# SH-8EPC58A9LB1S - Coupler connector

1621553

https://www.phoenixcontact.com/us/products/1621553

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

M23, Coupler connector, application: Hybrid, series: SH, straight long, shielded: yes, for standard and SPEEDCON interlock, No. of pos.: 4+4+4+PE / 3+N+PE, CAT5, 100 Mbps, contact connection type: Pin, Crimp connection, cable diameter range: 14.5 mm ... 18 mm, Item is lead-free in accordance with RoHS II without Exemption 6c (Pb < 0.1 %)

## Your advantages

- Transmission of signals, data, and power in just a single connector
- CAT5 data interface for up to 100 Mbps
- 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 | 1621553 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | AB33 |
| Product key | ABRCDG |
| GTIN | 4046356937016 |
| Weight per piece (including packing) | 117.8 g |
| Weight per piece (excluding packing) | 100.964 g |
| Customs tariff number | 85366990 |
| Country of origin | DE |

# Technical data

## Notes

| | |
|---|---|
| Order information: | Crimp contacts, 4x Ø 0.8 mm, 4x Ø 1 mm, 5x Ø 2 mm, order separately |
| Order information: | Recommended hybrid cable:<br>(5 x 2.5 mm² + 2 x (2 x 0.5 mm²) + (4 x 0.34 mm²) C) C<br>Lynxeo, order number 10572415<br><br>Recommended hybrid cable:<br>(4 x 1.5 mm² + (4 x 0.34 mm² C) + (2 x 0.75 mm²) + (2 x 0.50 mm²)) C<br>Lynxeo, order number 10580074 |

Safety note

| | |
|---|---|
| Safety note | • 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. |

## Product properties

| | |
|---|---|
| Product type | Circular connector (cable-side) |
| Application | Hybrid |
| Thread type | M23 |

## Connection data

Conductor connection

| | |
|---|---|
| Connection method | Crimp connection |

## Electrical properties

| | |
|---|---|
| Transmission speed | 100 Mbps |

## Mechanical properties

Mechanical data

| | |
|---|---|
| Insertion/withdrawal cycles | 100 |

## Connector

Connection 1

| | |
|---|---|
| Head design | Plug |
| Head cable outlet | straight |

Insulating body

| | |
|---|---|
| Note | Order information: Crimp contacts, 4x Ø 0.8 mm, 4x Ø 1 mm, 5x Ø 2 mm, order separately |
| Protection against electric shock | IEC 61984 and VDE 0623 |
| Data rate | 100 Mbps |
| Material (Insulating body) | PA 6.6 |

| | |
|---|---|
| Flammability rating according to UL 94 | V0 |
| 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 |
| Diameter (Litz wire outer diameter / Power contacts) | max. 4.15 mm (Outer cable sheath) |
| Contact diameter (Power contacts) | 2 mm |
| Litz wires Min. cross section (Power contacts) | 0.25 mm² |
| Litz wires Max. cross section (Power contacts) | 4 mm² |
| Rated current Contact (Power contacts) | 30 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 |
| Degree of pollution | 3 |
| Number (Data contacts) | 4 |
| Diameter (External cable diameter / Data contacts) | max. 1.55 mm (Outer cable sheath) |
| 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 |
| Diameter (External cable diameter / Signal contacts) | max. 2.1 mm (Outer cable sheath) |
| Contact diameter (Signal contacts) | 1 mm |
| Litz wires Max. cross section (Signal contacts) | 1 mm² |
| Rated current Contact (Signal contacts) | 8 A (for max. connection cross section) |
| Rated voltage Contact (Signal contacts) | 50 V AC/DC (Contact 1 ... 4) |
| Rated surge voltage | 1.5 kV |
| Overvoltage category | III |
| Degree of pollution | 3 |

Housing

| | |
|---|---|
| Note | The suitability for assembly must be checked when fully assigned with maximum wire cross sections. |
| Type | Coupling housing |
| Thread type | M23 |
| Design | straight long |
| Type of locking | for standard and SPEEDCON interlock |

| | |
|---|---|
| Pg screw connection | none |
| Material (Housing) | CuZn (Rotating parts) |
| | GD-Zn (Die-cast parts) |
| Material (Screw connection) | CuZn |
| Degree of protection (plugged in) | IP67 |
| | IP68 |

