

# TBUS8-20,0-PPPPPPPS-7035 - DIN rail bus connector



2202894

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DIN rail bus connector, color: light gray, nominal current: 6 A, 4 A (parallel contacts) (Serial contacts), rated voltage (III/2): 32 V, number of positions: 8, product range: TBUS8-20..., pitch: 2.54 mm, mounting: DIN rail mounting, locking: without, mounting method: without, type of packaging: packed in cardboard, Item with gold-plated contacts, bus connectors for connecting with electronics housings, 7 parallel contacts/1 serial contact

## 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
- Fast module-to-module communication without additional wiring effort
- Efficient connection between the individual housings of the ICS and ME-IO series

## Commercial data

Item number	2202894
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	AC09
Product key	ACHAGA
GTIN	4055626382159
Weight per piece (including packing)	6.1 g
Weight per piece (excluding packing)	4.64 g
Customs tariff number	85366990
Country of origin	PL

## Technical data

### Notes

Recommendation	Material of contact pads for bus connector, galvanic gold (hard gold)
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### Product properties

Product type	DIN rail bus connector
Product family	TBUS8-20..
Number of positions	8
Pitch	2.54 mm

### Electrical properties

#### Properties

Nominal current $I_N$	6 A (parallel contacts)
Nominal voltage $U_N$	32 V
Contact resistance	3.7 m $\Omega$
Rated voltage (III/2)	32 V
Rated surge voltage (III/2)	1.5 kV
Rated voltage (II/2)	32 V
Rated surge voltage (II/2)	1.5 kV

### Material specifications

#### Material data - contact

Contact material	Cu alloy
Surface characteristics	gold-plated

#### Material data - housing

Color (Housing)	light gray (7035)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

#### material specifications - connector

Color ( )	( )
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### Dimensions

Pitch	2.54 mm
Width [w]	24.3 mm
Height [h]	37.15 mm
Length [l]	16.3 mm

### Mounting

Mounting type	DIN rail mounting
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## Mechanical tests

### Insertion and withdrawal forces

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	2.8 N
Withdraw strength per pos. approx.	2.5 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

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

## Environmental and real-life conditions

### Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	1.75 kV
Contact resistance $R_1$	3.7 m $\Omega$
Contact resistance $R_2$	3.85 m $\Omega$
Insertion/withdrawal cycles	25

### Climatic test

Specification	DIN 50018:2013-05
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	0.84 kV

### Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.15 mm (10 Hz ... 58.1 Hz)
Acceleration	2g (58.1 Hz ... 150 Hz)

2202894

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Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis (pos. and neg.)

## 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.)

## Glow-wire test

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

## Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 55 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 105 °C (dependent on the derating curve)

## Ambient conditions

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Ambient temperature (storage/transport)	-40 °C ... 55 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

## Electrical tests

## Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	8

## Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Rated insulation voltage (III/2)	32 V
Rated surge voltage (III/2)	1.5 kV
minimum clearance value - non-homogenous field (III/2)	0.5 mm
minimum creepage distance (III/2)	0.53 mm
Rated insulation voltage (II/2)	32 V
Rated surge voltage (II/2)	1.5 kV
minimum clearance value - non-homogenous field (II/2)	0.5 mm
minimum creepage distance (II/2)	0.53 mm

## Packaging specifications

Type of packaging	packed in cardboard
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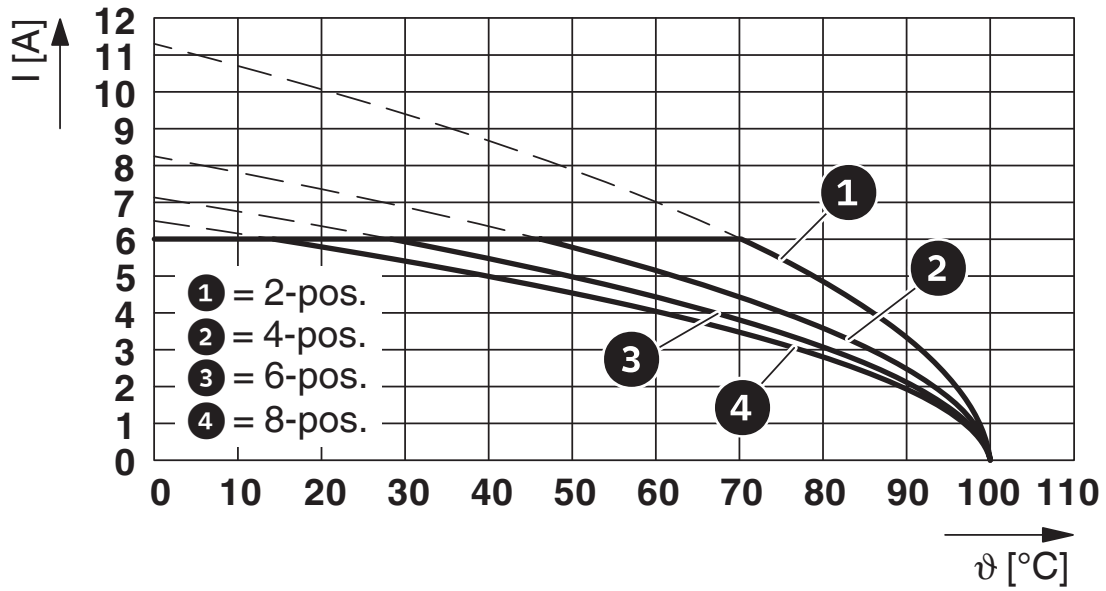
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Outer packaging type	Carton
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Drawings

Diagram



Type: TBUS8-20,0(25,0)-...

# TBUS8-20,0-PPPPPPS-7035 - DIN rail bus connector



2202894

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## Approvals

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 <b>cUL Recognized</b> Approval ID: E118976-20151204				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
Power	29.9 V	4 A	-	-
Signal	29.9 V	4 A	-	-

 <b>UL Recognized</b> Approval ID: E118976-20151204				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
Power	29.9 V	6 A	-	-
Signal	29.9 V	4 A	-	-

 <b>VDE approval of drawings</b> Approval ID: 40050612				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
Power	32 V	6 A	-	-
Signal	32 V	4 A	-	-

2202894

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## Classifications

### ECLASS

ECLASS-13.0	27460201
ECLASS-15.0	27460201

### ETIM

ETIM 10.0	EC002637
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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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