SH-8EPC5-PCB-H2-L4-S-V3 - PCB hybrid connector

1840871

https://www.phoenixcontact.com/us/products/1840871

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CAT5



Figure shows fully assembled variant

M23, PCB hybrid connector, application: Hybrid, series: SH, straight, shielded: yes, for standard and SPEEDCON interlock, No. of pos.: 4+2+4+PE / 3+N+PE, CAT5, 100 Mbps, contact connection type: Pin, Wave soldering. partial assembly

Your advantages

- Reliable transmission of signals, data, and power in a single connector
- 80% faster assembly and 60% less installation space compared to litz wire assemblies
- Cost reduction due to the elimination of additional PCB connectors
- Reduction of PCB complexity and EMC risks
- Elimination of work steps with high error potential

Commercial data

Item number	1840871
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	AB36
Product key	ABRCDX
GTIN	4067923484856
Weight per piece (including packing)	83.85 g
Weight per piece (excluding packing)	82.5 g
Customs tariff number	85366990
Country of origin	DE

Set consists of

SH-8EPC5-PCB-L4-ABCD-PE-12 - Contact insert

1835953

https://www.phoenixcontact.com/us/products/1835953



Contact insert, straight, M23, number of positions: 4+2+4+PE / 3+N+PE, contact connection type: Pin, Wave soldering, series: SH, partially assembled, only suitable for use with the M23 hybrid solder-in connector

SH-0000000H200S - Housing for circular connector

1555725

https://www.phoenixcontact.com/us/products/1555725



Housing for M23 Hybrid wave soldering

SH-FLAT-SEAL-0,5 - Flat gasket

1692442

https://www.phoenixcontact.com/us/products/1692442

Sealing ring for M23 hybrid PCB



SH-NUT-M26X1-GLUE - Flat nut

1555723

https://www.phoenixcontact.com/us/products/1555723

Flat nut M26 x 1 with screw locking mechanism



SH-00000-PCB-EXTENDER - Assembly clip

1555726

https://www.phoenixcontact.com/us/products/1555726



Extender to ensure air clearances and creepage distances, only suitable for use in M23 Hybrid

Technical data

Product properties

Product type	Circular connectors (device side)
Series	SH
Thread type	M23

Electrical properties

Transmission speed	100 Mbps

Connector

Insulating body

Protection against electric shock	IEC 61984 and VDE 0623
Material (Insulating body)	PA
Material (Contact)	CuZn
Material (Contact surface)	Au
Flammability rating according to UL 94	V0
Insertion/withdrawal cycles	100
Connection method	Wave soldering
Contact switching type	Pin
Application	Hybrid
Number of positions	11
Connection profile	4+2+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)	2 mm
Rated current Contact (Power contacts)	30 A (for max. connection cross section)
Rated voltage Contact (Power contacts)	630 V AC (Overvoltage category III/3)
	800 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
Rated current Contact (Data contacts)	3.6 A (for max. connection cross section)
Rated voltage Contact (Data contacts)	50 V (Contact 5 ... 8)
Rated surge voltage	1.5 kV
Overvoltage category	II, III
Degree of pollution	3
Number (Signal contacts)	2
Diameter (External cable diameter / Signal contacts)	max. 2.1 mm
Contact diameter (Signal contacts)	1 mm

Rated current Contact (Signal contacts)	8 A (for max. connection cross section)
Rated voltage Contact (Signal contacts)	50 V (Contact 1 and 2)
Rated surge voltage	1.5 kV
Overvoltage category	III
Degree of pollution	3

Housing

Order information:	only to be used with item number 1524754 or 1835953
Thread type	M23
Design	straight
Type of locking	for standard and SPEEDCON interlock
Mounting type	Rear wall/screw mounting (M26 x 1)
Assembly note	Central fastening
Material (Housing)	GD-Zn
Material (Housing surface)	Ni
Material (Seal)	FKM

