

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



2202894

<https://www.phoenixcontact.com/us/products/2202894>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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

2202894

<https://www.phoenixcontact.com/us/products/2202894>

## Technical data

### Notes

Recommendation	Material of contact pads for bus connector, galvanic gold (hard gold)
----------------	---

### 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 ( )	( )
-----------	-----

### 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
---------------	-------------------

## 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)

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



2202894

<https://www.phoenixcontact.com/us/products/2202894>

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

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

## 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
-------------------	---------------------

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



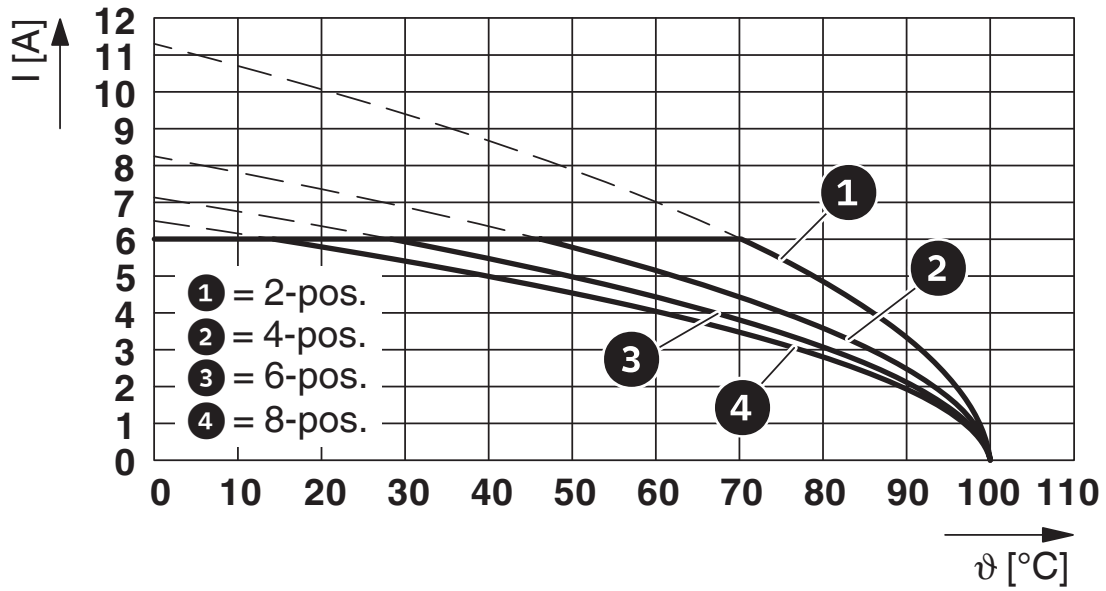
2202894

<https://www.phoenixcontact.com/us/products/2202894>

Outer packaging type	Carton
----------------------	--------

Drawings

Diagram



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

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



2202894

<https://www.phoenixcontact.com/us/products/2202894>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2202894>

 <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

<https://www.phoenixcontact.com/us/products/2202894>

## Classifications

### ECLASS

ECLASS-13.0	27460201
ECLASS-15.0	27460201

### ETIM

ETIM 10.0	EC002637
-----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

2202894

<https://www.phoenixcontact.com/us/products/2202894>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### 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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)