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

1835953

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

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Figure shows fully assembled variant

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

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	1835953
Packing unit	48 pc
Minimum order quantity	48 pc
Sales key	AB38
Product key	ABRCDX
GTIN	4067923477490
Weight per piece (including packing)	29.99 g
Weight per piece (excluding packing)	29.99 g
Customs tariff number	85366990
Country of origin	DE

Technical data

Product properties

Product type	Contact insert
Series	SH
Application	Hybrid
Number of positions	11
Connection profile	4+2+4+PE / 3+N+PE
Thread type	M23

Electrical properties

Contact: Power contacts

Contact diameter	2 mm
Nominal current I_N	30 A (for max. connection cross section)
Nominal voltage U_N	630 V AC (Overvoltage category III/3)
	800 V DC (Overvoltage category II/3)
Overvoltage category	III
Degree of pollution	3
Rated surge voltage	6 kV

Contact: Data contacts

Contact diameter	0.8 mm
Nominal current I_N	3.6 A (for max. connection cross section)
Nominal voltage U_N	50 V (Contact 5 ... 8)
Overvoltage category	II, III
Degree of pollution	3
Rated surge voltage	1.5 kV

Contact: Signal contacts

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

Connection data

Connection method	Wave soldering

Material specifications

Material Insulating body	PA
Material Contact	CuZn
Material Contact surface	Au
Flammability rating according to UL 94	V0

Connector

Type	straight

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	100

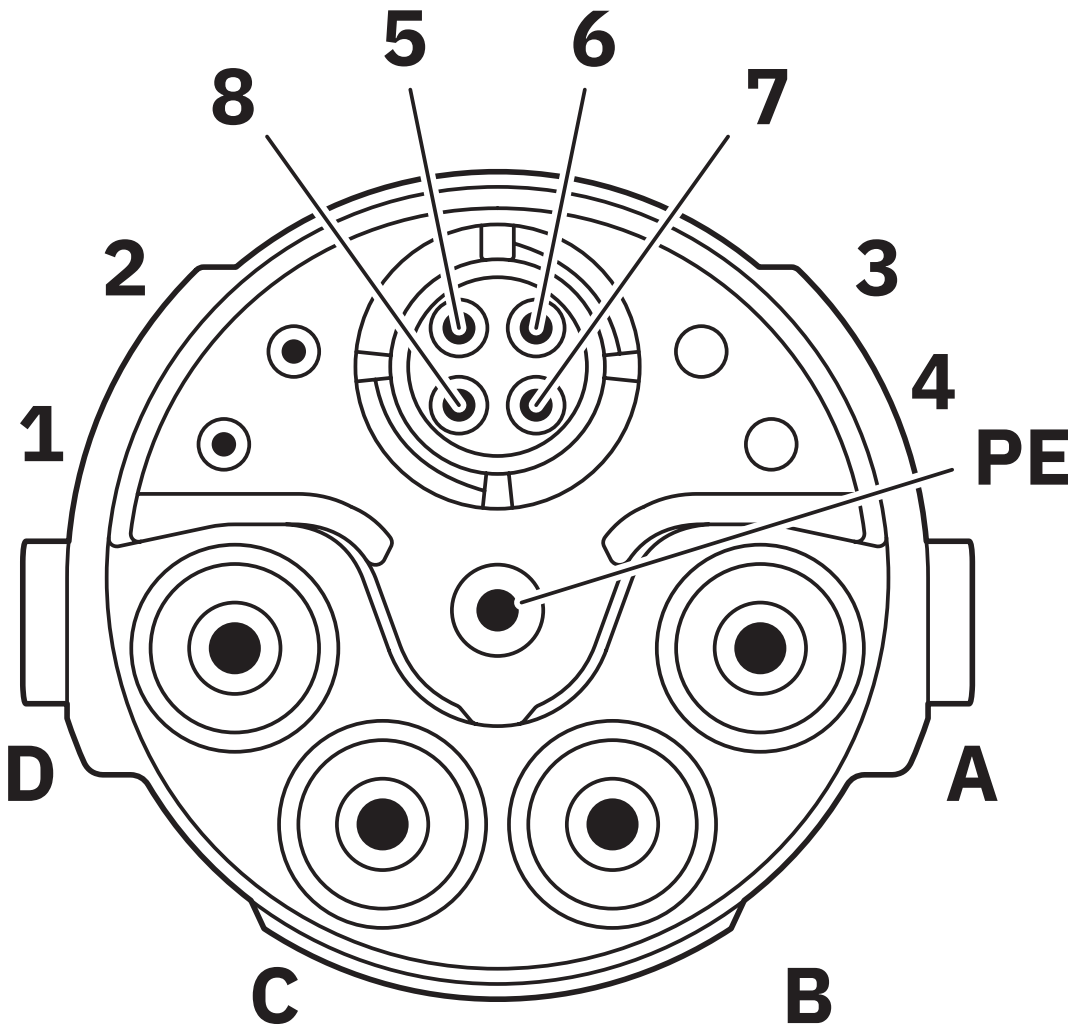
Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-40 °C ... 115 °C (see derating curve)
Altitude	2000 m (4000 m at 300 V system voltage in accordance with DIN EN 606664-1)

