SB-8ESSD8A8L33S - Cable connector

1623687

https://www.phoenixcontact.com/us/products/1623687

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

M40, Cable connector, application: Hybrid, series: SB, straight long, shielded: yes, SPEEDCON, No. of pos.: 8+4+PE, contact connection type: Socket, Crimp connection, cable diameter range: 14 mm ... 20.5 mm, coding: Signal, coding 2, this item is expected to be lead-free from Q3 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

Your advantages

- All housing can be fitted with pin or socket contacts
- A total of eight contacts are available for signal transmission
- 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	1623687
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	AB33
Product key	ABRCEB
GTIN	4055626194080
Weight per piece (including packing)	370.147 g
Weight per piece (excluding packing)	370.147 g
Customs tariff number	85366990
Country of origin	DE

Technical data

Notes

Order information:	Crimp contacts, 8 x Ø 1 mm, 5 x Ø 3.6 mm, order separately

Product properties

Product type	Circular connector (cable-side)

Connector

Connection 1

Head design	Socket

Insulating body

Protection against electric shock	IEC 61984
Coding	Signal, coding 2
Connection method	Crimp connection
Contact switching type	Socket
Application	Hybrid
Number of positions	13
Connection profile	8+4+PE
Installation height	2000 m (4000 m at 300 V system voltage in accordance with DIN EN 606664-1)
Number (Contact group 1)	5
Contact diameter (Contact group 1)	3.6 mm
Litz wires Min. cross section (Contact group 1)	2.5 mm²
Litz wires Max. cross section (Contact group 1)	16 mm²
Rated current Contact (Contact group 1)	70 A (for max. connection cross section)
Rated voltage Contact (Contact group 1)	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 (Contact group 2)	4
Contact diameter (Contact group 2)	0.8 mm
Litz wires Max. cross section (Contact group 2)	0.5 mm²
Rated current Contact (Contact group 2)	8 A (for max. connection cross section)
Rated voltage Contact (Contact group 2)	50 V AC/DC (Contact 5 ... 8)
Rated surge voltage	1.5 kV
Overvoltage category	II, III
Degree of pollution	3
Number (Contact group 3)	4
Contact diameter (Contact group 3)	1 mm
Litz wires Max. cross section (Contact group 3)	1.5 mm²
Rated current Contact (Contact group 3)	8 A (for max. connection cross section)

Rated voltage Contact (Contact group 3)	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 (Rotating parts)
	GD-Zn (Die-cast parts)
Material (Screw connection)	CuZn
Degree of protection (plugged in)	IP68/IP69K

