

2202399

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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: TBUS8-18,8.., 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	2202399
Packing unit	30 pc
Minimum order quantity	30 pc
Sales key	AC15
Product key	ACHEDA
GTIN	4055626116204
Weight per piece (including packing)	4.866 g
Weight per piece (excluding packing)	4.88 g
Customs tariff number	85366990
Country of origin	PL



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Technical data

Notes

	Recommendation	gold)
Pr	oduct properties	
	Product type	DIN rail bus connector
	Product family	TBUS8-18,8
	Number of positions	8

2.54 mm

Electrical properties

Properties

Pitch

Nominal current I _N	6 A (parallel contacts)
Nominal voltage U _N	32 V
Contact resistance	5.97 mΩ
Rated voltage (III/3)	32 V
Rated surge voltage (III/3)	1.5 kV
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]	23.2 mm
Height [h]	37.15 mm
Length [I]	16.3 mm



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Mounting

Woulding	
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

Environmental and real-life conditions

Vibration test

Result

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)
Acceleration	5g (60.1 Hz 500 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis (pos. and neg.)

Test passed

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



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Specification

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oposada	5 000 .0.20 .0 00
Corrosive stress	$0.2~\mathrm{dm^3SO_2}$ on 300 $\mathrm{dm^3/40~^\circ C/1}$ cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	0.84 kV
ow-wire test	
Specification	IEC 60695-2-10:2013-04
Temperature	850 °C
Time of exposure	30 s
nocks	
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.)
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nbient conditions	
Ambient temperature (operation)	-40 °C 105 °C (dependent on the derating curve)
	-40 °C 55 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (storage/transport) Relative humidity (storage/transport) Ambient temperature (assembly) etrical tests	30 % 70 % -5 °C 100 °C
Relative humidity (storage/transport) Ambient temperature (assembly) etrical tests ermal test Test group C	-5 °C 100 °C
Relative humidity (storage/transport) Ambient temperature (assembly) strical tests ermal test Test group C Specification	-5 °C 100 °C IEC 60512-5-1:2002-02
Relative humidity (storage/transport) Ambient temperature (assembly) etrical tests ermal test Test group C Specification Tested number of positions	-5 °C 100 °C
Relative humidity (storage/transport) Ambient temperature (assembly) etrical tests ermal test Test group C Specification Tested number of positions r clearances and creepage distances	-5 °C 100 °C IEC 60512-5-1:2002-02 8
Relative humidity (storage/transport) Ambient temperature (assembly) etrical tests ermal test Test group C Specification Tested number of positions r clearances and creepage distances Specification	-5 °C 100 °C IEC 60512-5-1:2002-02
Relative humidity (storage/transport) Ambient temperature (assembly) etrical tests ermal test Test group C Specification Tested number of positions r clearances and creepage distances Specification Insulating material group	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04
Relative humidity (storage/transport) Ambient temperature (assembly) etrical tests ermal test Test group C Specification Tested number of positions r clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112)	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04 I CTI 600
Relative humidity (storage/transport) Ambient temperature (assembly) etrical tests ermal test Test group C Specification Tested number of positions r clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3)	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04 I CTI 600 32 V
Relative humidity (storage/transport) Ambient temperature (assembly) etrical tests fermal test Test group C Specification Tested number of positions r clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3)	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04 I CTI 600 32 V 1.5 kV
Relative humidity (storage/transport) Ambient temperature (assembly) etrical tests ermal test Test group C Specification Tested number of positions r clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3)	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04 I CTI 600 32 V 1.5 kV 0.8 mm
Relative humidity (storage/transport) Ambient temperature (assembly) strical tests termal test Test group C Specification Tested number of positions r clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/3)	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04 I CTI 600 32 V 1.5 kV 0.8 mm 1.3 mm
Relative humidity (storage/transport) Ambient temperature (assembly) strical tests termal test Test group C Specification Tested number of positions r clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/3) Rated insulation voltage (III/3)	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04 I CTI 600 32 V 1.5 kV 0.8 mm 1.3 mm 32 V
Relative humidity (storage/transport) Ambient temperature (assembly) strical tests termal test Test group C Specification Tested number of positions relearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum creepage distance (III/3) Rated insulation voltage (III/3) Rated insulation voltage (III/2) Rated surge voltage (III/2)	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04 I CTI 600 32 V 1.5 kV 0.8 mm 1.3 mm 32 V 1.5 kV
Relative humidity (storage/transport) Ambient temperature (assembly) strical tests fermal test Test group C Specification Tested number of positions r clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) minimum clearance value - non-homogenous field (III/3) Rated insulation voltage (III/2) Rated surge voltage (III/2) Rated surge voltage (III/2) Rated surge voltage (III/2) minimum clearance value - non-homogenous field (III/2)	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04 I CTI 600 32 V 1.5 kV 0.8 mm 1.3 mm 32 V 1.5 kV 0.5 mm
Relative humidity (storage/transport) Ambient temperature (assembly) Strical tests Bermal test Test group C Specification Tested number of positions Telearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3) Rated insulation voltage (III/2) Rated surge voltage (III/2) Rated surge voltage (III/2) minimum clearance value - non-homogenous field (III/2) minimum clearance value - non-homogenous field (III/2) minimum creepage distance (III/2) minimum creepage distance (III/2)	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04 I CTI 600 32 V 1.5 kV 0.8 mm 1.3 mm 32 V 1.5 kV 0.5 mm 0.53 mm
Relative humidity (storage/transport) Ambient temperature (assembly) strical tests fermal test Test group C Specification Tested number of positions r clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/2) Rated surge voltage (III/2) Rated surge voltage (III/2) minimum clearance value - non-homogenous field (III/2) minimum creepage distance (III/2) Rated insulation voltage (III/2) Rated insulation voltage (III/2) Rated insulation voltage (III/2)	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04 I CTI 600 32 V 1.5 kV 0.8 mm 1.3 mm 32 V 1.5 kV 0.5 mm 0.53 mm 32 V
Relative humidity (storage/transport) Ambient temperature (assembly) ctrical tests dermal test Test group C Specification Tested number of positions r clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/2) Rated surge voltage (III/2) minimum creepage distance (III/2) minimum creepage distance (III/2) Rated insulation voltage (III/2) Rated surge voltage (III/2)	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04 I CTI 600 32 V 1.5 kV 0.8 mm 1.3 mm 32 V 1.5 kV 0.5 mm 0.53 mm 32 V 1.5 kV
Relative humidity (storage/transport) Ambient temperature (assembly) strical tests fermal test Test group C Specification Tested number of positions r clearances and creepage distances Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3) minimum clearance value - non-homogenous field (III/3) minimum creepage distance (III/2) Rated surge voltage (III/2) Rated surge voltage (III/2) minimum clearance value - non-homogenous field (III/2) minimum creepage distance (III/2) Rated insulation voltage (III/2) Rated insulation voltage (III/2) Rated insulation voltage (III/2)	-5 °C 100 °C IEC 60512-5-1:2002-02 8 IEC 60664-1:2007-04 I CTI 600 32 V 1.5 kV 0.8 mm 1.3 mm 32 V 1.5 kV 0.5 mm 0.53 mm 32 V

