

2713645

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DIN rail connector, color: light grey, nominal current: 8 A (parallel contacts), rated voltage (III/2): 125 V, number of positions: 5, pitch: 3.81 mm, mounting: DIN rail mounting, locking: without, mounting: without, type of packaging: packed in cardboard, Item with gold-plated contacts, bus connectors for connecting with electronics housings, 5 parallel contacts

## 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	2713645
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AC08
Product key	ACHACA
Catalog page	Page 666 (C-1-2013)
GTIN	4017918914509
Weight per piece (including packing)	4.65 g
Weight per piece (excluding packing)	4.35 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	$4.4~\text{m}\Omega$
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

## Connection data

Maximum load current	8 A
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## **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

Material data - nousing	
Color (Housing)	light grey (7035)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0



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## Connector

Connection	1

Insulating material	PA
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

Air clearances and creepage distances	
Specification	IEC 60664-1:2007-04
Insulating material group	I I
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
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



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Dim	ension	check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

## Environmental and real-life conditions

#### Vibration 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

## Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R <sub>1</sub>	$4.4~\text{m}\Omega$
Contact resistance R <sub>2</sub>	$4.5~\text{m}\Omega$
Insertion/withdrawal cycles	25

## Climatic 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

#### Glow-wire test

Specification	IEC 60695-2-10:2013-04
Temperature	850 °C
Time of exposure	30 s

#### Shocks

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.)

#### Ambient 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



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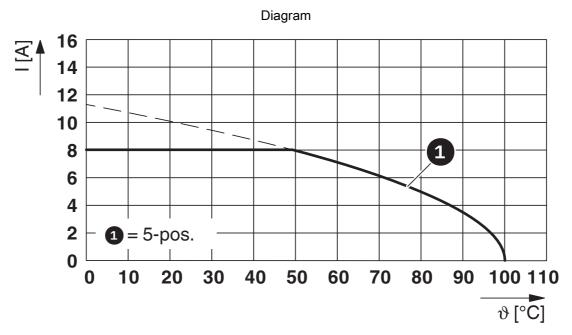
	Mounting type	DIN rail mounting
Packaging specifications		
	Type of packaging	packed in cardboard
	Outer packaging type	Carton



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## Drawings



Type: TBUS5...



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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2713645

.71	cUL Recognized Approval ID: E118976-20151204				
	Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>	
	150 V	6 A	-	-	

<b>71</b>	UL Recognized Approval ID: E118976-20151204					
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>	
		150 V	8 A	-	-	

cULus Recognized



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## Classifications

UNSPSC 21.0

## **ECLASS**

	ECLASS-11.0	27460201	
	ECLASS-12.0	27460201	
	ECLASS-13.0	27460201	
ETIM			
	ETIM 9.0	EC002637	
UNSPSC			

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

E/ME TBUS NS35 GY - End bracket

2713780

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End clamp, stable construction for DIN rail bus connector

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

1943276

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PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Gold, contact connection type: Pin, 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 °, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard



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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 mm², color: light grey, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Gold, contact connection type: Pin, 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 °, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard

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