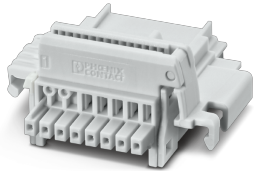


# DIN rail bus connectors - TBUS8-25,0-PPPPPPPS-7035 - 2202890

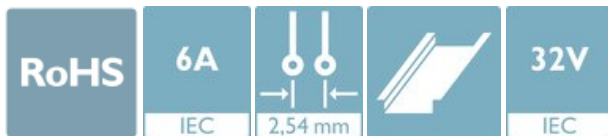
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DIN rail connector, color: light gray, nominal current: 6 A, 4 A (parallel contacts) (Serial contacts), rated voltage (III/2): 32 V, Number of positions per row: 8, pitch: 2.54 mm, mounting: DIN rail mounting, Locking: without, mounting: without, type of packaging: packed in cardboard, Item with gold-plated contacts, bus connectors for connecting with electronics housings, 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



## Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	
GTIN	4055626382166

## Technical data

### Item properties

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

### Electrical parameters

Nominal current	6 A (parallel contacts)
	4 A (Serial contacts)
Nom. voltage	32 V

# DIN rail bus connectors - TBUS8-25,0-PPPPPPPS-7035 - 2202890

## Technical data

### Electrical parameters

Rated voltage (III/2)	32 V
Rated voltage (II/2)	32 V
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 ]	29.3 mm
Height [ h ]	37.15 mm
Pitch	2.54 mm

### Dimensions for PCB design

PCB thickness	1.4 mm ... 1.8 mm
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### 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)

### 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

## DIN rail bus connectors - TBUS8-25,0-PPPPPPPS-7035 - 2202890

### Technical data

#### Mechanical tests according to standard

No. of cycles	25
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)-...
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#### 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

# DIN rail bus connectors - TBUS8-25,0-PPPPPPPS-7035 - 2202890

## 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

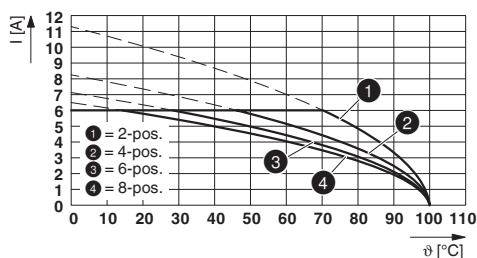
### Environmental Product Compliance

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

## Drawings

# DIN rail bus connectors - TBUS8-25,0-PPPPPPPS-7035 - 2202890

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	EC002637

### UNSPSC

UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

## Approvals

### Approvals

#### Approvals


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


#### Ex Approvals


# DIN rail bus connectors - TBUS8-25,0-PPPPPPPS-7035 - 2202890


## Approvals


### Approval details


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
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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	
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## Accessories

### Additional products

## DIN rail bus connectors - TBUS8-25,0-PPPPPPPS-7035 - 2202890

### 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

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