DIN 50018:2013-05



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Packaging specifications

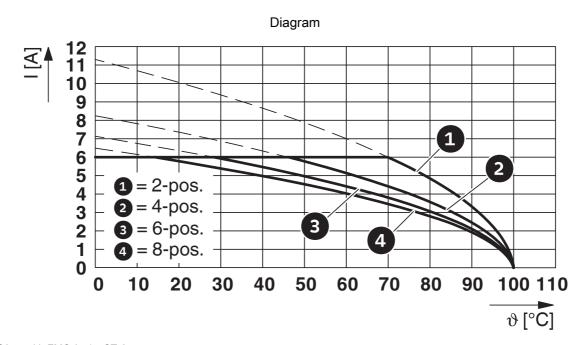
Type of packaging	packed in cardboard
Outer packaging type	Carton



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Drawings



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



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2202399

cUL Recog Approval ID: E	cUL Recognized Approval ID: E118976-20151204			
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
Power	29.9 V	4 A	-	-
Signal	29.9 V	4 A	-	-

UL Recognized Approval ID: E118976	UL Recognized Approval ID: E118976-20151204			
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
Power	29.9 V	6 A	-	-
Signal	29.9 V	4 A	-	-

	VDE approval of drawings Approval ID: 40050612			
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
Power	32 V	6 A	-	-
Signal	32 V	4 A	-	-



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Classifications

ECLASS

	ECLASS-13.0	27460201	
	ECLASS-15.0	27460201	
ETIM			
	ETIM 9.0	EC002637	
UNSPSC			
	UNSPSC 21.0	39121400	



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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%

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