

1871762

https://www.phoenixcontact.com/us/products/1871762

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 documentation. Our general terms of use for downloads are valid.



PCB terminal block, nominal current: 24 A, rated voltage (III/2): 400 V, nominal cross section: 2.5 mm², number of potentials: 8, number of rows: 1, number of positions per row: 8, product range: MKDS 3, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Linear pinning, Solder pin [P]: 5 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard. The article can be aligned to create different nos. of positions!

Your advantages

- · Well-known connection principle allows worldwide use
- · Low temperature rise, thanks to maximum contact force
- · Allows connection of two conductors
- · Integrated protective guide prevents incorrect insertion of the conductor underneath the tension sleeve
- · The latching on the side enables various numbers of positions to be combined

Commercial data

Item number	1871762
Packing unit	1 pc
Minimum order quantity	50 pc
Sales key	AA13
Product key	AAMFIB
GTIN	4017918310646
Weight per piece (including packing)	16.377 g
Weight per piece (excluding packing)	15.462 g
Customs tariff number	85369010
Country of origin	DE



https://www.phoenixcontact.com/us/products/1871762



Technical data

Product properties

Туре	PC terminal block can be aligned
Product line	COMBICON Terminals M
Product type	Printed circuit board terminal
Product family	MKDS 3
Number of positions	8
Pitch	5.08 mm
Number of connections	8
Number of rows	1
Number of potentials	8
Pin layout	Linear pinning
Solder pins per potential	1

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 terminal block can be aligned
Nominal cross section	2.5 mm ²

Conductor connection

Connection method	Screw connection with tension sleeve
Conductor cross section rigid	0.2 mm² 4 mm²
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross section AWG	24 12
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 2.5 mm²
2 conductors with same cross section, solid	0.2 mm² 1.5 mm²
2 conductors with same cross section, flexible	0.2 mm² 1.5 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



1871762

https://www.phoenixcontact.com/us/products/1871762

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)
Connection method	Screw connection with tension sleeve
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
Surface characteristics	Tin-plated
Metal surface terminal point (top layer)	Tin (4 - 8 μm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 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

Notes

Note on application	For safe conductor connection, always adhere to a defined tightening torque. Particularly in the case of PCB terminal blocks with two or three positions, the individual solder pin for each contact point cannot compensate for this. That is why the terminal blocks must be supported during conductor connection (held with one hand, support on the housing).
---------------------	--

Dimensions

Dimensional drawing	
	PA



1871762

https://www.phoenixcontact.com/us/products/1871762

Pitch	5.08 mm
Width [w]	40.64 mm
Height [h]	23 mm
Length [I]	11.2 mm
Installed height	23 mm
Solder pin length [P]	5 mm
Pin dimensions	0.9 x 0.9 mm
PCB design	
Pin spacing	15.24 mm
Hole diameter	1.3 mm

Electrical tests

Air clearances and creepage distances |

Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Insulating material group	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 4 mm² (solid).
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
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

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-40 °C 105 °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

3 5 5 F 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Type of packaging	packed in cardboard



https://www.phoenixcontact.com/us/products/1871762



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1871762

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	-

EAC
Approval ID: B.01687

cULus Recognized Approval ID: E60425-19770427				
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
Multi-conductor connection	300 V	15 A	30 - 18	-
Screw connection	300 V	15 A	30 - 12	-
Use group D				
Multi-conductor connection	300 V	10 A	30 - 18	-
Screw connection	300 V	10 A	30 - 12	-

DNV GL
Approval ID: TAE00001EV

VDE Zeichengenel Approval ID: 40055394	nmigung			
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
	400 V	32 A	-	0.2 - 4



1871762

https://www.phoenixcontact.com/us/products/1871762

Classifications

UNSPSC 21.0

ECLASS

ECLASS	-11.0	27460101
ECLASS	12.0	27460101
ECLASS	-13.0	27460101
ETIM		
ETIM 8.0		EC002643
UNSPSC		

39121400



1871762

https://www.phoenixcontact.com/us/products/1871762

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e	
	No hazardous substances above threshold values	



1871762

https://www.phoenixcontact.com/us/products/1871762

Accessories



Note: Applying some accessories below might limit this product.

EBP 2-5 - Insertion bridge

1733169

https://www.phoenixcontact.com/us/products/1733169

Insertion bridge for connectors with 5.0 mm or 5.08 mm pitch



Max. current carrying capacity: 12 A

EBP 3-5 - Insertion bridge

1733172

https://www.phoenixcontact.com/us/products/1733172

Insertion bridge for connectors with 5.0 mm or 5.08 mm pitch



Max. current carrying capacity: 12 A



1871762

https://www.phoenixcontact.com/us/products/1871762

EBP 4-5 - Insertion bridge

1733185

https://www.phoenixcontact.com/us/products/1733185

Insertion bridge for connectors with 5.0 mm or 5.08 mm pitch



10 Max. current carrying capacity: 12 A

EBP 5-5-Insertion bridge

1733198

https://www.phoenixcontact.com/us/products/1733198

Insertion bridge for connectors with 5.0 mm or 5.08 mm pitch



10 Max. current carrying capacity: 12 A



1871762

https://www.phoenixcontact.com/us/products/1871762

EBP 6-5 - Insertion bridge

1733208

https://www.phoenixcontact.com/us/products/1733208

Insertion bridge for connectors with 5.0 mm or 5.08 mm pitch



Max. current carrying capacity: 12 A

SZS 0,6X3,5 - Screwdriver

1205053

https://www.phoenixcontact.com/us/products/1205053



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: $0.6 \times 3.5 \times 100$ mm, 2-component grip, with non-slip grip



1871762

https://www.phoenixcontact.com/us/products/1871762

RZ 1,25-MKDS 3 - Pitch spacer

1703047

https://www.phoenixcontact.com/us/products/1703047



Pitch spacer, for adjusting the pitches between MKDS and GMKDS terminal blocks in mixed rows, 1.25 mm thick

SK 5,08/3,8:FORTL.ZAHLEN - Marker card

0804293

https://www.phoenixcontact.com/us/products/0804293



Marker card, white, labeled, horizontal: consecutive numbers 1 \dots 10, 11 \dots 20, etc. up to 91 \dots (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm



1871762

https://www.phoenixcontact.com/us/products/1871762

SK 5,08/3,8:UNBEDRUCKT - Marker card

0805412

https://www.phoenixcontact.com/us/products/0805412



Marker card, white, unlabeled, can be labeled with: Marker pen: without print, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: $5.08 \times 3.8 \text{ mm}$, Number of individual labels: $120 \times 3.8 \text{ mm}$

Phoenix Contact 2023 © - all rights reserved https://www.phoenixcontact.com

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com