DMCC 0,5/ 4-ST-SHL 7,0-2,54 - PCB connector

1145726

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PCB connector, nominal cross section: 0.34 mm^2, color: black, nominal current: 5 A, rated voltage (III/2): 160 V, contact surface: Au, contact connection type: Socket, number of rows: 2, number of positions: 4, product range: DMCC 0,5/..-ST-SHL, pitch: 2.54 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, plug-in system: COMBICON DFMC 0,5 lock & shielded, Electrical properties: shielded, locking: shielded connection, mounting method: Lock & Shield, type of packaging: packed in cardboard, Suitable for CAT5

Your advantages

- Cost-effective connection of crimped conductors in large quantities
- Gold-plated contacts ensure transfer quality remains stable over the long term
- Contacts arranged in a double row enable high packing density in a compact area
- Tools for manual and automatic crimping available as an option
- Satisfies CAT5 requirements in accordance with EN 50173 and ISO/IEC 11801

Commercial data

Item number	1145726
Packing unit	100 pc
Minimum order quantity	100 pc
Sales key	AA
Product key	AAAILA
GTIN	4063151136062
Weight per piece (including packing)	3.54 g
Weight per piece (excluding packing)	2.22 g
Customs tariff number	85366990
Country of origin	CN

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Technical data

Product properties

Product type	PCB connector
Product family	DMCC 0,5/..-ST-SHL
Product line	COMBICON Connectors XS
Number of positions	4
Pitch	2.54 mm
Number of rows	2
Electrical characteristic	shielded

Electrical properties

Properties

Nominal current I_N	5 A
Nominal voltage U_N	160 V
Contact resistance	5.2 mΩ
Rated voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
Electrical characteristic	shielded

Data transmission

Signal type	Ethernet
Frequency range	to 100 MHz
Transmission medium	Copper
Transmission characteristics (category)	CAT5 (IEC 11801)
Data transmission rate	1000 Mbps
Power transmission	PoE++

Connection data

Interlock

Locking type	shielded connection
Mounting type	Lock & Shield

Conductor connection

Connection method	Crimp connection
Conductor/PCB connection direction	0 °
Conductor cross-section AWG	26 ... 22
Stripping length	4.1 mm ... 4.5 mm

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Material specifications

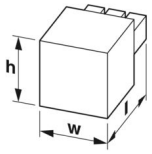
Material data - contact

Contact material	Cu alloy
Metal surface contact area (top layer)	Gold (Au)

Material data - housing

Color (Housing)	black (9005)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

Dimensions

Dimensional drawing	
Pitch	2.54 mm
Width [w]	12.22 mm
Height [h]	7.85 mm
Length [l]	33 mm

Notes

Note on application	The item is qualified for CAT5 Ethernet applications. For this reason, it is suited for use in IoT devices.
Note on application	All laboratory tests are performed in combination with the crimp contacts specified as accessories.
Note on application	The current depends on the crimp contact and conductor cross-section used.
Note on the contact	The information on the basic material and the finish properties of the crimp contacts is to be found in the E-Shop in the technical data for the respective crimp contact.
Note on application	The crimp contacts may only be processed with approved crimping tools.
Note on the contact	These connectors conform to DIN EN 61984, connectors without switching power (COC). When used for their intended purpose, they must not be plugged in or disconnected live or under load.

Mechanical tests

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Tensile strength of crimp connections

Result	Test passed
Conductor cross-section/conductor type/tractive force setpoint/actual value	AWG 22 / flexible / > 40 N

Insertion and withdrawal forces

Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	100
Insertion strength per pos. approx.	2 N
Withdraw strength per pos. approx.	1 N

Resistance of inscriptions

Specification	IEC 60068-2-70:1995-12
Result	Test passed

Polarization and coding

Specification	IEC 60512-13-5:2006-02
Result	Test passed

Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	50 m/s² (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R_1	5.2 mΩ
Contact resistance R_2	4.6 mΩ
Insertion/withdrawal cycles	100
Insulation resistance, neighboring positions	> 5 MΩ

Climatic test

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Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm^3 SO_2 on 300 dm^3/40 °C/1 cycle
Thermal stress	80 °C/168 h
Power-frequency withstand voltage	1.39 kV

Ambient conditions

Ambient temperature (operation)	-55 °C ... 100 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	4

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	2 mm
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	1.5 mm
Rated insulation voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	1.6 mm

