

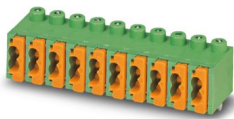
FK-MPT 0,5/12-3,5-H - PCB terminal block



1928864

<https://www.phoenixcontact.com/us/products/1928864>

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PCB terminal block, nominal current: 4 A, rated voltage (III/2): 250 V, nominal cross section: 0.5 mm², number of potentials: 12, number of rows: 1, number of positions per row: 12, product range: FK-MPT 0,5/...-H, pitch: 3.5 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 4 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard

Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Intuitive operation due to color-coded actuating push button
- Potentials can be easily looped through – ideal for BUS applications
- Small component size for applications where space is at a premium

Commercial data

Item number	1928864
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA11
Product key	AAKBCA
Catalog page	Page 403 (C-1-2013)
GTIN	4017918591311
Weight per piece (including packing)	5.66 g
Weight per piece (excluding packing)	5.16 g
Customs tariff number	85369010
Country of origin	IN

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Technical data

Product properties

Product type	Printed circuit board terminal
Product family	FK-MPT 0,5/...-H
Product line	COMBICON Terminals XS
Type	PC termination block
Number of positions	12
Pitch	3.5 mm
Number of connections	24
Number of rows	1
Number of potentials	12
Pin layout	Linear pinning
Solder pins per potential	1

Data management status

Article revision	04
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Electrical properties

Nominal current I_N	4 A
Nominal voltage U_N	250 V
Rated voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	250 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	250 V
Rated surge voltage (II/2)	2.5 kV

Connection data

Conductor connection

Connection method	Push-in spring connection
Conductor cross section rigid	0.12 mm ² ... 0.5 mm ²
Conductor cross section AWG	26 ... 20
Stripping length	6.5 mm

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
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Contact material	Steel/copper
Surface characteristics	Tin-plated
Metal surface terminal point (top layer)	Tin (5 - 7 µm Sn)
Metal surface terminal point (middle layer)	Copper (2 - 3 µm Cu)
Metal surface soldering area (top layer)	Tin (5 - 7 µm Sn)
Metal surface soldering area (middle layer)	Copper (2 - 3 µm Cu)

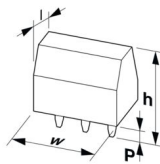
Material data - housing

Color (Housing)	green (6021)
Insulating material	PBT
Insulating material group	IIIa
CTI according to IEC 60112	225
Flammability rating according to UL 94	V0

Material data – actuating element

Color (Actuating element)	orange (2003)
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Dimensions

Dimensional drawing	
Pitch	3.5 mm
Width [w]	42.5 mm
Height [h]	12.5 mm
Length [l]	9.5 mm
Installed height	8.5 mm
Solder pin length [P]	4 mm
Pin dimensions	1 mm

PCB design

Pin spacing	3.5 mm
Hole diameter	1.2 mm

Electrical tests

Air clearances and creepage distances |

Insulating material group	IIIa
Rated insulation voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated insulation voltage (III/2)	250 V
Rated surge voltage (III/2)	2.5 kV
Rated insulation voltage (II/2)	250 V
Rated surge voltage (II/2)	2.5 kV

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Environmental and real-life conditions

