TBUS8-18,8-PPPPPPSS-7035 - DIN rail bus connectors

2202403

https://www.phoenixcontact.com/us/products/2202403

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DIN rail connector, color: light grey, nominal current: 6 A, 4 A (parallel contacts) (Serial contacts), rated voltage (III/2): 32 V, number of positions: 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, 6 parallel contacts/2 serial 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
- 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	2202403
Packing unit	1 pc
Minimum order quantity	30 pc
Sales key	AC15
Product key	ACHEDA
GTIN	4055626116242
Weight per piece (including packing)	5.06 g
Weight per piece (excluding packing)	5.06 g
Customs tariff number	85366990
Country of origin	PL

Technical data

Notes

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

Product properties

Product type	DIN rail connector
Product family	TBUS8..2,54
Number of positions	8
Pitch	2.54 mm

Electrical properties

Nominal current I_N	6 A (parallel contacts)
Nominal voltage U_N	32 V
Degree of pollution	3
Contact resistance	5.97 mΩ
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

Dimensions

Pitch	2.54 mm
Width [w]	23.2 mm
Height [h]	37.15 mm
Length [l]	16.3 mm

Material specifications

Material data - contact

Contact material	Cu alloy
Surface characteristics	gold-plated

Material data - housing

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

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	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

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

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	1.75 kV
Contact resistance R_1	5.97 mΩ
Contact resistance R_2	5.91 mΩ
Insertion/withdrawal cycles	25

Climatic test

Specification	DIN 50018:2013-05
Corrosive stress	0.2 dm^3 SO_2 on 300 dm^3/40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	0.84 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

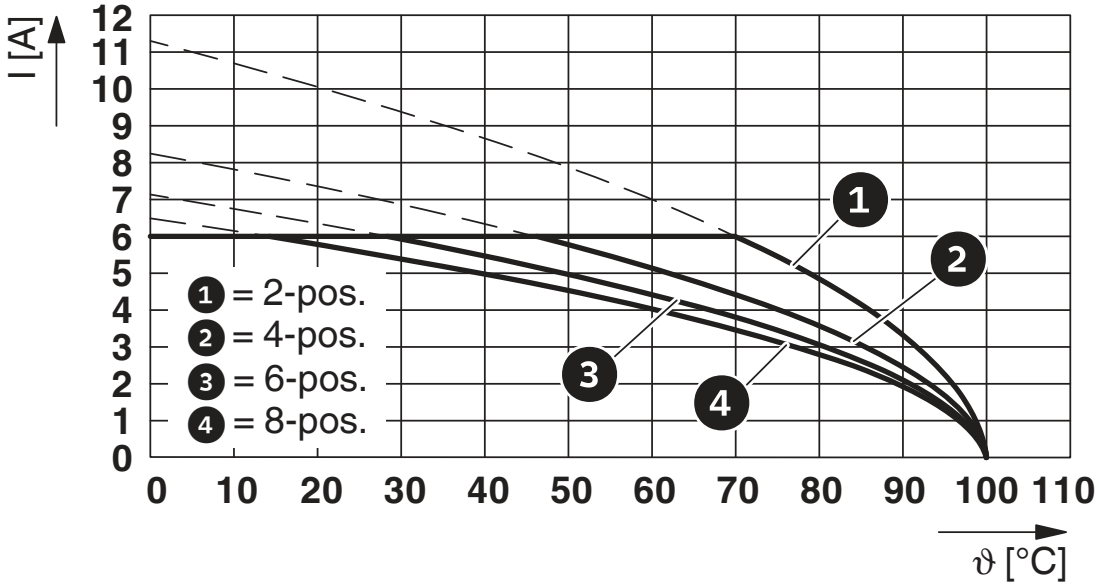
Mounting type	DIN rail mounting

Packaging specifications

Type of packaging	packed in cardboard
Outer packaging type	Carton

Drawings

Diagram



Type: TBUS8-... with FMC 0,5/...-ST-2,54

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2202403

cUL Recognized
Approval ID: E118976-20151204

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Power	29.9 V	4 A	-	-
Signal	29.9 V	4 A	-	-

UL Recognized
Approval ID: E118976-20151204

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Power	29.9 V	6 A	-	-
Signal	29.9 V	4 A	-	-

IECEE CB Scheme
Approval ID: DE1-62506

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Power	32 V	6 A	-	-
Signal	32 V	4 A	-	-

EAC
Approval ID: B.01687

VDE Zeichengenehmigung
Approval ID: 40050612

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Power	32 V	6 A	-	-
Signal	32 V	4 A	-	-

cULus Recognized

Classifications

ECLASS

ECLASS-11.0	27460201
ECLASS-12.0	27460201
ECLASS-13.0	27460201

ETIM

ETIM 8.0	EC002637

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

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

Accessories

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

1821151

https://www.phoenixcontact.com/us/products/1821151

PCB connector, nominal cross section: 0.5 mm^2, color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Gold, contact connection type: Socket, number of potentials: 8, number of rows: 1, number of positions: 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: COMBICON FMC 0,5, locking: without, mounting: without, type of packaging: packed in cardboard

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