

HBUS 161,6-16P-1S BK - DIN rail bus connectors



2278555

<https://www.phoenixcontact.com/us/products/2278555>

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DIN rail connector, color: black, nominal current: 3 A (Total current of 25 A max.), rated voltage (III/2): 30 V, number of positions: 16, pitch: 2.54 mm, mounting: DIN rail mounting, locking: without

Your advantages

- Space-saving installation under the housing in the DIN rail
- Fast module-to-module communication without additional wiring effort
- One DIN rail connector for each overall width

Commercial data

Item number	2278555
Packing unit	1 pc
Minimum order quantity	10 pc
Sales key	AC10
Product key	ACHBBA
Catalog page	Page 702 (C-1-2013)
GTIN	4046356299442
Weight per piece (including packing)	42.32 g
Weight per piece (excluding packing)	39.8 g
Customs tariff number	85366990
Country of origin	DE

Technical data

Product properties

Product type	DIN rail connector
Product family	HBUS16
Number of positions	16
Pitch	2.54 mm

Electrical properties

Nominal current I_N	3 A (Total current of 25 A max.)
Degree of pollution	3
Contact resistance	23.9 mΩ
Rated voltage (III/3)	30 V
Rated surge voltage (III/3)	0.8 kV
Rated voltage (III/2)	30 V
Rated surge voltage (III/2)	0.8 kV
Rated voltage (II/2)	100 V
Rated surge voltage (II/2)	0.8 kV

Connection data

Maximum load current	3 A (maximum total current 23 A)
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Dimensions

Pitch	2.54 mm
Width [w]	161.6 mm
Height [h]	13.6 mm
Length [l]	37.1 mm

Material specifications

Material data - contact

Contact material	Cu alloy
Surface characteristics	Completely gold-plated

Material data - housing

Color (Housing)	black (9005)
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
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CTI according to IEC 60112	600
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Electrical tests

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Rated insulation voltage (III/3)	30 V
Rated surge voltage (III/3)	0.8 kV
minimum clearance value - non-homogenous field (III/3)	0.8 mm
minimum creepage distance (III/3)	1.3 mm
Rated insulation voltage (III/2)	30 V
Rated surge voltage (III/2)	0.8 kV
minimum clearance value - non-homogenous field (III/2)	0.2 mm
minimum creepage distance (III/2)	0.53 mm
Rated insulation voltage (II/2)	100 V
Rated surge voltage (II/2)	0.8 kV
minimum clearance value - non-homogenous field (II/2)	0.2 mm
minimum creepage distance (II/2)	0.71 mm

Mechanical tests

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	0.15 mm (10 Hz ... 58.1 Hz)
Sweep speed	20 m/s ²
Test duration per axis	2.5 h

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	0.91 kV
Contact resistance R ₁	23.9 mΩ
Contact resistance R ₂	24 mΩ
Insertion/withdrawal cycles	25

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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	0.55 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	150 m/s ²
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)	80 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Mounting

Mounting type	DIN rail mounting
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Packaging specifications

Outer packaging type	Carton
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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2278555>



EAC
Approval ID: B.01687

	cULus Recognized Approval ID: E118976-20090923			
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	30 V	2 A	-	-

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Classifications

ECLASS

ECLASS-11.0	27460202
ECLASS-12.0	27460202
ECLASS-13.0	27460202

ETIM

ETIM 8.0	EC002638
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

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

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Mandatory accessories

PSTD 0,65X0,65/9-2,54 - Pin strip

2200700

<https://www.phoenixcontact.com/us/products/2200700>



Pin strip, color: black, contact connection type: Pin, number of potentials: 18, number of rows: 2, number of positions: 18, number of connections: 18, product range: PSTD 0,65X0,65/...-V, pitch: 2.54 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.5 mm, locking: without, type of packaging: packed in cardboard

Accessories

HBUS-B SET BK - Protective cap

2278173

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Set of 3 caps, for protecting unused DIN rail bus connectors, simply snap on to fit

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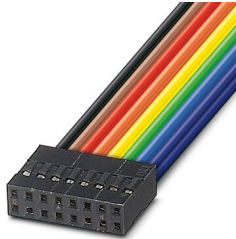
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BL2-2,54/16-ST - Power plug

1281276

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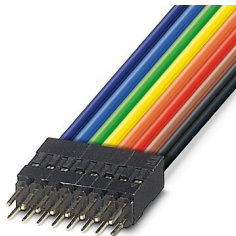


Power connector for DIN rail bus connector with 16 free cable ends with a cross section of 0.25 mm^2 , 500 mm long, female contacts

SL2-2,54/16-ST - Power plug

1281275

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Power connector for DIN rail bus connector with 16 free cable ends with a cross section of 0.25 mm^2 , 500 mm long, male contacts

HBUS 161,6-16P-1S BK - DIN rail bus connectors



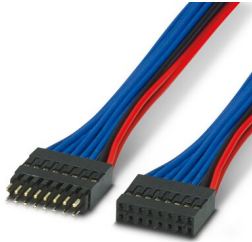
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BSL-2,54/16-ST 40CM - Cable set

1281278

<https://www.phoenixcontact.com/us/products/1281278>

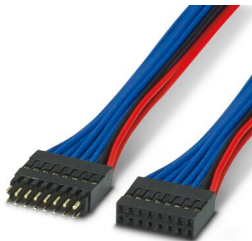


Cable bridge for cross-DIN-rail connection of the HBUS connector

BSL2-2,54/16-ST - Cable set

1281277

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Cable bridge for cross-DIN-rail connection of the HBUS connector

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