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PCB terminal block, nominal current: 20 A, nominal cross section: 2.5 mm², number of potentials: 4, number of rows: 2, number of positions per row: 2, product range: MK3DSMH 3-EX, 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: green, 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
- Satisfies the more stringent safety requirements of “Ex e” protection according to IEC 60079-7 for potentially explosive areas
- Tall type enables conductor connection for sealed PCBs
- Conductor connection on several levels enables higher contact density
- 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	1870255
Packing unit	50 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	AAMFKK
Catalog page	Page 157 (C-1-2013)
GTIN	4017918310059
Weight per piece (including packing)	12.969 g
Weight per piece (excluding packing)	11.77 g
Customs tariff number	85369010
Country of origin	CN

MK3DSMH 3/ 2-5,08-EX - PCB terminal block



1870255

<https://www.phoenixcontact.com/pc/products/1870255>

Technical data

Product properties

Product type	Printed circuit board terminal
Product family	MK3DSMH 3-EX
Product line	COMBICON Terminals M
Type	PC terminal block can be aligned
Number of positions	2
Pitch	5.08 mm
Number of connections	4
Number of rows	2
Number of potentials	4
Pin layout	Linear pinning
Solder pins per potential	1

Data management status

Article revision	07
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Electrical properties

Nominal current I_N	20 A
Nominal voltage U_N	176 V
Rated current / conductor cross section	19 A/2.5 mm ²

Ex data

Ex approval

Identification	0344 [®] II 2GD / Ex eb IIC Gb
EU-type examination certificate	KEMA 01ATEX2130 U
IECEx certificate	IECEx KEM 07.0019 U

Connection data

Connection technology

Type	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 mm ² ... 4 mm ²
	0.2 mm ² ... 4 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 2.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 2.5 mm ²
2 conductors with same cross section, solid	0.2 mm ² ... 1.5 mm ²

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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
Stripping length	7 mm
Drive form screw head	Slotted (L)
Tightening torque	0.5 Nm ... 0.6 Nm

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

Material specifications

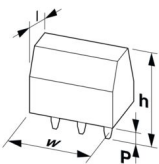
Material data - contact

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

Material data - housing

Color (Housing)	green (6021)
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	
Pitch	5.08 mm
Width [w]	10.16 mm
Height [h]	49.8 mm
Length [l]	23.1 mm
Installed height	44.8 mm
Solder pin length [P]	5 mm
Pin dimensions	0.9 x 0.9 mm

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PCB design

Hole diameter	1.3 mm
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Environmental and real-life conditions

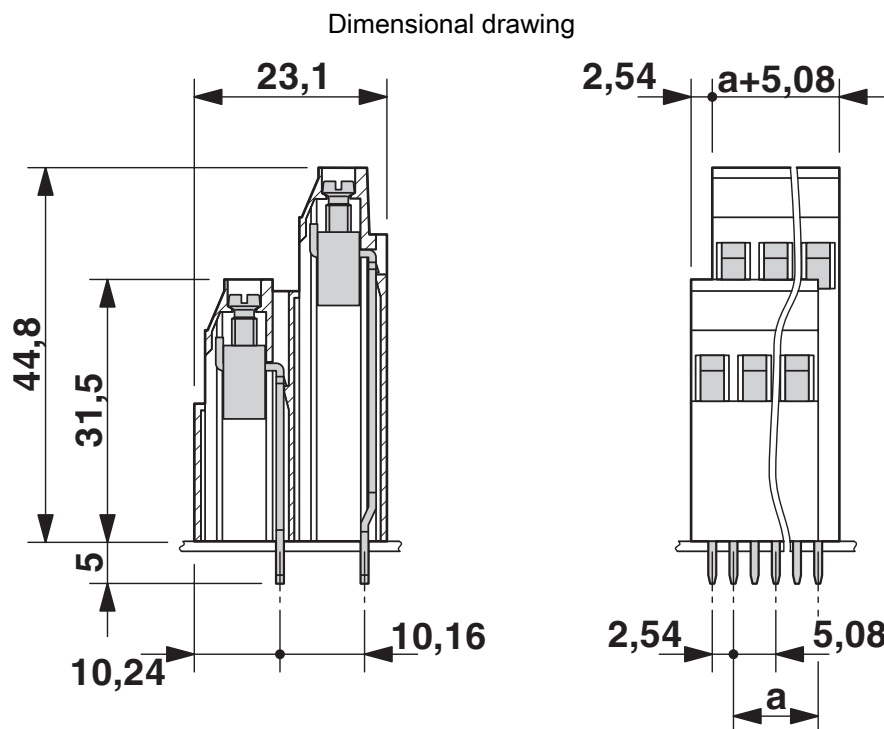
Ambient conditions

Ambient temperature (operation)	-50 °C ... 110 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

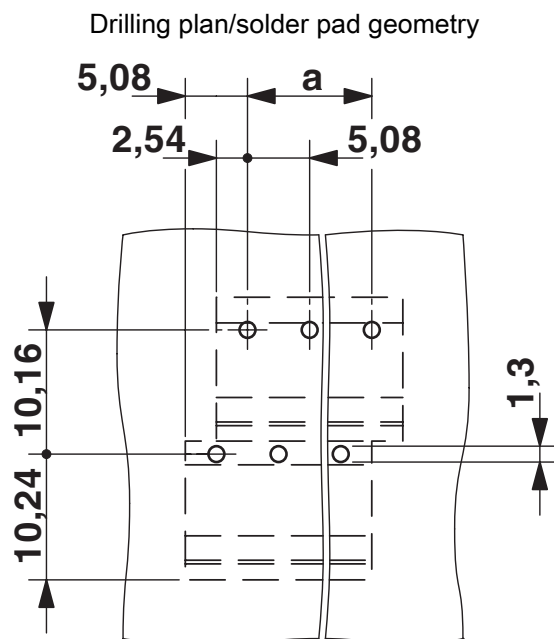
Packaging specifications

Type of packaging	packed in cardboard
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Drawings



The figure shows the dimensional drawing of the 3-pos. version of the product



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Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1870255>



ATEX

Approval ID: KEMA 01ATEX2130 U



IECEx

Approval ID: IECEx KEM 07.0019 U



EAC Ex

Approval ID: B.00065/19

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Classifications

ECLASS

ECLASS-11.0	27460101
ECLASS-12.0	27460101
ECLASS-13.0	27460101

ETIM

ETIM 9.0	EC002643
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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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