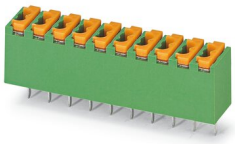
PCB terminal block - FK-MPT 0,5/ 3-3,5

1891072

https://www.phoenixcontact.com/pc/products/1891072

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PCB terminal block, nominal current: 4 A, rated voltage (III/2): 250 V, nominal cross section: 0.5 mm^2, number of potentials: 3, number of rows: 1, number of positions per row: 3, 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 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

Commercial Data

Item number	1891072
Packing unit	50 pc
Minimum order quantity	1 pc
Product Key	AAKBCB
Catalog Page	Page 403 (C-1-2013)
GTIN	4017918169596
Weight per Piece (including packing)	1.23 g
Weight per Piece (excluding packing)	1.23 g
Customs tariff number	85369010
Country of origin	IN

Technical Data

Product properties

Type	PC termination block
Product line	COMBICON Terminals XS
Product type	Printed circuit board terminal
Number of positions	3
Pitch	3.5 mm
Number of connections	6
Number of rows	1
Mounting flange	without
Number of potentials	3
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Nominal current I_N	4 A
Nominal voltage U_N	250 V
Degree of pollution	3
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

Connection data

Conductor connection

Connection method	Push-in spring connection
Conductor cross section solid	0.12 mm² ... 0.5 mm²
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
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)

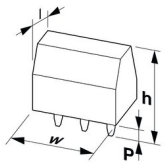
Material data - housing

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 ()	()
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]	11 mm
Height [h]	13 mm
Length [l]	7 mm
Installed height	9.5 mm
Solder pin length [P]	3.5 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 setpoint/actual value	0.14 mm² / solid / > 10 N
	0.5 mm² / 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^{12} 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)
Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

Ambient conditions

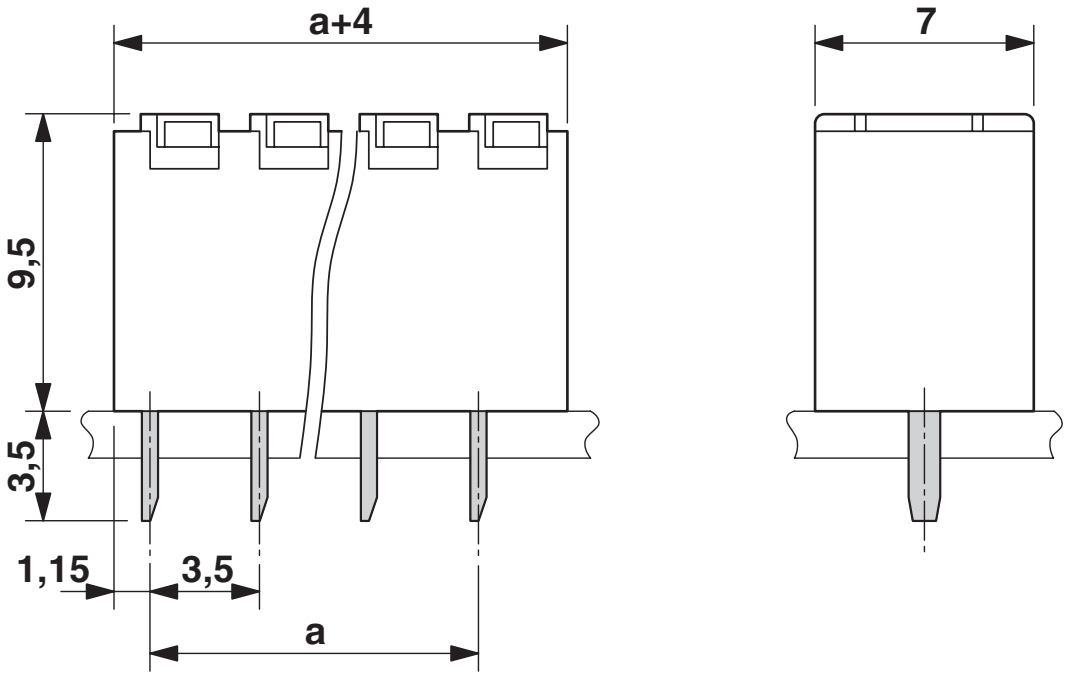
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

