SB-8EPCA8A8L32S - Cable connector

1623332

https://www.phoenixcontact.com/us/products/1623332

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 documentation. Our general terms of use for downloads are valid.

CAT5

The figure shows the product with assembled crimp contacts. Please order crimp contacts separately.

Your advantages

- Transmission of signals, data, and power in just a single connector
- CAT5 data interface for up to 100 Mbps
- Reduced connection time with SPEEDCON fast locking system
- Mechanical coding reliably prevents incorrect connections
- Safe use in the field, thanks to high degree of protection
- Consistent EMC protection for reliable connection solutions in the industrial environment

Commercial data

Item number	1623332
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB33
Product key	ABRCEB
GTIN	4055626194165
Weight per piece (including packing)	455 g
Weight per piece (excluding packing)	374.812 g
Customs tariff number	85366990
Country of origin	DE

Technical data

Notes

Order information:	Crimp contacts, 4 x Ø 0.8 mm, 4 x Ø 1 mm, 5 x Ø 3.6 mm, order separately

Safety note

Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	• WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	• The products are suitable for applications in plant, controller, and electrical device engineering.
	• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.
	• Assembled products may not be manipulated or improperly opened.
	• Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).
	• When using the product in direct connection with third-party manufacturers, the user is responsible.
	• For operating voltages > 50 V AC, conductive connector housings must be grounded
	• VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector
	• Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product
	• Only use tools recommended by Phoenix Contact
	• The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.
	• Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
	• Operate the connector only when it is fully plugged in and interlocked.
	• Ensure that when laying the cable, the tensile load on the

	connectors does not exceed the upper limit specified in the standards.
	• Observe the minimum bending radius of the cable. Lay the cable without twisting it.
	• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).

Product properties

Product type	Circular connector (cable-side)

Electrical properties

Transmission speed	100 Mbps

Connector

Insulating body

Data rate	100 Mbps
Coding	CAT5, coding 1
Material (Insulating body)	PA 6.6
Insertion/withdrawal cycles	100
Connection method	Crimp connection
Contact switching type	Pin
Application	Hybrid
Number of positions	13
Connection profile	4+4+4+PE / 3+N+PE
Installation height	2000 m (4000 m at 300 V system voltage in accordance with DIN EN 606664-1)
Number (Power contacts)	5
Contact diameter (Power contacts)	3.6 mm
Litz wires Min. cross section (Power contacts)	2.5 mm²
Litz wires Max. cross section (Power contacts)	16 mm²
Rated current Contact (Power contacts)	70 A (for max. connection cross section)
Rated voltage Contact (Power contacts)	630 V AC (Overvoltage category III/3)
	850 V DC (Overvoltage category II/3)
Rated surge voltage	6 kV
Overvoltage category	III
Degree of pollution	3
Number (Data contacts)	4
Contact diameter (Data contacts)	0.8 mm
Litz wires Max. cross section (Data contacts)	0.5 mm²
Rated current Contact (Data contacts)	3.6 A (for max. connection cross section)
Rated voltage Contact (Data contacts)	50 V AC/DC (Contact 5 ... 8)
Rated surge voltage	1.5 kV
Overvoltage category	II, III
Degree of pollution	3

Number (Signal contacts)	4
Contact diameter (Signal contacts)	1 mm
Litz wires Max. cross section (Signal contacts)	1.5 mm²
Rated current Contact (Signal contacts)	8 A (for max. connection cross section)
Rated voltage Contact (Signal contacts)	500 V AC/DC (Contact 1 ... 4)
Rated surge voltage	6 kV
Overvoltage category	III
Degree of pollution	3

Housing

Type	Cable connector housing
Thread type	M40
Design	straight long
Type of locking	SPEEDCON
Pg screw connection	none
Material (Housing)	CuZn ()
	GD-Zn ()
Material (Screw connection)	CuZn
Degree of protection (plugged in)	IP68/IP69K