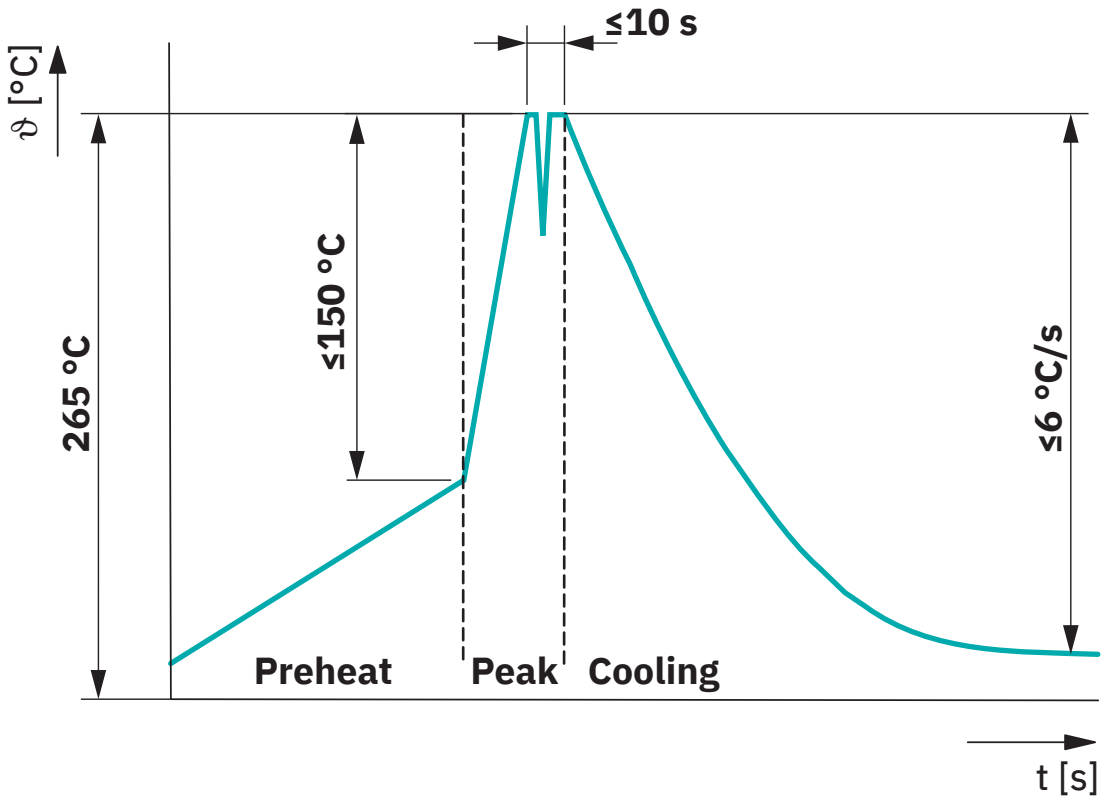
Drawings

Schematic diagram