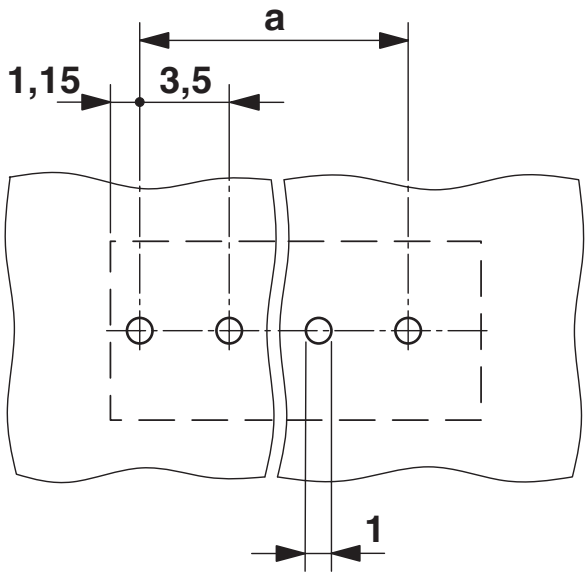
Type of packaging	packed in cardboard

Drawings

Dimensional drawing



Drilling plan/solder pad geometry



Approvals

EAC
Approval ID: B.01687

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	-

Classifications

ECLASS

ECLASS-9.0	27440401
ECLASS-10.0.1	27440401
ECLASS-11.0	27460101

ETIM

ETIM 8.0	EC002643

UNSPSC

UNSPSC 21.0	39121400

Environmental Product Compliance

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

Accessories

Screwdriver

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

https://www.phoenixcontact.com/pc/products/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

PCB header

PCB header - FK-MPT 0,5/ 3-ICA-3,5 - 1930331

https://www.phoenixcontact.com/pc/products/1930331



PCB headers, nominal cross section: 0.5 mm^2, color: black, nominal current: 3 A, rated voltage (III/2): 250 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FK-MPT 0,5/..-ICA, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm, number of solder pins per potential: 1, plug-in system: COMBICON FK-MPT - IC, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, The touch-protected basic strip, serves to accommodate the FK-MPT 0,5 PCB terminal block.

PCB header

PCB header - FK-MPT 0,5/ 2-ICA-3,5 - 1930328

https://www.phoenixcontact.com/pc/products/1930328

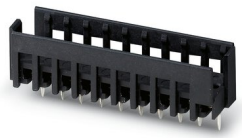


PCB headers, nominal cross section: 0.5 mm^2, color: black, nominal current: 3 A, rated voltage (III/2): 250 V, contact surface: Tin, type of contact: Female connector, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: FK-MPT 0,5/..-ICA, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm, number of solder pins per potential: 1, plug-in system: COMBICON FK-MPT - IC, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, The touch-protected basic strip, serves to accommodate the FK-MPT 0,5 PCB terminal block.

PCB header

PCB header - FK-MPT 0,5/ 3-ICVA-3,5 - 1930483

https://www.phoenixcontact.com/pc/products/1930483



PCB headers, nominal cross section: 0.5 mm^2, color: black, nominal current: 3 A, rated voltage (III/2): 250 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FK-MPT 0,5/..-ICVA, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 3.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON FK-MPT - IC, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, The touch-protected basic strip, serves to accommodate the FK-MPT 0,5 PCB terminal block.

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

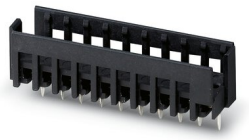
1891072

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PCB header

PCB header - FK-MPT 0,5/ 2-ICVA-3,5 - 1930470

https://www.phoenixcontact.com/pc/products/1930470



PCB headers, nominal cross section: 0.5 mm^2, color: black, nominal current: 3 A, rated voltage (III/2): 250 V, contact surface: Tin, type of contact: Female connector, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, product range: FK-MPT 0,5/..-ICVA, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 3.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON FK-MPT - IC, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, The touch-protected basic strip, serves to accommodate the FK-MPT 0,5 PCB terminal block.

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