Seal

External cable diameter	9 mm ... 14 mm
Seal material	FKM

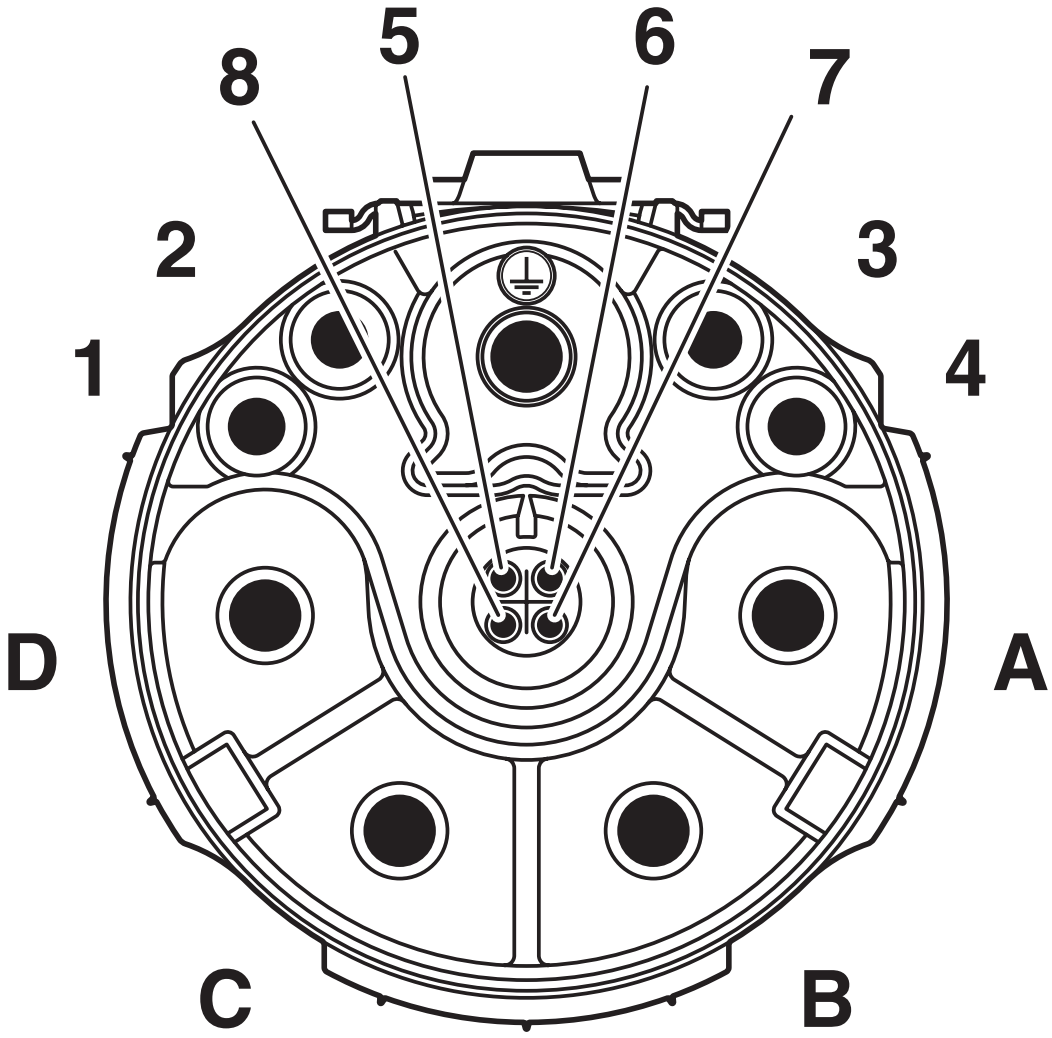
Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-40 °C ... 115 °C (see derating curve)