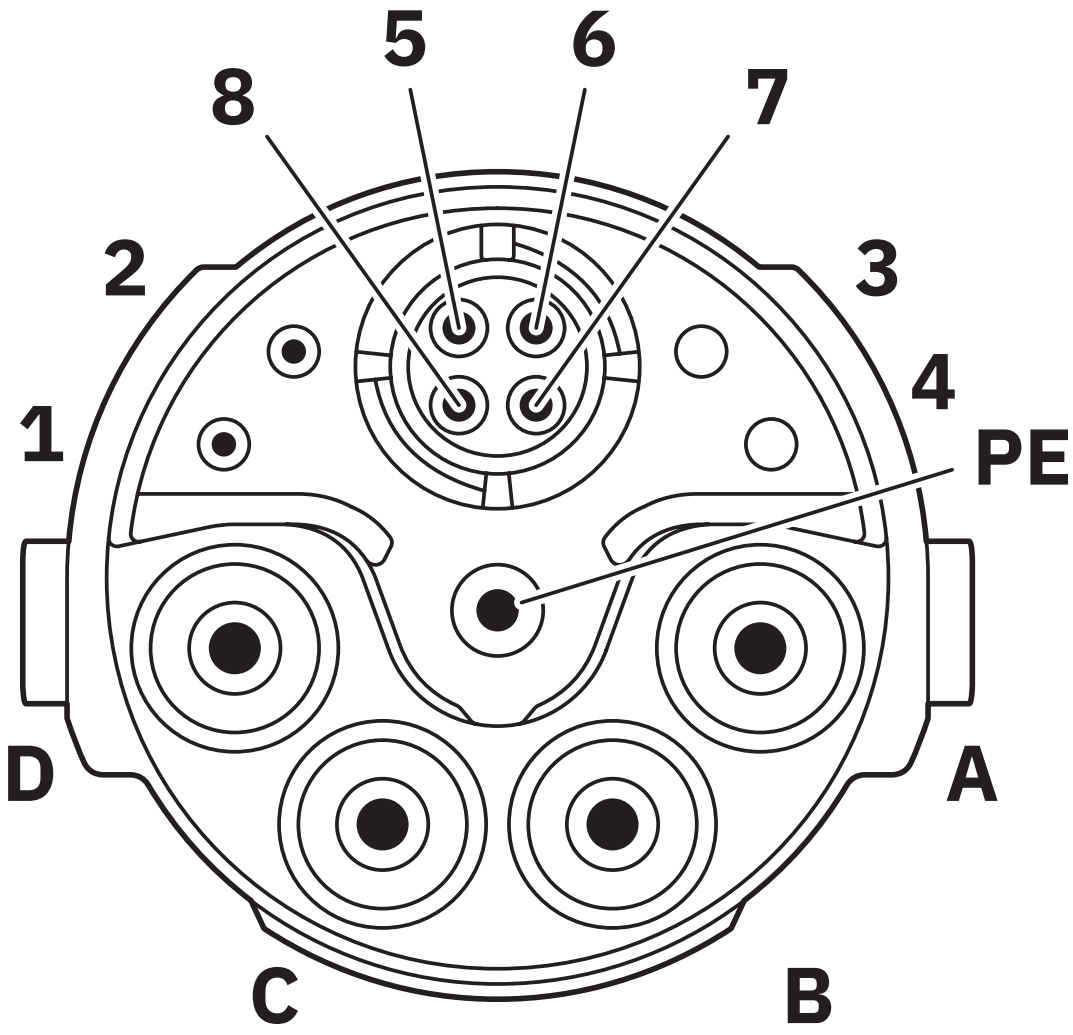
Environmental and real-life conditions

Ambient conditions

Degree of protection	IP66
	IP67
	IP68 (2 m / 24 h)
Ambient temperature (operation)	-40 °C ... 115 °C (see derating curve)

