

#### 2890014

https://www.phoenixcontact.com/us/products/2890014

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DIN rail connector for DIN rail mounting. Universal for TBUS housing. Gold-plated contacts, 2-pos.

## Your advantages

- · Space-saving installation under the housing in the DIN rail
- · Contact design enables electronics modules to be easily snapped on
- · Power supply and communication without additional wiring
- · Parallel and serial contacts for efficient signal and data transmission

## **Commercial Data**

Item number	2890014
Packing unit	1 pc
Minimum order quantity	100 рс
Sales Key	AC08
Product Key	ACHACA
Catalog Page	Page 431 (C-6-2019)
GTIN	4046356050586
Weight per Piece (including packing)	4.94 g
Weight per Piece (excluding packing)	3.26 g
Customs tariff number	85366990
Country of origin	DE



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## **Technical Data**

### Notes

	Recommendation	Material of contact pads for bus connector, galvanic gold (hard gold)	
Product properties			
	Product type	DIN rail connector	
	Product family	TBUS53,81	
	Number of positions	5	
	Pitch	3.81 mm	

## **Electrical properties**

Nominal current I <sub>N</sub>	8 A (parallel contacts)
Nominal voltage U <sub>N</sub>	125 V
Degree of pollution	3
Contact resistance	4.4 mΩ
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	125 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV

## Dimensions

Pitch	3.81 mm
Width [w]	24.2 mm
Height [h]	36.3 mm
Length [I]	20.45 mm

## Material specifications

Material data - contact Contact material	Cu alloy	
Surface characteristics	gold-plated	
Material data - housing		
Color (Housing)	black (9005)	
Insulating material	PA	
Insulating material group	1	
CTI according to IEC 60112	600	
Flammability rating according to UL 94	VO	
Material data – actuating element		
Color ()	0	

Connector



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Connection 1	РА
Insulating material	
CTI according to IEC 60112	600
Electrical tests	
Thermal test   Test group C	
Specification	IEC 60512-5-1:2002-02
Tested number of positions	5
Air clearances and creepage distances	
Specification	IEC 60664-1:2007-04
Insulating material group	1
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	1.9 mm
Rated insulation voltage (III/2)	125 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)	0.75 mm
Rated insulation voltage (II/2)	320 V

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minimum creepage distance (III/2)	0.75 mm
Rated insulation voltage (II/2)	320 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)	1.6 mm

### Mechanical tests

Insertion and withdrawal forces

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	6 N
Withdraw strength per pos. approx.	5 N
Contact holder in insert	
Specification	IEC 60512-15-1:2008-05
Contact holder in insert Requirements >20 N	Test passed
Polarization and coding	
Specification	IEC 60512-13-5:2006-02
Result	Test passed
Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	



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Specification	IEC 60512-1-2:2002-02
Result	Test passed
ronmental and real-life conditions	
oration test	
Specification	IEC 60068-2-6:2007-12
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 500 Hz)
Test duration per axis	2.5 h
irability test	
Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R <sub>1</sub>	4.4 mΩ
Contact resistance R <sub>2</sub>	4.5 mΩ
Insertion/withdrawal cycles	25
matic test	
Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	1.39 kV
ow-wire test	
Specification	IEC 60695-2-10:2013-04
Temperature	850 °C
Time of exposure	30 s
locks	
Specification	IEC 60068-2-27:2008-02
Pulse shape	Semi-sinusoidal
Acceleration	15g
Shock duration	11 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)
bient conditions	
Ambient temperature (operation)	-40 °C 105 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C 55 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 100 °C

Mounting type DIN rail mounting



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Packaging specifications

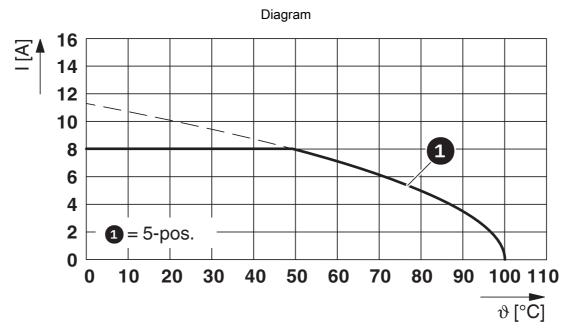
Type of packaging	packed in cardboard
Outer packaging type	Carton



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# Drawings



Type: TBUS5...



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# Classifications

### ECLASS

ECLASS-10.0.1	27440402
ECLASS-9.0	27440402
ECLASS-11.0	27460201
ТІМ	

## ETIM

	ETIM 8.0	EC002637
U	NSPSC	
	UNSPSC 21.0	39121400



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# **Environmental Product Compliance**

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



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## Accessories

IMC 1,5/ 5-ST-3,81 AU - Printed-circuit board connector

1943276 https://www.phoenixcontact.com/us/products/1943276



PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Gold, type of contact: Male connector, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: IMC 1,5/..-ST, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard

### IMC 1,5/ 5-ST-3,81 GY7035 AU - Printed-circuit board connector

1719707

https://www.phoenixcontact.com/us/products/1719707



PCB connector, nominal cross section: 1.5 mm<sup>2</sup>, color: light grey, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Gold, type of contact: Male connector, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: IMC 1,5/..-ST, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard

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