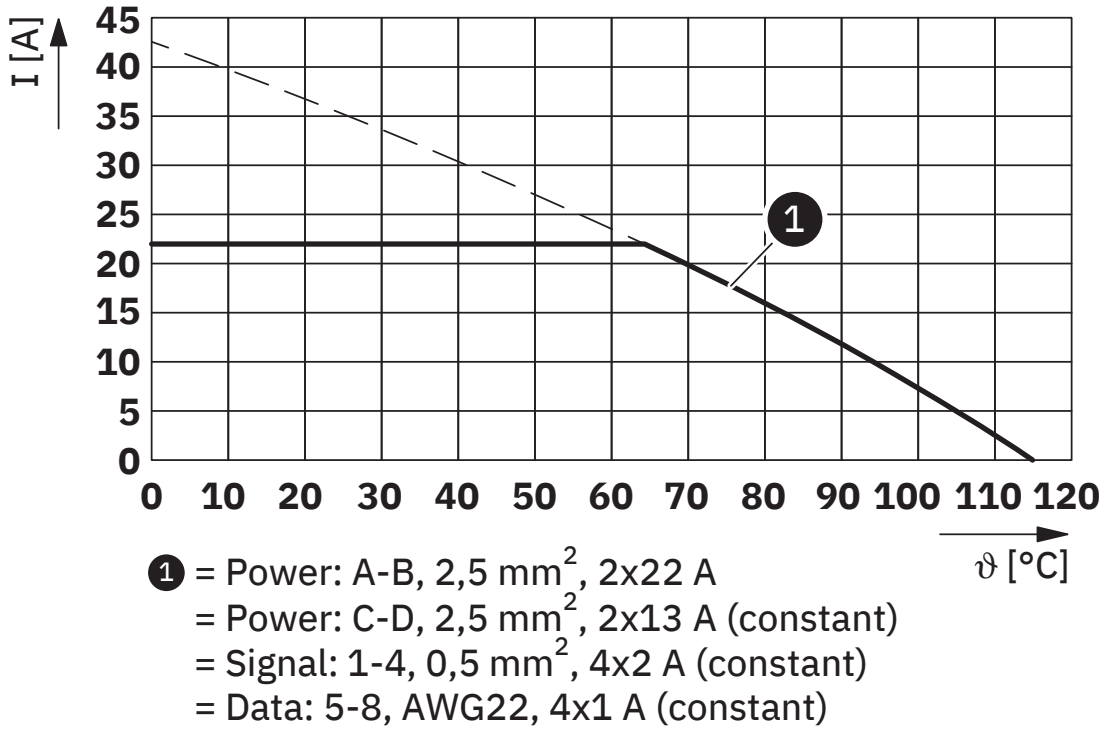
Pin assignment CAT5 pin, partially assembled