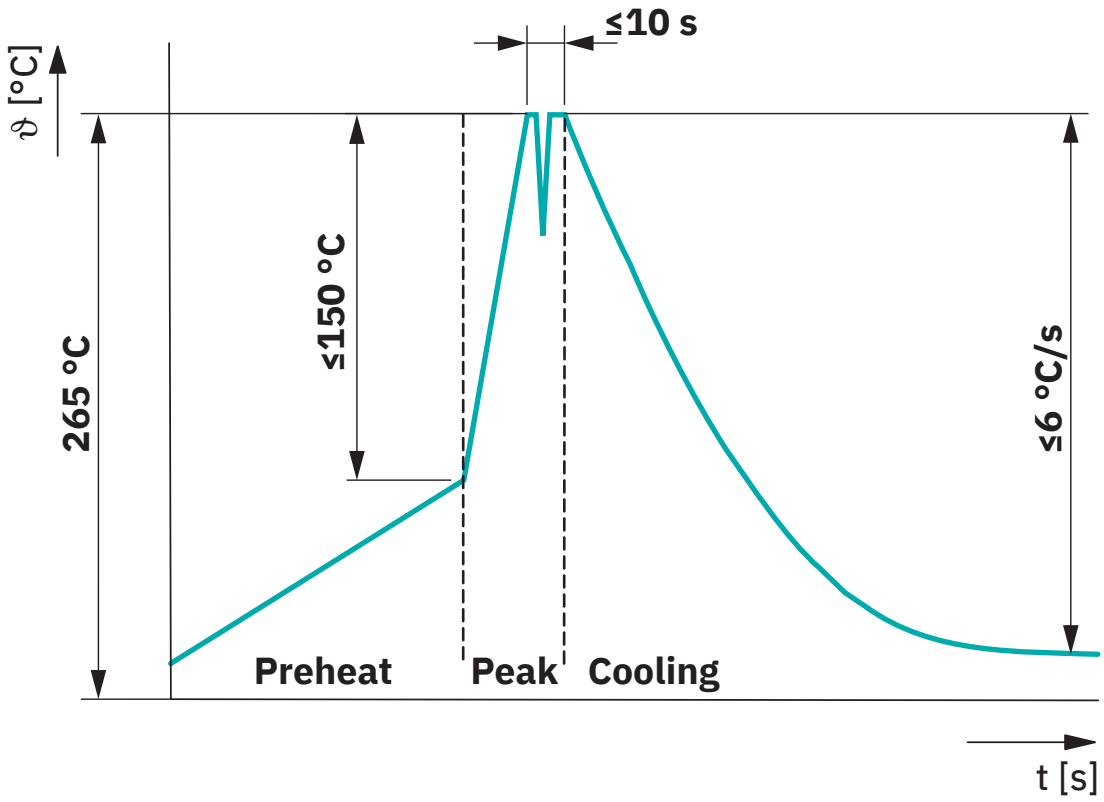
Drawings

Schematic diagram



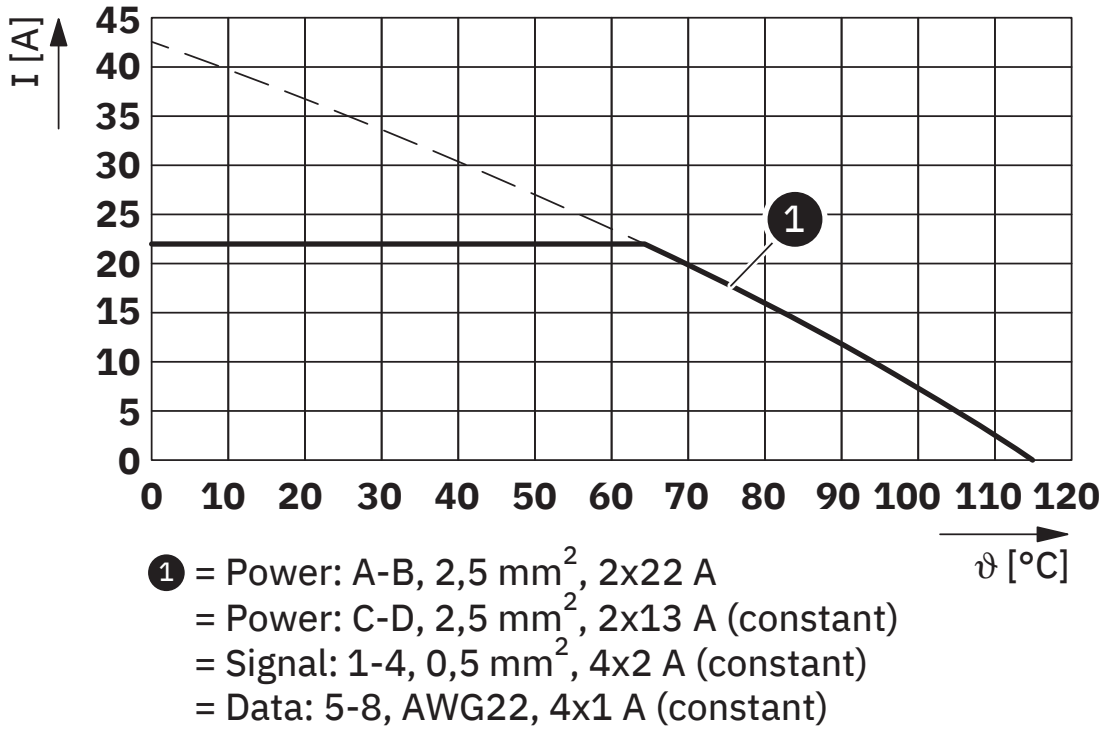
Pin assignment CAT5 pin, partially assembled

