

# FK-MPT 0,5/ 2-3,5 (VPE1000) - PCB terminal block



1931835

<https://www.phoenixcontact.com/us/products/1931835>

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.



The figure shows a 10-position version of the product

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: 2, number of rows: 1, number of positions per row: 2, product range: FK-MPT 0,5/..-V, pitch: 3.5 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 3.5 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
- Vertical connection enables multi-row arrangement on the PCB

## Commercial data

Item number	1931835
Packing unit	1,000 pc
Minimum order quantity	1,000 pc
Note	Made to order (non-returnable)
Product key	AAKBCB
GTIN	4017918849160
Weight per piece (including packing)	0.776 g
Weight per piece (excluding packing)	0.728 g
Country of origin	IN

# FK-MPT 0,5/ 2-3,5 (VPE1000) - PCB terminal block



1931835

<https://www.phoenixcontact.com/us/products/1931835>

## Technical data

### Product properties

Product type	Printed circuit board terminal
Product family	FK-MPT 0,5/..-V
Product line	COMBICON Terminals XS
Type	PC termination block
Number of positions	2
Pitch	3.5 mm
Number of connections	4
Number of rows	1
Number of potentials	2
Pin layout	Linear pinning
Solder pins per potential	1

### Electrical properties

#### 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
Contact material	Steel/copper

# FK-MPT 0,5/ 2-3,5 (VPE1000) - PCB terminal block



1931835

<https://www.phoenixcontact.com/us/products/1931835>

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

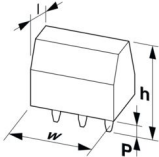
## Material data - housing

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)
Insulating material	POM
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	HB

## Dimensions

Dimensional drawing	
Pitch	3.5 mm
Width [w]	7.5 mm
Height [h]	13 mm
Length [l]	7 mm
Installed height	9.5 mm
Solder pin length [P]	3.5 mm
Pin dimensions	0.35 x 0.9 mm

## PCB design

Hole diameter	1 mm
---------------	------

## Mechanical tests

### Test for conductor damage and slackening

Specification	IEC 60999-1:1990-05
Result	Test passed

### Pull-out test

Specification	IEC 60999-1:1990-05
Conductor cross-section/conductor type/tractive force	0.14 mm <sup>2</sup> / solid / > 10 N

# FK-MPT 0,5/ 2-3,5 (VPE1000) - PCB terminal block



1931835

<https://www.phoenixcontact.com/us/products/1931835>

setpoint/actual value	0.5 mm <sup>2</sup> / solid / > 30 N
-----------------------	--------------------------------------

## Electrical tests

### Temperature-rise test

Specification	IEC 60998-1:1990-04
Requirement temperature-rise test	Increase in temperature ≤ 45 K

### Insulation resistance

Specification	IEC 60512-2:1985-00
Insulation resistance, neighboring positions	10 <sup>12</sup> Ω

### Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	IIIa
Comparative tracking index (IEC 60112)	CTI 225
Rated insulation voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	2.5 mm
Rated insulation voltage (III/2)	250 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	2.5 mm
Rated insulation voltage (II/2)	250 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	2.5 mm

## Environmental and real-life conditions

### Vibration test

Specification	IEC 60068-2-6:1995-03
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

### Ambient conditions

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

# FK-MPT 0,5/ 2-3,5 (VPE1000) - PCB terminal block



1931835

<https://www.phoenixcontact.com/us/products/1931835>

## Packaging specifications

Type of packaging
packed in cardboard

Drawings

Dimensional drawing



Drilling plan/solder pad geometry



# FK-MPT 0,5/ 2-3,5 (VPE1000) - PCB terminal block



1931835

<https://www.phoenixcontact.com/us/products/1931835>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1931835>

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

 <b>VDE approval of drawings</b> Approval ID: 40055523				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine	250 V	4 A	-	0.2 - 0.5

# FK-MPT 0,5/ 2-3,5 (VPE1000) - PCB terminal block



1931835

<https://www.phoenixcontact.com/us/products/1931835>

## Classifications

### ECLASS

ECLASS-13.0	27460101
ECLASS-15.0	27460101

### ETIM

ETIM 10.0	EC002643
-----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

# FK-MPT 0,5/ 2-3,5 (VPE1000) - PCB terminal block



1931835

<https://www.phoenixcontact.com/us/products/1931835>

## 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%
-------------------------------------	----------------------------

### EF3.1 Climate Change

CO2e kg	0.03 kg CO2e
---------	--------------

Phoenix Contact 2026 © - 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](mailto:info@phoenixcon.com)