Seal

External cable diameter	14 mm ... 20.5 mm
Seal material	FKM

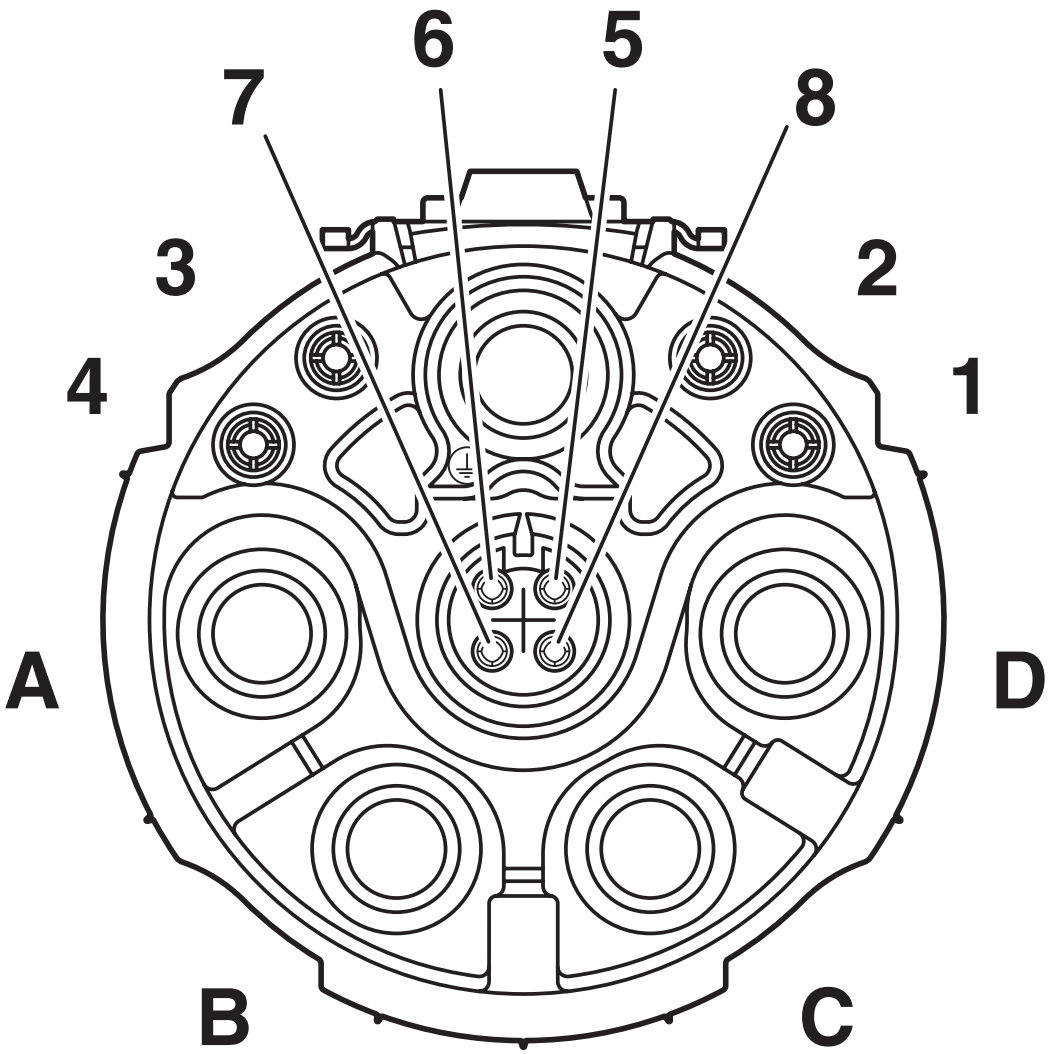
Environmental and real-life conditions

Ambient conditions

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

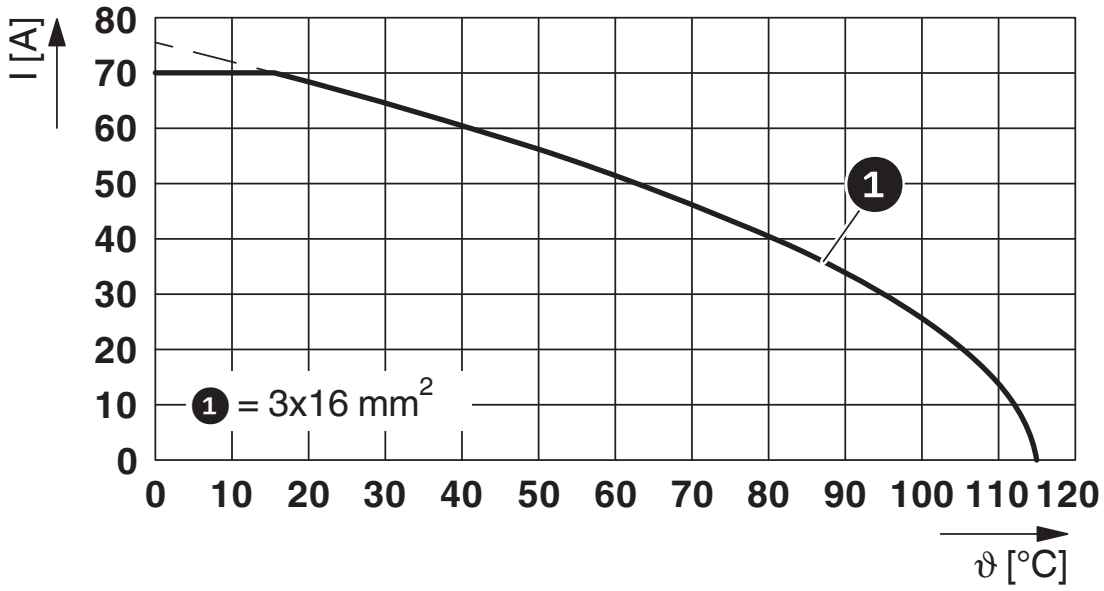
Drawings

Schematic diagram



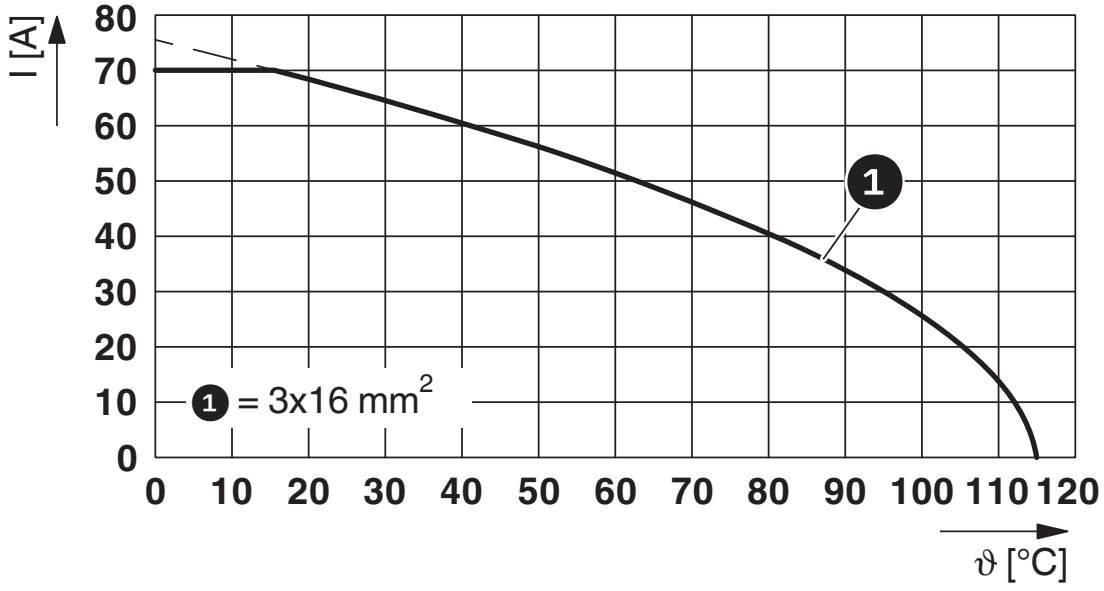
Pin assignment of socket signal, DC coding

Diagram

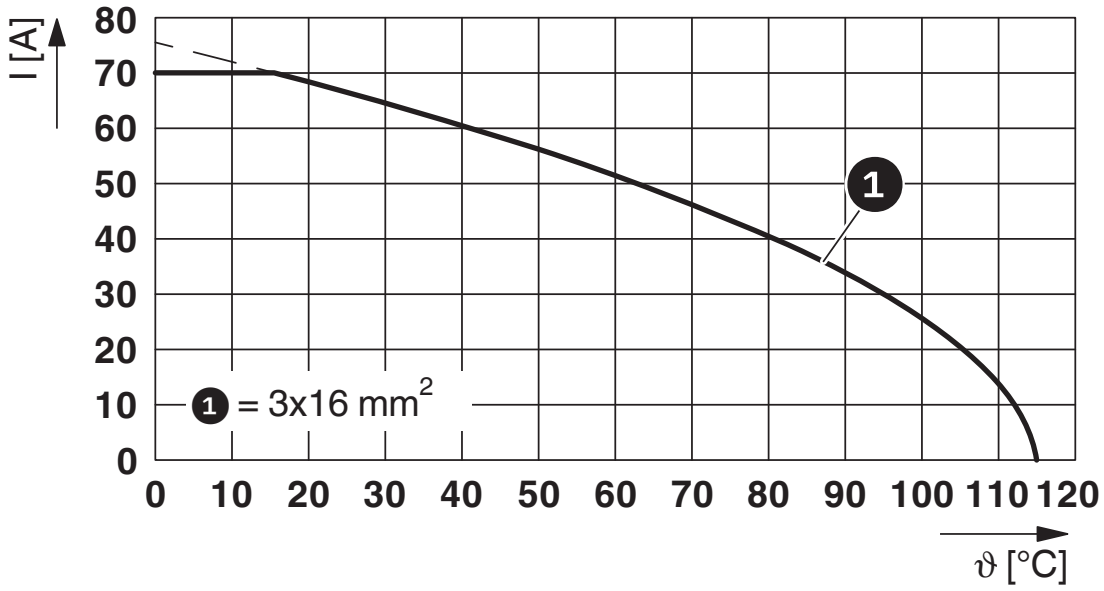


I = current strength, ϑ = ambient temperature, power contacts A–C: 3x up to 70 A, signal contacts: 4x 2 A constant, data contacts: no load

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/1623687

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	24 A	6	-
Signal	500 V	4 A	1,5	-
Data	50 V	1 A	0,34	-

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	32 A	6	-
Signal	500 V	4 A	1,5	-
Data	50 V	1 A	0,34	-

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	ee5f7756-ac12-47c8-ae3f-994369dc01e6

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