Diagram



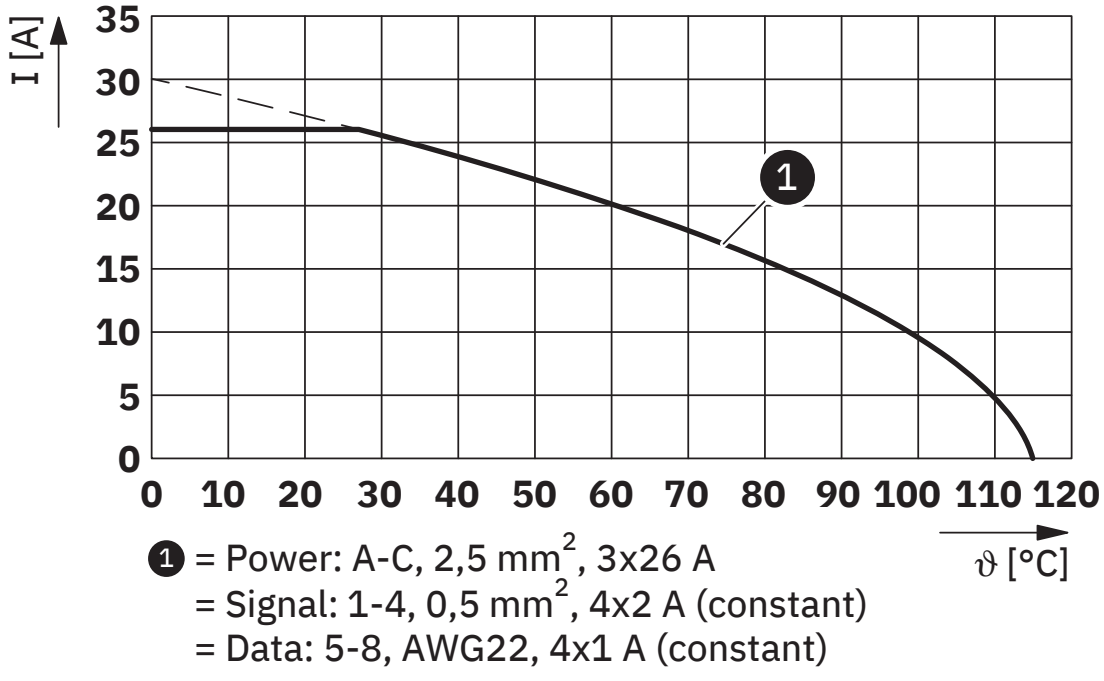
Classification wave soldering profile

Diagram



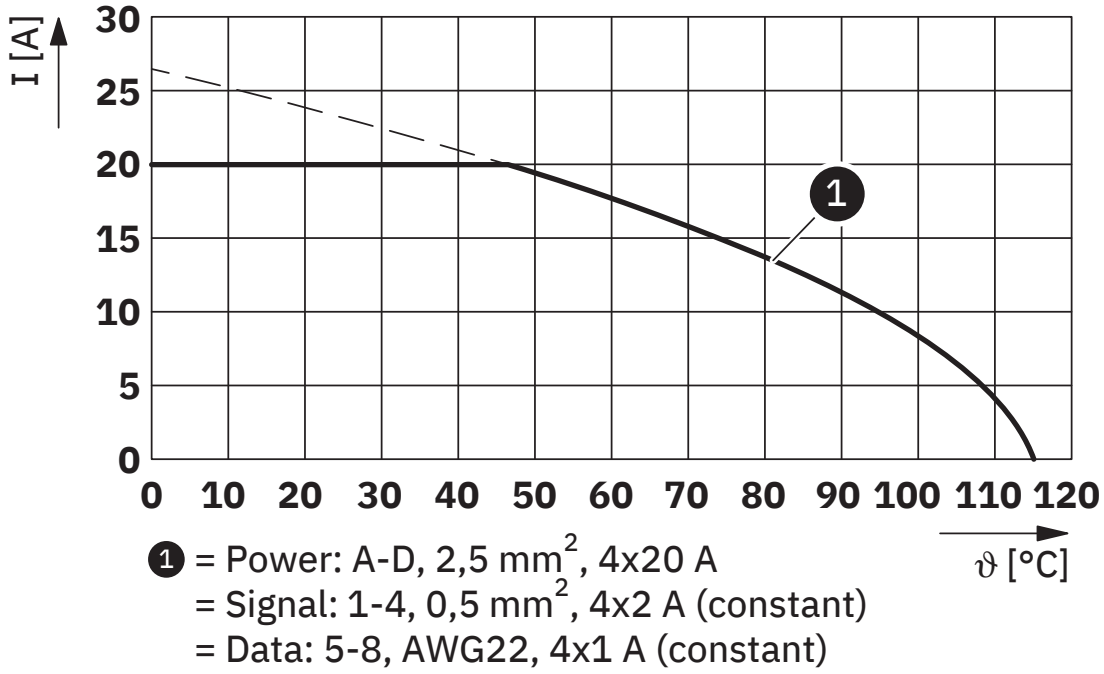
I = current strength, ϑ = ambient temperature, power contacts A-B: 2.5 mm², 2 x 22 A, power contacts C-D: 2.5 mm², 2 x 13 A (constant), signal contacts 1-4: 0.5 mm², 4 x 2 A (constant), data contacts 5-8: AWG22, 4 x 1 A (constant)

Diagram



I = current strength, ϑ = ambient temperature, power contacts A-C: 2.5 mm², 3 x 36 A, signal contacts 1-4: 0.5 mm², 4 x 2 A (constant), data contacts 5-8: AWG22, 4 x 1 A (constant)

Diagram



I = current strength, ϑ = ambient temperature, power contacts A-D: 2.5 mm², 4 x 20 A, signal contacts 1-4: 0.5 mm², 4 x 2 A (constant), data contacts 5-8: AWG22, 4 x 1 A (constant)

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1840871

cULus Recognized
Approval ID: E468743

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

Classifications

ECLASS

ECLASS-13.0	27440110
ECLASS-15.0	27440110

ETIM

ETIM 10.0	EC003568

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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