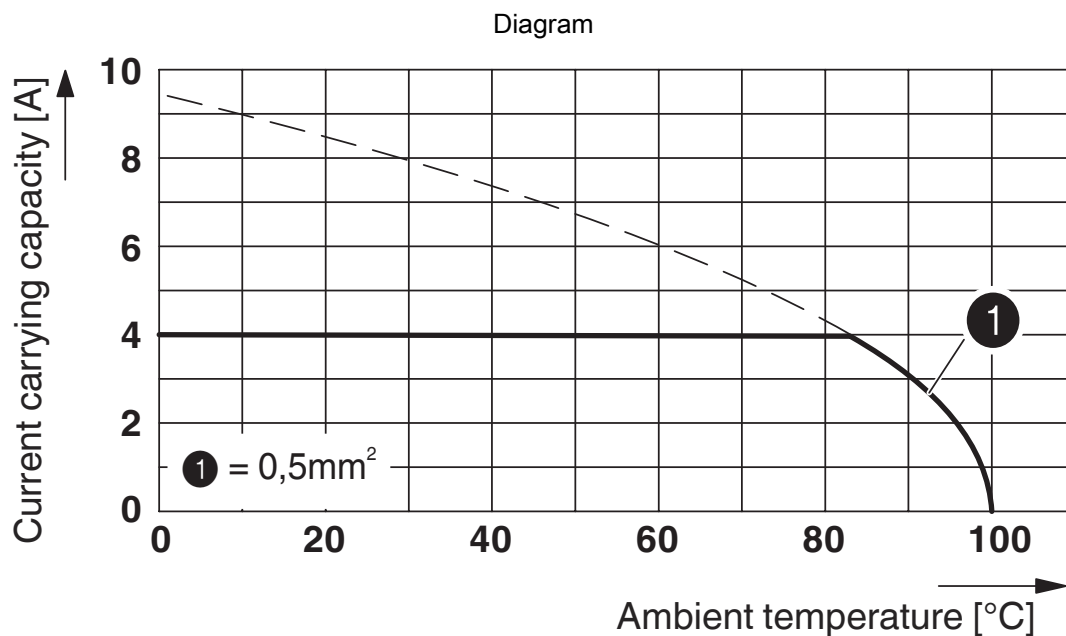
Ambient conditions

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

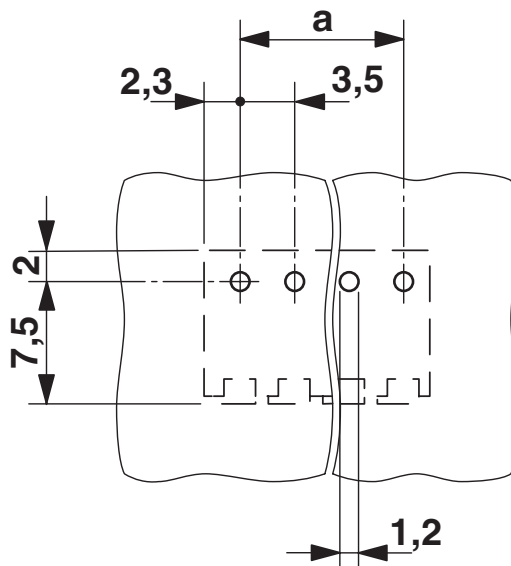
Type of packaging	packed in cardboard
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Drawings



Derating diagram for 5 positions; reduction factor=0.8

Drilling plan/solder pad geometry



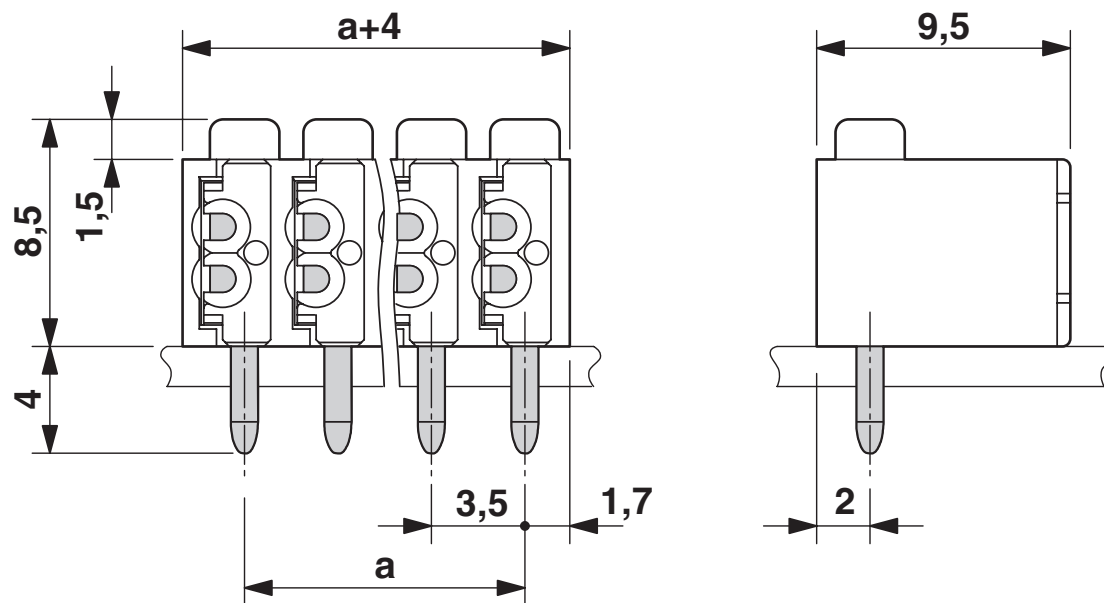
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Dimensional drawing



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1928864>

 cULus Recognized Approval ID: E60425-19991118				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	4 A	28 - 20	-
Use group D				
	300 V	4 A	28 - 20	-

 VDE Zeichengenehmigung Approval ID: 40055523				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	250 V	4 A	-	0.2 - 0.5

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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
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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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