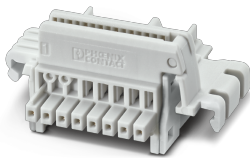


# DIN rail bus connectors - TBUS8-20,0-PPPPPPPP-7035 - 2202889

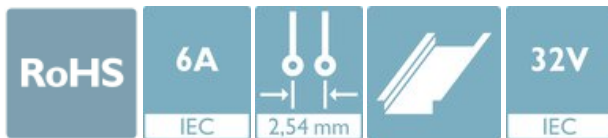
Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



DIN rail connector, color: light gray, nominal current: 6 A (parallel contacts), rated voltage (III/2): 32 V, Number of positions per row: 8, pitch: 2.54 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, 8 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



## Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	
GTIN	4055626382135

## Technical data

### Item properties

Brief article description	DIN rail bus connectors
Range of articles	TBUS8-2...-PP
Pitch	2.54 mm
Number of positions	8
Mounting type	DIN rail mounting

### Electrical parameters

Nominal current	6 A (parallel contacts)
Nom. voltage	32 V
Rated voltage (III/2)	32 V
Rated voltage (II/2)	32 V

# DIN rail bus connectors - TBUS8-20,0-PPPPPPP-7035 - 2202889

## Technical data

### Electrical parameters

Rated surge voltage (III/2)	1.5 kV
Rated surge voltage (II/2)	1.5 kV

### Material data - contact

Contact material	Cu alloy
Surface characteristics	Completely gold-plated

### Material data - housing

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

### Dimensions for the product

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

### Dimensions for PCB design

PCB thickness	1.4 mm ... 1.8 mm
---------------	-------------------

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	10
Denomination packing units	Pcs.
Outer packaging type	Carton

### General product information

Type of note	Recommendation
Note	Material of contact pads for bus connector, galvanic gold (hard gold)

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 55 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 105 °C (dependent on the derating curve)
Relative humidity (storage/transport)	80 %

### Mechanical tests according to standard

Test specification	IEC 61984:2008-10
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Insertion and withdrawal force	IEC 60512-13-2:2006-02
No. of cycles	25

## DIN rail bus connectors - TBUS8-20,0-PPPPPPP-7035 - 2202889

### Technical data

#### Mechanical tests according to standard

Insertion strength per pos. approx.	2.8 N
Withdraw strength per pos. approx.	2.5 N
Polarization and coding	IEC 60512-13-5:2006-02
Contact holder in insert	IEC 60512-15-1:2008-05
Test force per pos.	20 N

#### Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/2)	0.5 mm
Minimum clearance - inhomogeneous field (II/2)	0.5 mm
Minimum creepage distance value (III/2)	0.53 mm
Minimum creepage distance value (II/2)	0.53 mm

#### Current carrying capacity / derating curves

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

#### Mechanical tests (A)

Test specification	IEC 61984:2008-10
Insertion strength per pos. approx.	2.8 N
Withdraw strength per pos. approx.	2.5 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

#### Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R <sub>1</sub>	3.7 mΩ
Insertion/withdrawal cycles	25
Contact resistance R <sub>2</sub>	3.85 mΩ
Impulse withstand voltage at sea level	1.75 kV

#### Thermal tests (C)

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

#### Climatic tests (D)

Specification	DIN 50018:2013-05
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Impulse withstand voltage at sea level	1.75 kV
Power-frequency withstand voltage	0.84 kV

#### Environmental and durability tests (E)

## DIN rail bus connectors - TBUS8-20,0-PPPPPPP-7035 - 2202889

### Technical data

#### Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

#### Mechanical strength/tumbling barrel

Specification	IEC 60998-1:2002-12
Number of drop cycles	50

#### Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.15 mm (10 - 58.1 Hz)
Acceleration	2g (58.1 - 150 Hz)
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
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)

#### Test for assessing the risk of fire (glow wire)

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

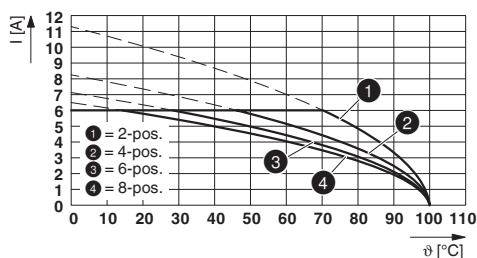
#### Environmental Product Compliance

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

### Drawings

# DIN rail bus connectors - TBUS8-20,0-PPPPPPP-7035 - 2202889

Diagram



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

## Classifications

### eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 11.0	27460201
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440309
eCl@ss 9.0	27440402

### ETIM

ETIM 6.0	EC002638
ETIM 7.0	EC002638

## Approvals

### Approvals

#### Approvals

UL Recognized / cUL Recognized / EAC / IEC CB Scheme / VDE Zeichengenehmigung / cULus Recognized

#### Ex Approvals

### Approval details

# DIN rail bus connectors - TBUS8-20,0-PPPPPPP-7035 - 2202889

## Approvals

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E118976-20151204
Nominal voltage UN		29.9 V	
Nominal current IN		6 A	

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E118976-20151204
Nominal voltage UN		29.9 V	
Nominal current IN		4 A	

EAC		B.01687
-----	--	---------

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-62506
Nominal voltage UN		32 V	
Nominal current IN		6 A	

VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40050612
Nominal voltage UN		32 V	
Nominal current IN		6 A	

cULus Recognized	
------------------	--

## Accessories

### Additional products

## DIN rail bus connectors - TBUS8-20,0-PPPPPPP-7035 - 2202889

### Accessories

Printed-circuit board connector - FMC 0,5/ 8-ST-2,54 - 1821151



PCB connector, nominal cross section: 0.5 mm<sup>2</sup>, color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Gold, type of contact: Female connector, number of potentials: 8, Number of rows: 1, Number of positions per row: 8, number of connections: 8, product range: FMC 0,5/..-ST, pitch: 2.54 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, plug-in system: MICRO COMBICON - FMC 0,5, Locking: without, mounting: without, type of packaging: packed in cardboard

---

Phoenix Contact 2021 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>