

FK-MPT 0,5/ 4-ST-3,5 NZ975DE - PCB connector



1972085

<https://www.phoenixcontact.com/us/products/1972085>

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The figure shows a 10-position version of the product

PCB connector, nominal cross section: 0.5 mm², color: green, nominal current: 4 A, rated voltage (III/2): 250 V, contact surface: Sn, contact connection type: Socket, number of potentials: 4, number of rows: 1, number of positions: 4, number of connections: 8, product range: FK-MPT 0,5/..-ST, pitch: 3.5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, pin layout: Linear pinning, plug-in system: COMBICON PST 1,0, locking: without, mounting method: without, 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	1972085
Packing unit	50 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	AAAFBA
GTIN	4017918933708
Weight per piece (including packing)	1.593 g
Weight per piece (excluding packing)	1.37 g
Country of origin	IN

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Technical data

Product properties

Product type	PCB connector
Product family	FK-MPT 0,5/...-ST
Product line	COMBICON Connectors XS
Number of positions	4
Pitch	3.5 mm
Number of connections	8
Number of rows	1
Number of potentials	4
Mounting type	without
Pin layout	Linear pinning

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

Interlock

Locking type	without
Mounting type	without

Conductor connection

Connection method	Push-in spring connection
Conductor/PCB connection direction	0 °
Conductor cross-section rigid	0.12 mm ² ... 0.5 mm ²
Conductor cross-section AWG	26 ... 20
Stripping length	6.5 mm

Material specifications

Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	hot-dip tin-plated

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Metal surface terminal point (top layer)	Tin (5 µm - 7 µm Sn)
Metal surface terminal point (middle layer)	Nickel (2 µm - 3 µm Ni)
Metal surface contact area (top layer)	Tin (5 µm - 7 µm Sn)
Metal surface contact area (middle layer)	Nickel (2 µm - 3 µm Ni)

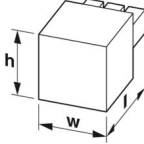
Material data - housing

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]	14.5 mm
Height [h]	8.5 mm
Length [l]	9.5 mm

Mounting

Pin layout	Linear pinning
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Environmental and real-life conditions

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 (dependent on the derating curve)

Electrical tests

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

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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

Packaging specifications

Type of packaging	packed in cardboard
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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1972085>

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

 VDE Gutachten mit Fertigungsüberwachung Approval ID: 40040542				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine	250 V	4 A	-	0.2 - 0.5

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Classifications

ECLASS

ECLASS-13.0	27460202
ECLASS-15.0	27460202

ETIM

ETIM 10.0	EC002638
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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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EF3.1 Climate Change

CO2e kg	0.05 kg CO2e
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