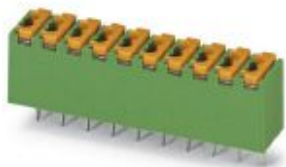


PCB terminal block - FK-MPT 0,5/12-3,5 - 1891166

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PCB terminal block, nominal current: 4 A, rated voltage (III/2): 250 V, nominal cross section: 0.5 mm², pitch: 3.5 mm, number of positions: 12, 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




The figure shows a 10-position version of the product

Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Intuitive use through colour coded actuation lever
- 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



Key Commercial Data

Packing unit	50 pc
GTIN	 4 017918 169688
GTIN	4017918169688

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	FK-MPT 0,5/..-V
Pitch	3.5 mm
Number of positions	12
Connection method	Push-in spring connection
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without
Number of levels	1

PCB terminal block - FK-MPT 0,5/12-3,5 - 1891166

Technical data

Item properties

Number of connections	24
Number of potentials	12

Electrical parameters

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

Connection capacity

Connection method	Push-in spring connection
pluggable	no
Conductor cross section solid	0.12 mm ² ... 0.5 mm ²
Conductor cross section AWG / kcmil	26 ... 20
Stripping length	6.5 mm

Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201
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

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

Dimensions for the product

Length [l]	7 mm
Width [w]	42.5 mm
Height [h]	13 mm
Pitch	3.5 mm
Height (without solder pin)	9.5 mm
Solder pin [P]	3.5 mm

PCB terminal block - FK-MPT 0,5/12-3,5 - 1891166

Technical data

Dimensions for the product

Pin dimensions	0.35 x 0.9 mm
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Dimensions for PCB design

Hole diameter	1 mm
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Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

Ambient conditions

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

Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1990-05
	Test passed

Pull-out test

Pull-out test	IEC 60999-1:1990-05
	Test passed
Conductor cross section / conductor type / tensile force	0.14 mm ² / solid / > 10 N
	0.5 mm ² / solid / > 30 N

Mechanical tests according to standard

Test specification	IEC 60999-1 (in parts)
--------------------	------------------------

Electrical tests

Rated current	4 A
Rated voltage (III/2)	250 V
Rated surge voltage (III/2)	2.5 kV

Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	1.5 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	1.5 mm
Minimum creepage distance value (III/3)	2.5 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	2.5 mm

Temperature-rise test

Specification	IEC 60998-1:1990-04
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PCB terminal block - FK-MPT 0,5/12-3,5 - 1891166

Technical data

Temperature-rise test

Result	Test passed
Requirement temperature-rise test	Increase in temperature ≤ 45 K

Current carrying capacity / derating curves

Caption	Type: FK-MPT 0,5/...-3,5
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Vibration test

Specification	IEC 60068-2-6:1995-03
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Insulation resistance

Specification	IEC 60512-2:1985-00
Result	Test passed
Insulation resistance, neighboring positions	$10^{12} \Omega$

Mechanical strength/tumbling barrel test

Specification	IEC 60998-1:1990-04
Height of fall	50 cm
Number of drop cycles	50

Standards and Regulations

Connection in acc. with standard	EN-VDE
	CUL
Flammability rating according to UL 94	V0

