

1717770

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PCB terminal block, nominal current: 24 A, rated voltage (III/2): 400 V, nominal cross section: $2.5 \, \text{mm}^2$, number of potentials: 5, number of rows: 1, number of positions per row: 5, product range: MKDSD 2,5, pitch: $5.08 \, \text{mm}$, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Wave soldering, conductor/PCB connection direction: $0\,^\circ$, color: black, Pin layout: Linear pinning, Solder pin [P]: $3.7 \, \text{mm}$, number of solder pins per potential: 2, type of packaging: packed in cardboard

Your advantages

- · Well-known connection principle allows worldwide use
- · Low temperature rise, thanks to maximum contact force
- · Allows connection of two conductors
- · Two solder pins reduce the mechanical strain on the soldering spots
- · Integrated protective guide prevents incorrect insertion of the conductor underneath the tension sleeve

Commercial data

Item number	1717770
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA13
Product key	AAMFHB
GTIN	4046356139649
Weight per piece (including packing)	11.132 g
Weight per piece (excluding packing)	10.7 g
Customs tariff number	85369010
Country of origin	PL



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Technical data

Product properties

Product type	Printed circuit board terminal
Product family	MKDSD 2,5
Product line	COMBICON Terminals M
Туре	PC termination block
Number of positions	5
Pitch	5.08 mm
Number of connections	5
Number of rows	1
Number of potentials	5
Pin layout	Linear pinning
Solder pins per potential	2

Electrical properties

Nominal current I _N	24 A
Nominal voltage U _N	400 V
Degree of pollution	3
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

Connection data

Connection technology

Туре	PC termination block
Nominal cross section	2.5 mm ²

Conductor connection

Conductor Connection	
Connection method	Screw connection with tension sleeve
Conductor cross section rigid	0.14 mm² 2.5 mm²
Conductor cross section flexible	0.14 mm² 2.5 mm²
Conductor cross section AWG	26 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 2.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 1.5 mm²
2 conductors with same cross section, solid	0.14 mm² 0.75 mm²
2 conductors with same cross section, flexible	0.14 mm² 0.75 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 0.75 mm²
2 conductors with the same cross section, flexible, with TWIN	0.5 mm² 1.5 mm²



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ferrule with plastic sleeve	
Stripping length	8 mm
Tightening torque	0.5 Nm 0.6 Nm

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning
Drive form screw head	Slotted (L)

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
Metal surface terminal point (top layer)	Tin (5 - 7 μm Sn)
Metal surface soldering area (top layer)	Tin (5 - 7 μm Sn)

Material data - housing

Color (Housing)	black (9005)
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

Dimensions

Dimensional drawing	p p
Pitch	5.08 mm
Width [w]	26.58 mm
Height [h]	21.7 mm
Length [I]	11.62 mm
Installed height	18 mm
Solder pin length [P]	3.7 mm
Pin dimensions	1.1 x 0.8 mm

PCB design

	Hole diameter	1.4 mm



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Electrical tests

Air clearances and creepage distances |

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Specification	IEC 60664-1:2007-04	
Insulating material group	I I	
Comparative tracking index (IEC 60112)	CTI 600	
Rated insulation voltage (III/3)	250 V	
Rated surge voltage (III/3)	4 kV	
minimum clearance value - non-homogenous field (III/3)	3 mm	
minimum creepage distance (III/3)	3.2 mm	
Note on connection cross section	With connected conductor 2.5 mm² (solid).	
Rated insulation voltage (III/2)	400 V	
Rated surge voltage (III/2)	4 kV	
minimum creepage distance (III/2)	3 mm	
Rated insulation voltage (II/2)	630 V	
Rated surge voltage (II/2)	4 kV	
minimum clearance value - non-homogenous field (II/2)	3 mm	
minimum creepage distance (II/2)	3.2 mm	

Packaging specifications

Type of packaging	packed in cardboard	



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1717770

CSA Approval ID: 13631				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
	300 V	10 A	28 - 12	-
Use group D				
	300 V	10 A	28 - 12	-

cULus Recogn Approval ID: E6042	CULus Recognized Approval ID: E60425-19770427			
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
	300 V	20 A	30 - 12	-
Use group D				
	300 V	10 A	30 - 12	-

VDE Zeichengenehmigung Approval ID: 40055535		hmigung			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		400 V	24 A	-	0.2 - 2.5



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Classifications

ECLASS

	ECLASS-11.0	27460101				
	ECLASS-12.0	27460101				
	ECLASS-13.0	27460101				
ΕT	ETIM					
	ETIM 8.0	EC002643				
UN	UNSPSC					
	UNSPSC 21.0	39121400				



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Environmental product compliance

EU RoHS

Le rierie	
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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