

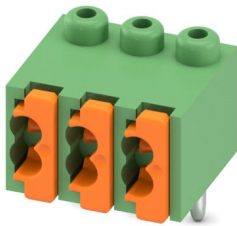
# FK-MPT 0,5/ 3-3,5-H - PCB terminal block



1928770

<https://www.phoenixcontact.com/us/products/1928770>

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Printed circuit board terminal, nominal current: 4 A, rated voltage (III/2): 250 V, nominal cross section: 0.5 mm<sup>2</sup>, number of potentials: 3, number of rows: 1, number of positions per row: 3, 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	1928770
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA11
Product key	AAKBCA
Catalog page	Page 403 (C-1-2013)
GTIN	4017918591229
Weight per piece (including packing)	1.428 g
Weight per piece (excluding packing)	1.07 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	3
Pitch	3.5 mm
Number of connections	6
Number of rows	1
Number of potentials	3
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 <sup>2</sup> ... 0.5 mm <sup>2</sup>
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 $\mu\text{m}$ Sn)
Metal surface terminal point (middle layer)	Copper (2 - 3 $\mu\text{m}$ Cu)
Metal surface soldering area (top layer)	Tin (5 - 7 $\mu\text{m}$ Sn)
Metal surface soldering area (middle layer)	Copper (2 - 3 $\mu\text{m}$ Cu)

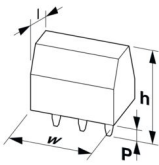
## Material data - housing

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]	11 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

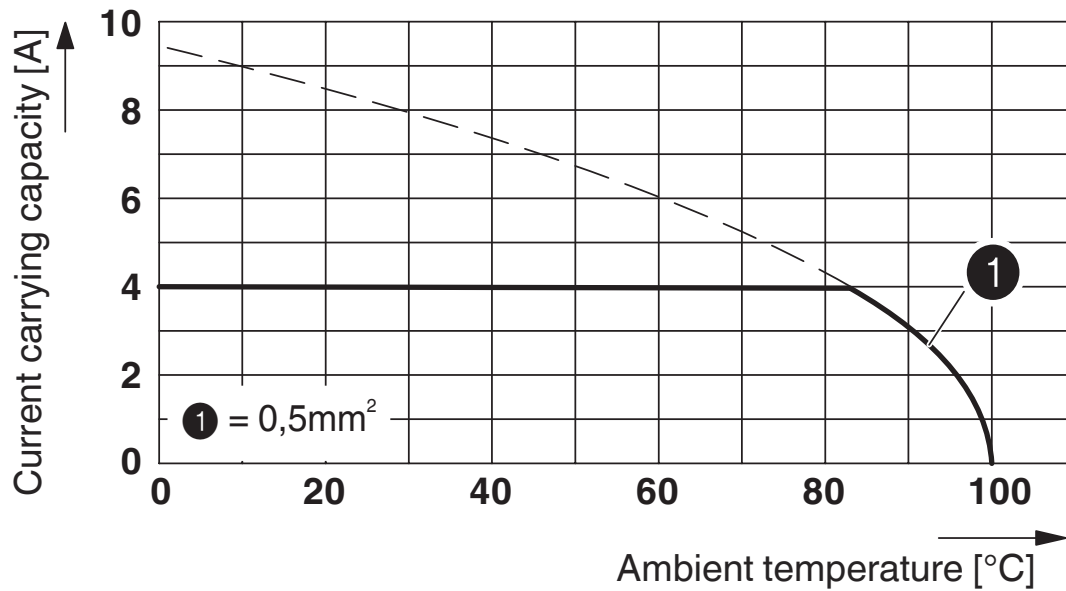
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

## Packaging specifications

Type of packaging	packed in cardboard
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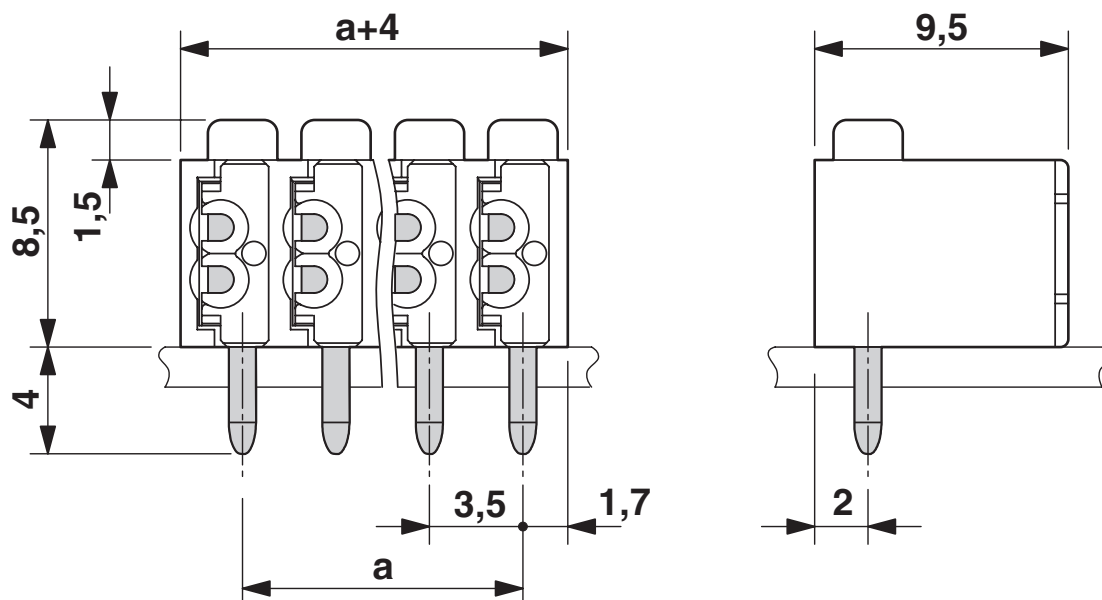
## Drawings

Diagram



Derating diagram for 5 positions; reduction factor=0.8

Dimensional drawing



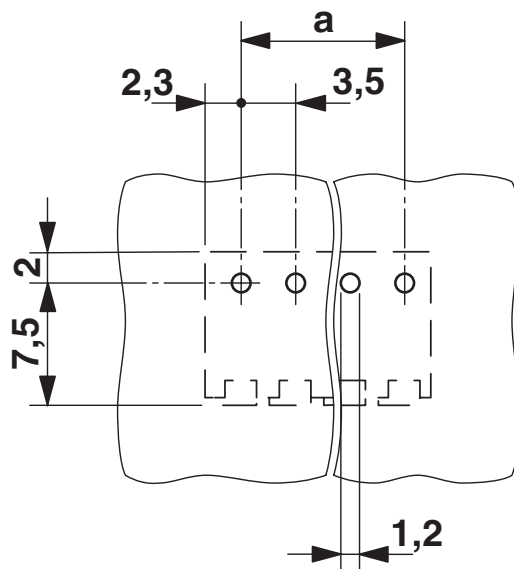
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Drilling plan/solder pad geometry



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1928770>

 <b>cULus Recognized</b> Approval ID: E60425-19991118				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Use group B	300 V	4 A	28 - 20	-
Use group D	300 V	4 A	28 - 20	-

 <b>VDE Zeichengenehmigung</b> Approval ID: 40055523				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	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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