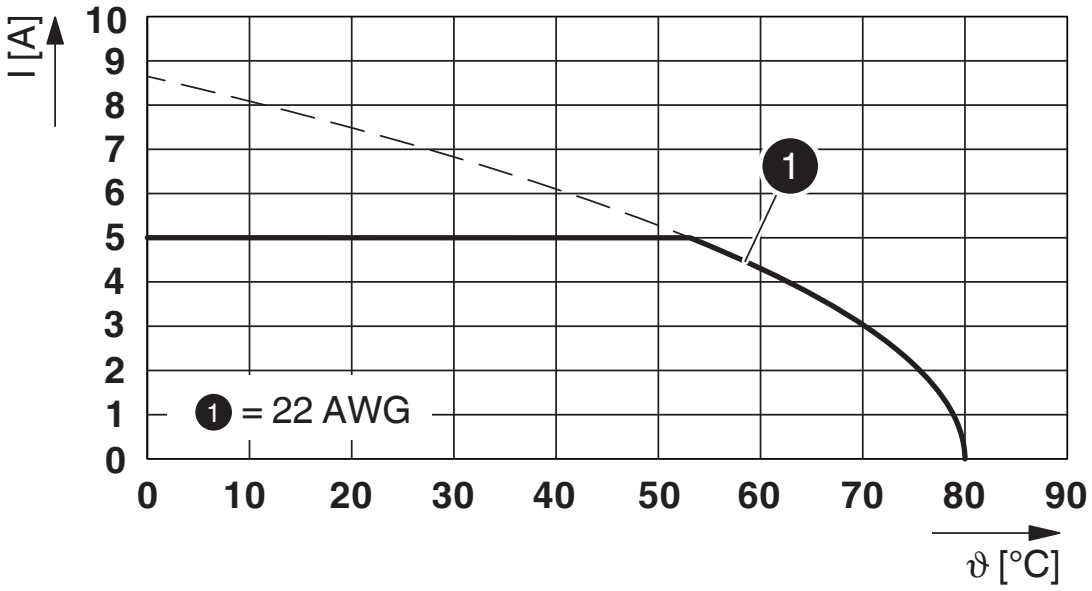
Packaging specifications

Type of packaging	packed in cardboard

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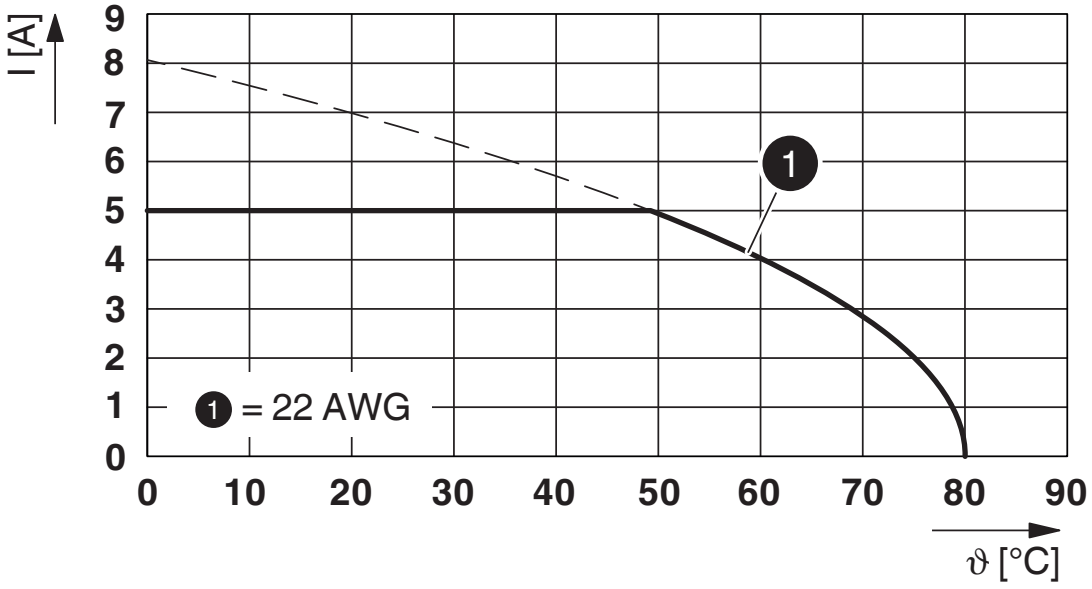
Drawings

Diagram



Type: DMCC 0,5/...-ST-SHL 7,0-2,54 with DMC 0,5/...-G1SHL-2,54P20THRR...

Diagram



Type: DMCC 0,5/...-ST-SHL 7,0-2,54 with DMCV 0,5/...-G1SHL-2,54P20THR...

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Approvals

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cULus Recognized
Approval ID: E60425-19920306

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
Factory wiring	150 V	6 A	26 - 18	-
D				
Factory wiring	150 V	6 A	26 - 18	-

VDE report with production monitoring
Approval ID: 40042389

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	160 V	6 A	-	0.14 - 0.75

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Classifications

ECLASS

ECLASS-13.0	27460202
ECLASS-15.0	27460202

ETIM

ETIM 9.0	EC002638

UNSPSC

UNSPSC 21.0	39121400

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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%

EF3.0 Climate Change

CO2e kg	0.092 kg CO2e

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