Diagram



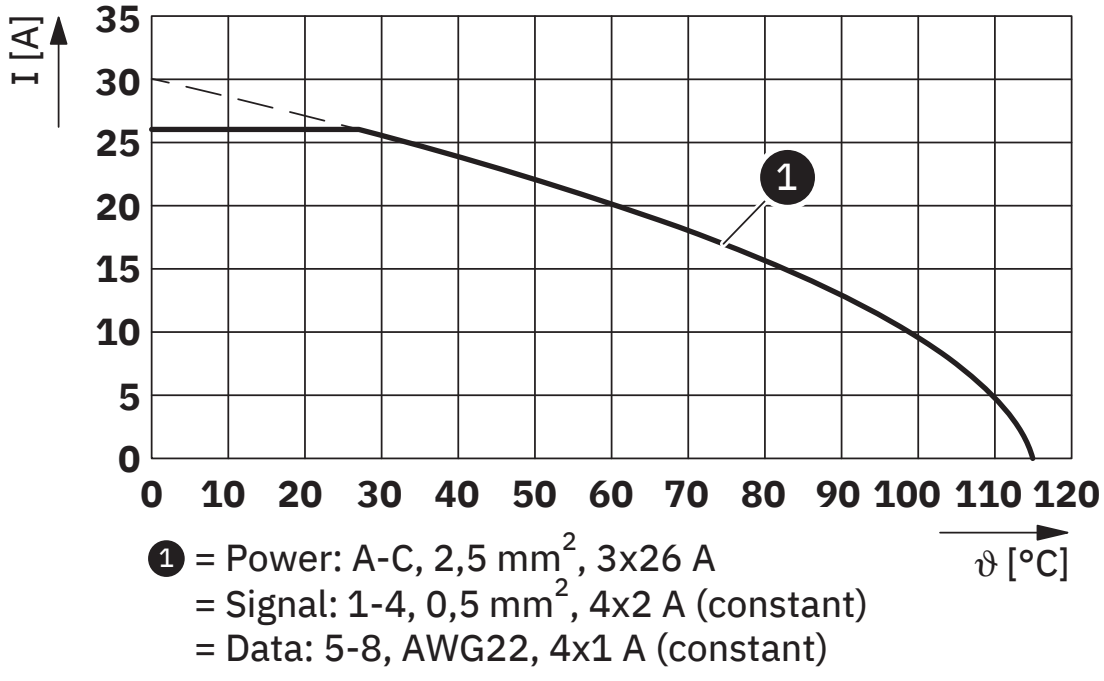
Classification wave soldering profile

Diagram



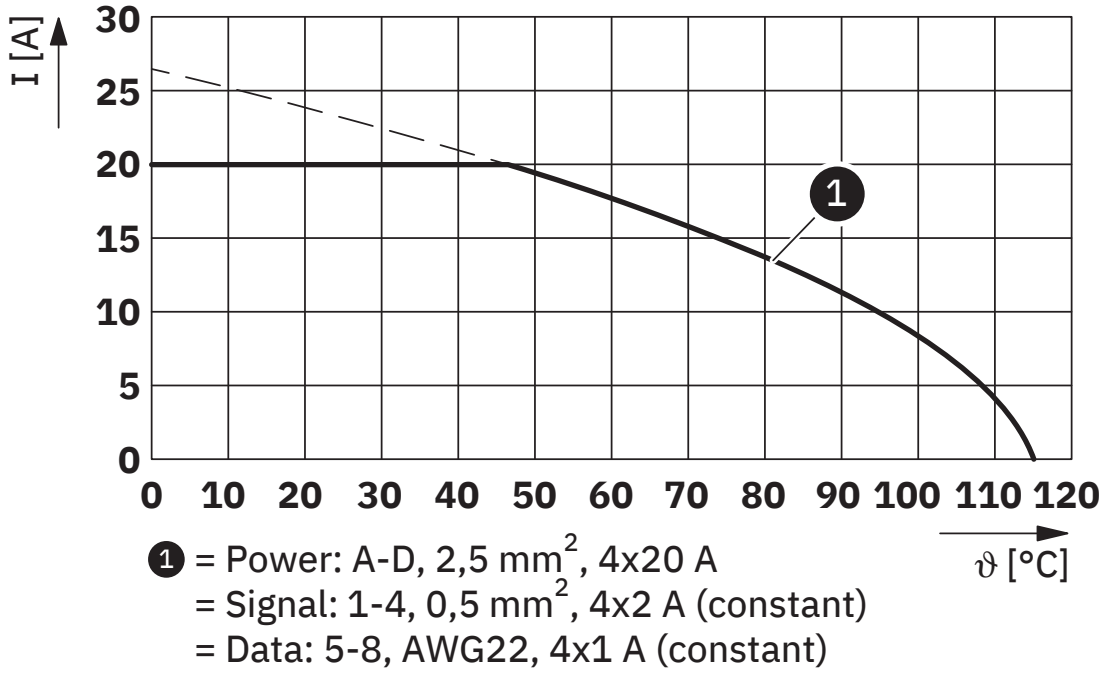
I = current strength, ϑ = ambient temperature, power contacts A-B: 2.5 mm², 2 x 22 A, power contacts C-D: 2.5 mm², 2 x 13 A (constant), signal contacts 1-4: 0.5 mm², 4 x 2 A (constant), data contacts 5-8: AWG22, 4 x 1 A (constant)

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/1835953

cUL Recognized
Approval ID: E468743

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Classifications

ECLASS

ECLASS-13.0	27440223
ECLASS-15.0	27440223

ETIM

ETIM 10.0	EC003557

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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