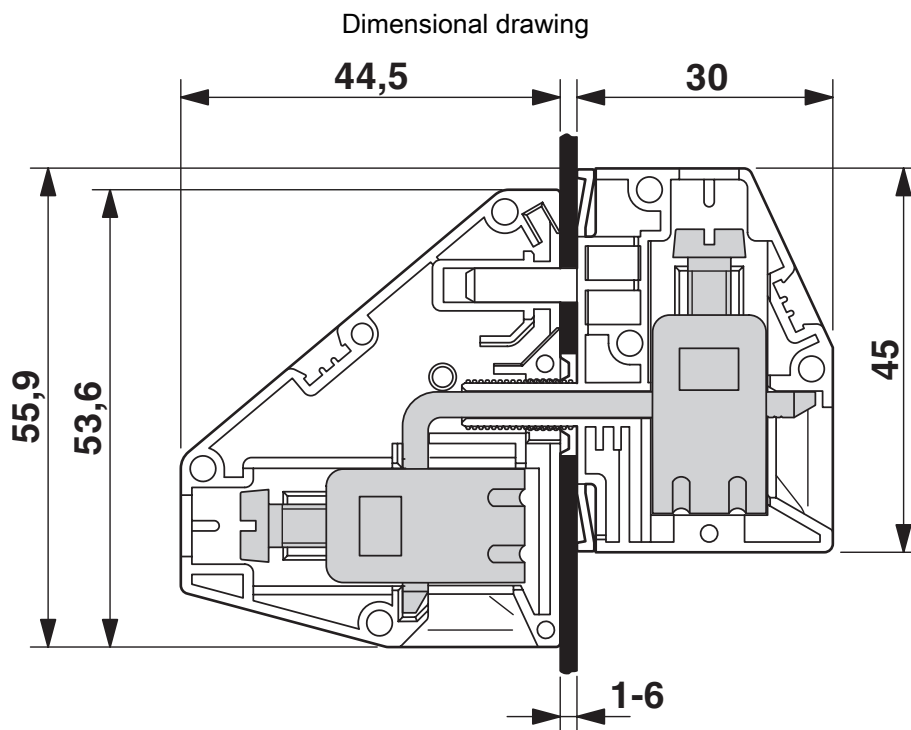


Type: HDFKV 25

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/0709039>

 CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	100 A	8 - 2	-
Use group C				
	600 V	100 A	8 - 2	-

 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	115 A	8 - 2	-
Use group C				
	600 V	115 A	8 - 2	-

 KEMA-KEUR Approval ID: 2169260.02				
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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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