Seal

| | |
|---|---|
| External cable diameter | 14.5 mm ... 18 mm |

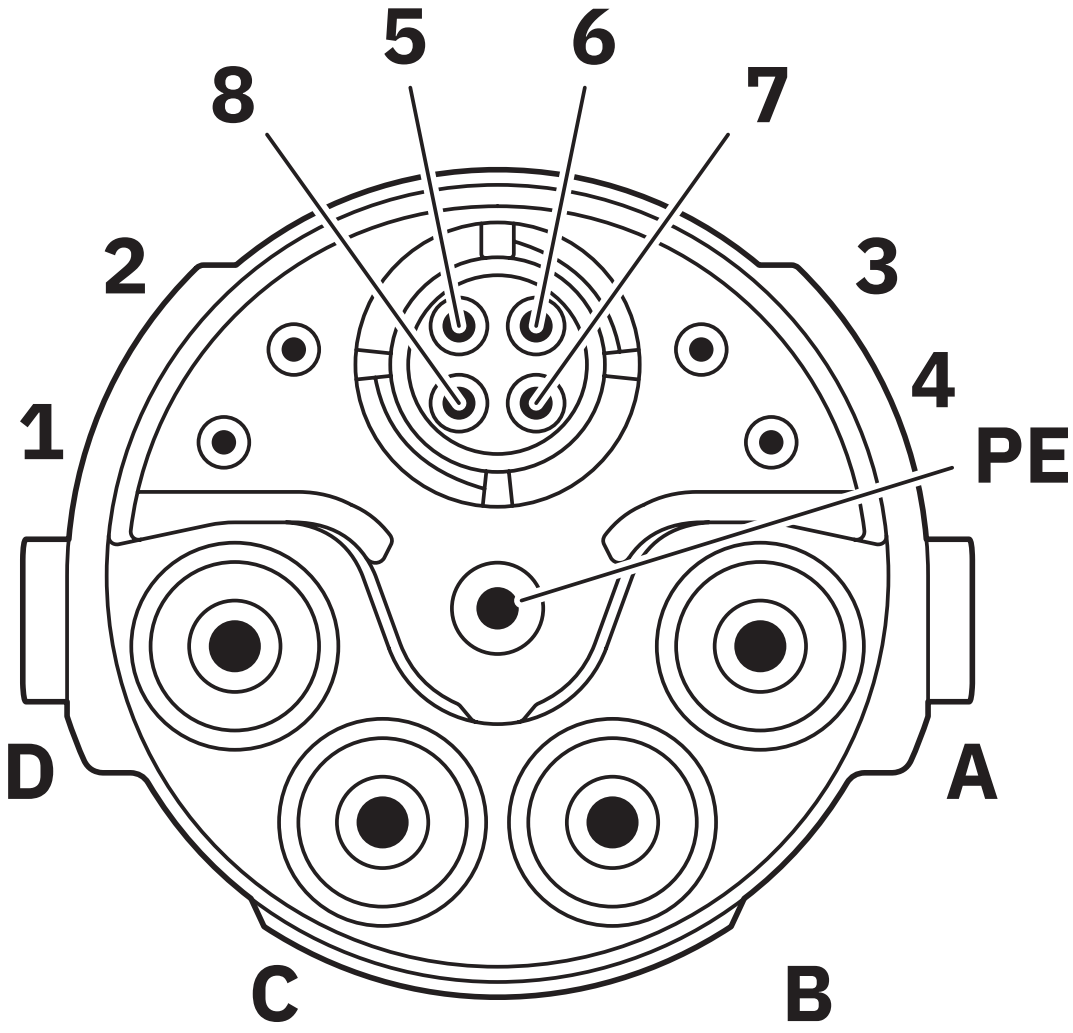
## Environmental and real-life conditions

Ambient conditions

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

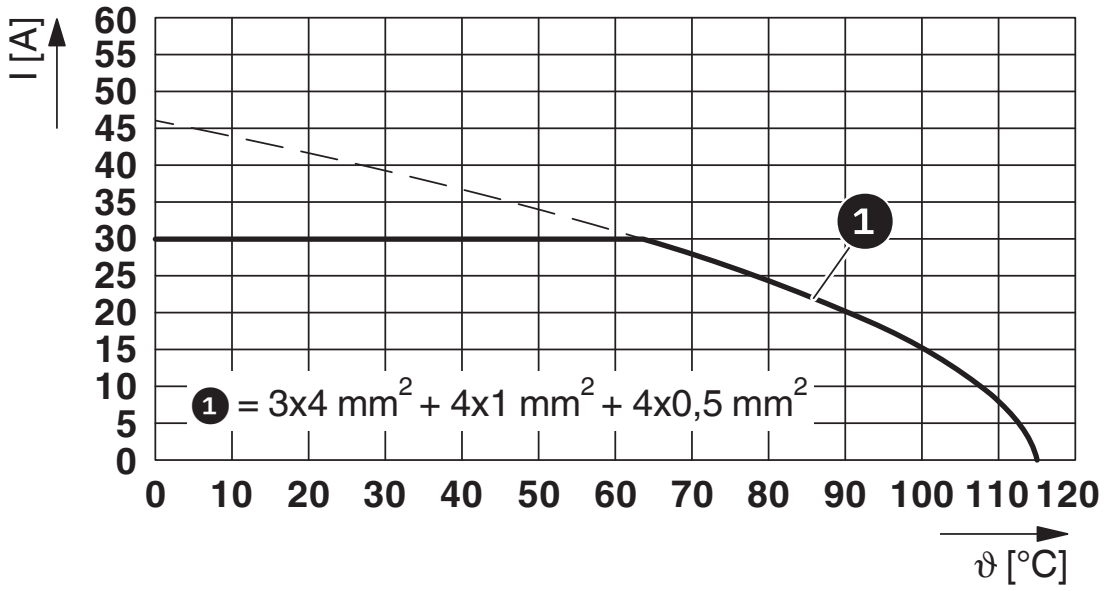
## Drawings

Schematic diagram




Pin assignment of pin, CAT5

Diagram




I = current strength, ϑ = ambient temperature, power contacts A-C: 3 x up to 30 A, signal contacts: 4 x 2 A constant, data contacts: 4 x 1 A constant

## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1621553

**cUL Recognized**
Approval ID: E153698-20181206

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| keine | | | | |
| Power | 600 V | 21.4 A | 12 | - |
| Control | 50 V | 4 A | 18 | - |

**UL Recognized**
Approval ID: E153698-20181206

| | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $mm^2$ |
|---|---|---|---|---|
| keine | | | | |
| Power | 600 V | 24 A | 12 | - |
| Control | 50 V | 4 A | 18 | - |

## 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

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