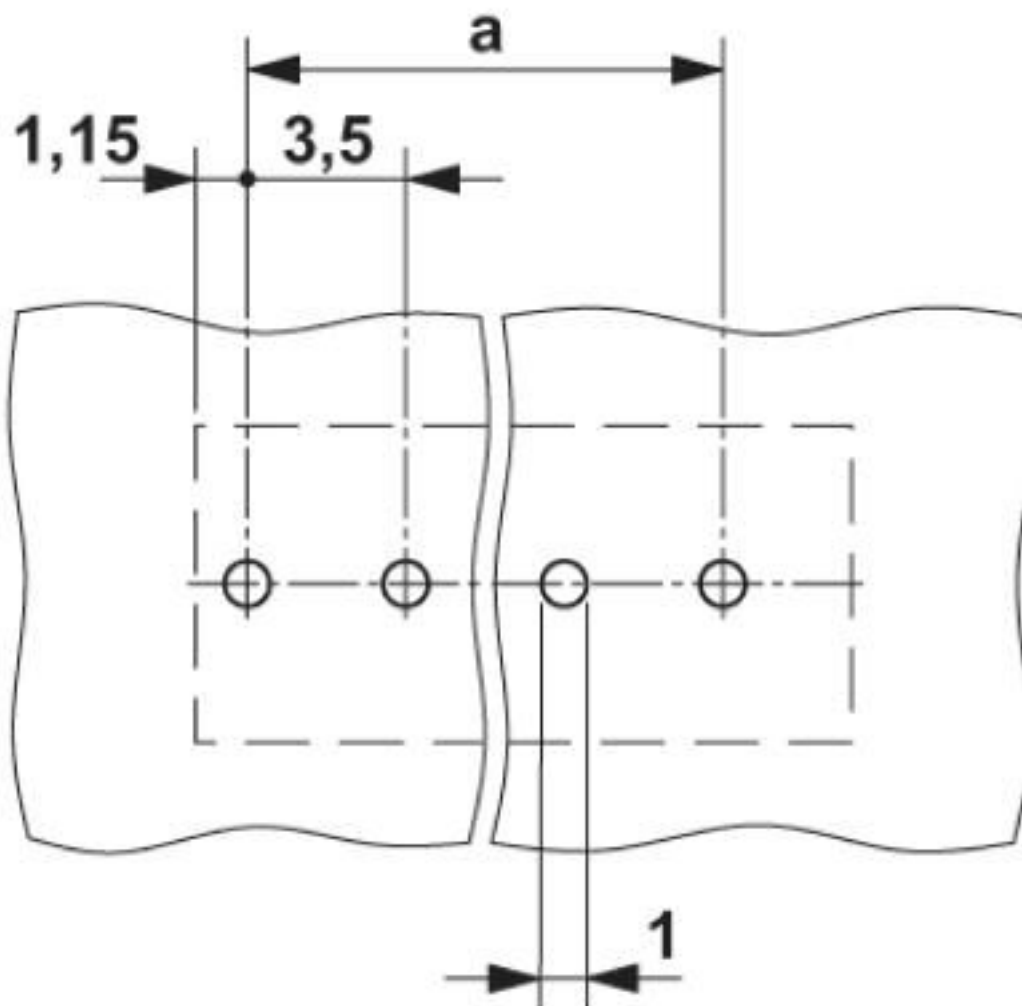
Environmental Product Compliance

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

Drawings

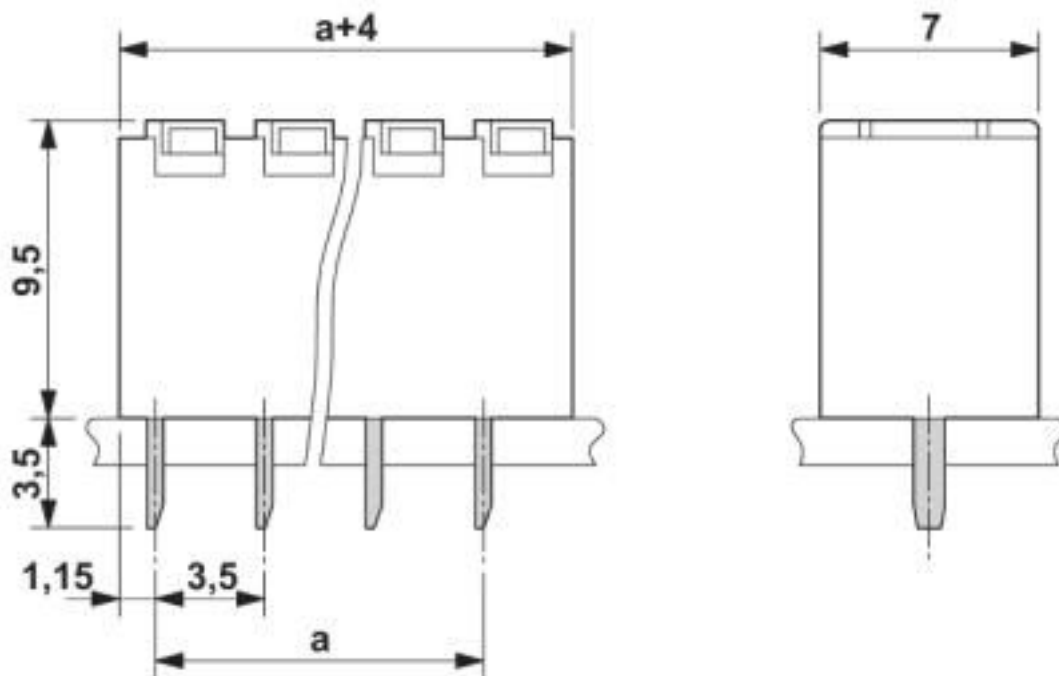
PCB terminal block - FK-MPT 0,5/12-3,5 - 1891166

Drilling diagram



PCB terminal block - FK-MPT 0,5/12-3,5 - 1891166

Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 4.0	27260700
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 8.0	27440401
eCl@ss 9.0	27440401

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002643
ETIM 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

UNSPSC

UNSPSC 6.01	30211801
UNSPSC 7.0901	39121432
UNSPSC 11	34131203

PCB terminal block - FK-MPT 0,5/12-3,5 - 1891166

Classifications

UNSPSC

UNSPSC 12.01	39121432
UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

Approvals


Approvals


Approvals


UL Recognized / cUL Recognized / SEV / EAC / IECCE CB Scheme / cULus Recognized

Ex Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	4 A	4 A	
mm ² /AWG/kcmil	28-20	28-20	

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	4 A	4 A	
mm ² /AWG/kcmil	28-20	28-20	

SEV		https://www.eurofins.ch/de/	IK-4496
Nominal voltage UN	250 V		
Nominal current IN	3 A		

PCB terminal block - FK-MPT 0,5/12-3,5 - 1891166

Approvals

mm ² /AWG/kcmil	0.12-5
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EAC		B.01687
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IECEE CB Scheme		http://www.iecee.org/	CH-10786
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Nominal voltage UN	250 V
Nominal current IN	3 A
mm ² /AWG/kcmil	0.12-5

cULus Recognized	
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Accessories

Accessories

Screwdriver tools

Screwdriver - SZF 0-0,4X2,5 - 1204504



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

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PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

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