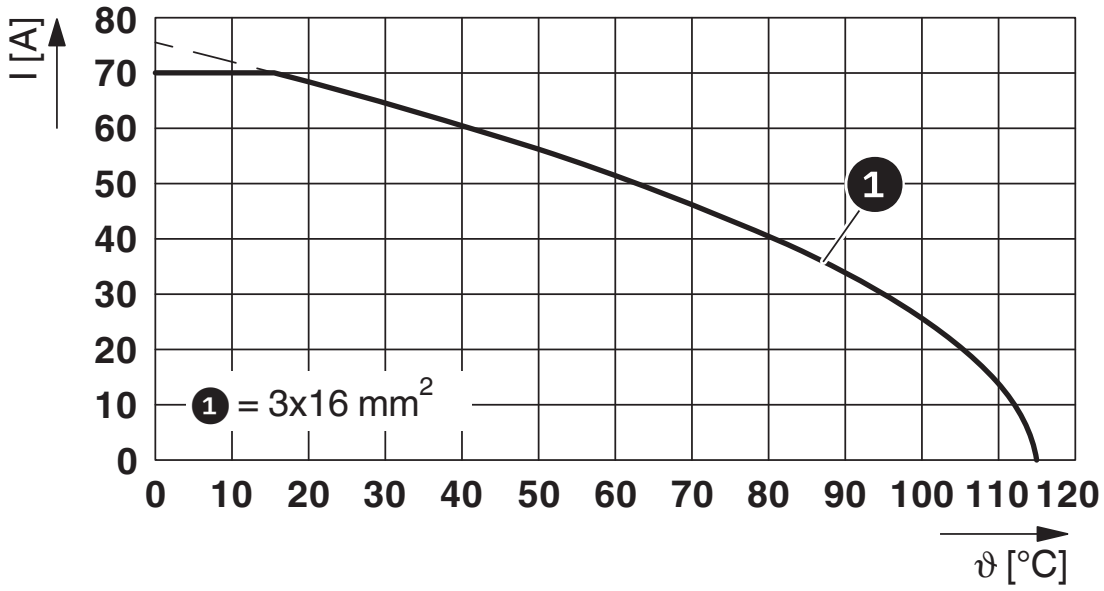
Drawings

Schematic diagram



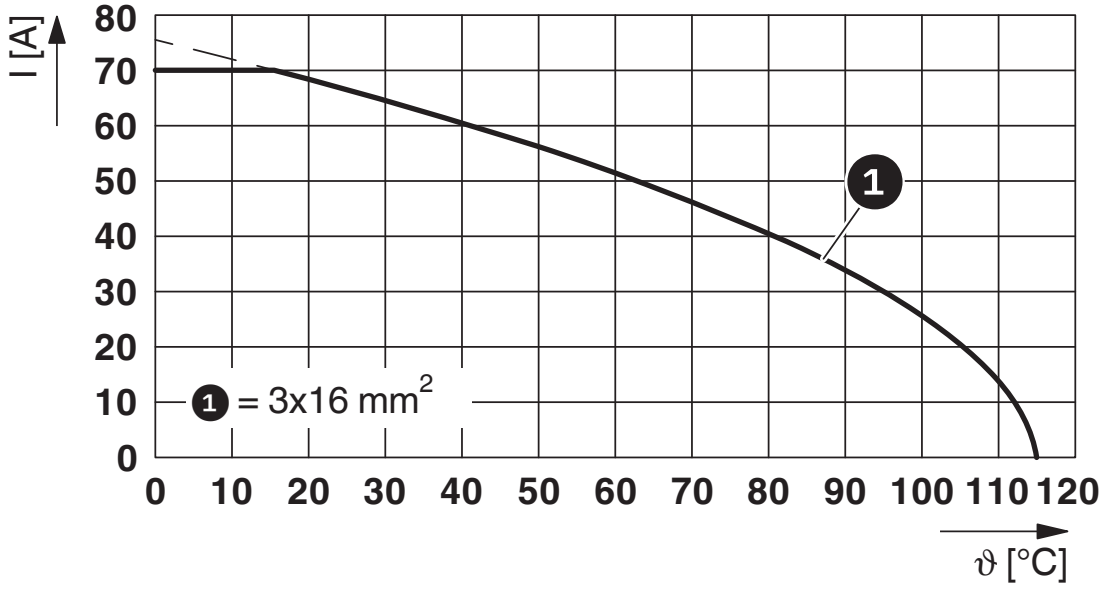
Pin assignment of pin CAT5, coding 1

Diagram

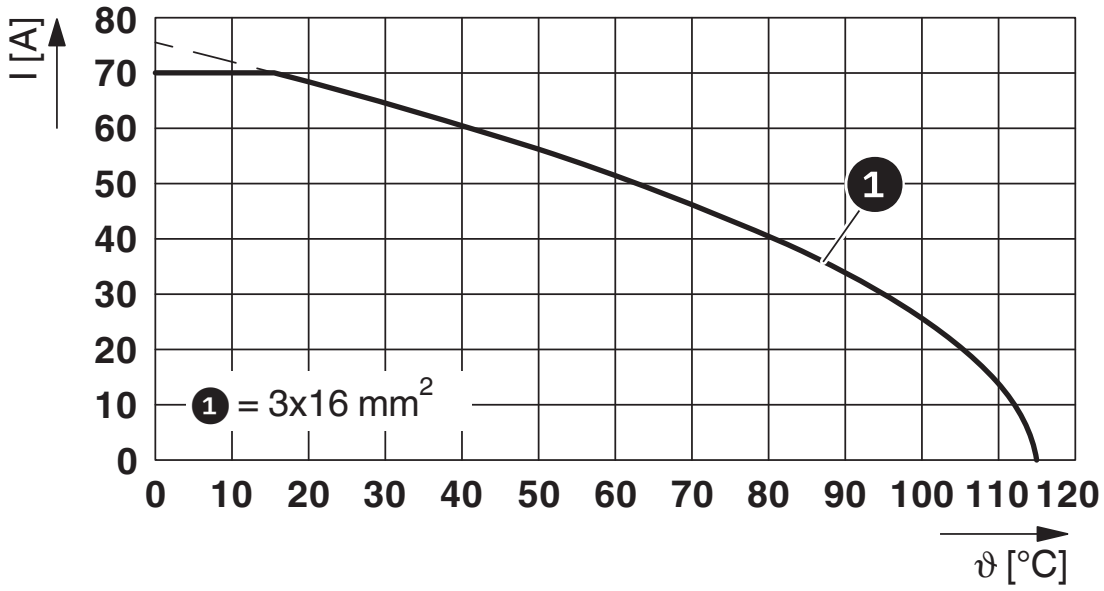


I = current strength, ϑ = ambient temperature, power contacts A–C: 3x up to 70 A, signal contacts: 4x 2 A constant, data contacts: no load

Diagram



Diagram


I [A]
80
70
60
50
40
30
20
10
0
1
1 = 3x16 mm²
0 10 20 30 40 50 60 70 80 90 100 110 120
ϑ [°C]

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1623332

cUL Recognized
Approval ID: E468743-20170914

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Power	600 V	42 A	- 6	-
Signal	500 V	4 A	- 16	-
Data	30 V	1 A	- 22	-

UL Recognized
Approval ID: E468743-20170914

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Power	600 V	50 A	- 6	-
Signal	500 V	4 A	- 16	-
Data	30 V	1 A	- 22	-

UL Recognized
Approval ID: E153698-20190718

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Power	600 V	70 A	-	-
Signal	500 V	4 A	-	-
Data	50 V	1 A	-	-

cUL Recognized
Approval ID: E153698-20190718

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Power	600 V	28 A	-	-
Signal	500 V	4 A	-	-
Data	50 V	1 A	-	-

Classifications

ECLASS

ECLASS-13.0	27440116
ECLASS-15.0	27440116

ETIM

ETIM 10.0	EC002635

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(b)

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	eff602e9-4475-482b-801f-51930bdffaa0

Phoenix Contact 2026 © - all rights reserved
https://www.phoenixcontact.com

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com