2020-02-11
Product version 00
Document revision 00

Data sheet

Order No.: 1150807

Type: DMCC 0,5/ 2-ST-SHL 7,0-2,54

PCB connector

The figure shows a 2-pos. version with 4 contacts

1 Main features

- No. of pos. 2
- Conductor cross section 0.34 mm²
- Color black (9005)
- Pitch 2.54 mm
- Connection method
- Nominal current 6 A
- Nominal voltage 160 V
- Connection direction
- Type of packaging packed in cardboard

2 Your advantages

- Contacts arranged in a double row enable high packing density in a compact area
- Gold-plated contacts ensure transfer quality remains stable over the long term
- Tools for manual and automatic crimping available as an option

Make sure you always use the latest documentation.
It can be downloaded at: phoenixcontact.net/product/1150807

3 Table of contents

4 3D model in PDF can be activated (Acrobat Reader only)

5 General Technical Data

5.1 item properties

Order No.	1150807
Type	DMCC 0,5/ 2-ST-SHL 7,0-2,54
Plug-in system	MICRO COMBICON - DFMC 0,5 lock & shielded
Product type	PCB connector
Range of articles	DMCC 0,5/..-ST-SHL
Pitch	
Range of positions	...
Number of positions	2

5.2 Mounting

Type of locking	shielded connection
	Lock & Shield

5.3 Connection capacity AWG

Conductor cross section AWG	22

6 Material properties

6.1 Material of metal parts

Note	WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Terminal point surface	Tin (4 - 8 µm Sn)
Surface contact area	Nickel (2 - 4 µm Ni), , Gold (0.25
Surface characteristics	Selective coating

6.2 Material of plastic parts

	Housing
Color	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

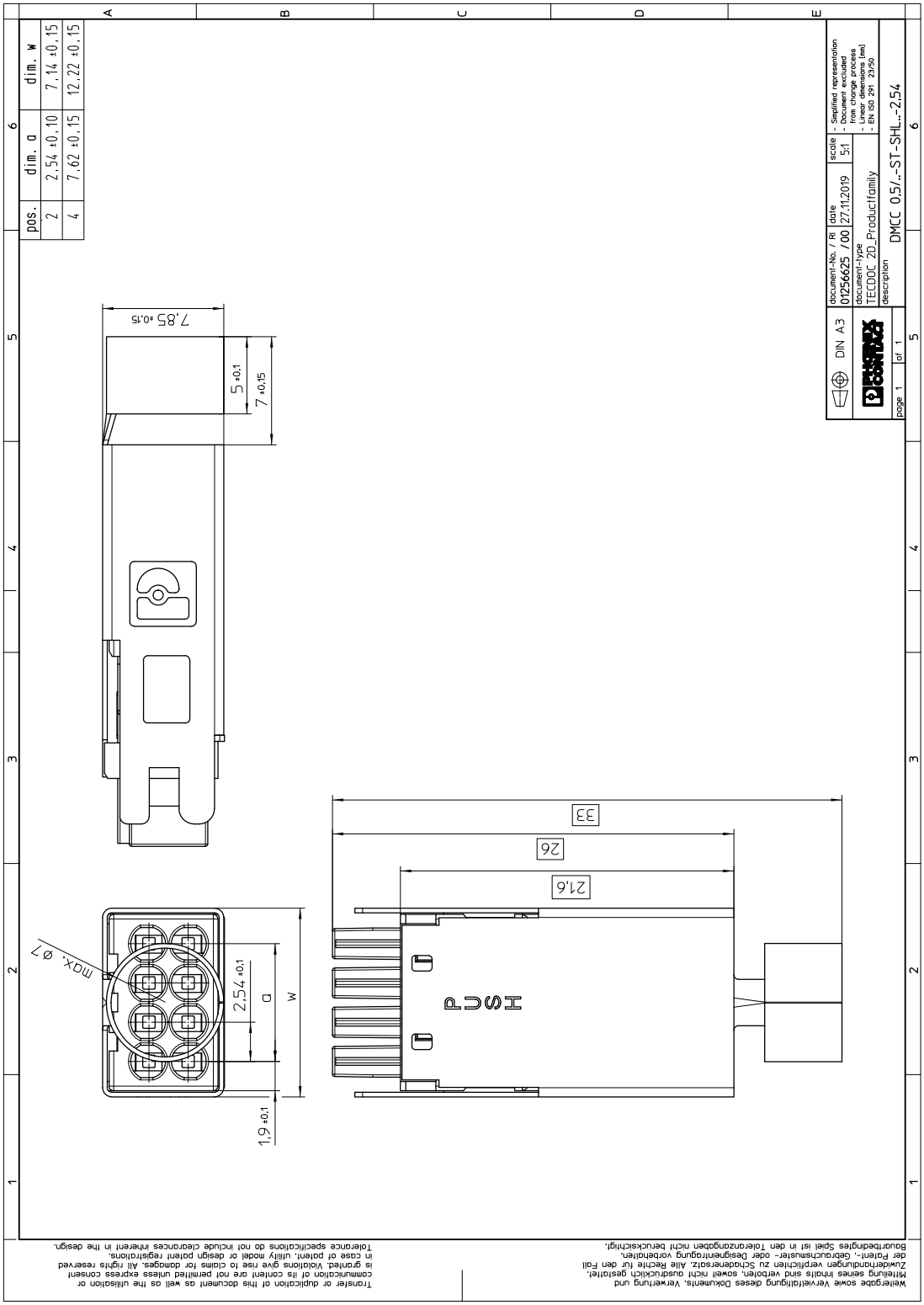
7 Dimensions

7.1 Dimensions for the product

Length	33 mm
Width	7.14 mm
Total height	7.85 mm
Dimension a	2.54 mm

1150807 DMCC 0,5/ 2-ST-SHL 7,0-2,54

8 Series drawing



9 Packaging information

Type of packaging	packed in cardboard
Pieces per package	100

10 Application

10.1 Temperature limit values

Ambient temperature (storage/transport)	-20 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 80 °C
Ambient temperature (installation)	-40 °C ... 80 °C (dependent on the derating curve)
Ambient temperature (mobile installation)	-20 °C 80 °C dependent on the derating curve

11 General tests

11.1 Specification

Specification	IEC 61984
Specification	IEC 60352-2

12 Mechanical tests

12.1 Tensile strength of crimped connections

Result	Test passed
Specification	IEC 60512-16-4:2008-06
Conductor cross section/conductor type/tractive force setpoint/actual value	/ flexible / > 40 N / flexible / > 15 N

12.2 Visual examination

Specification	IEC 61984:2008-10
Visual examination	Test passed
Specification	IEC 60512-1-1:2002-02

12.3 Dimensional test

Dimensional test	Test passed
Specification	IEC 60512-1-2:2002-02

12.4 Resistance of marking

Resistance of marking	Test passed
Specification	IEC 60068-2-70:1995-12

12.5 Polarization and coding

Polarization and coding	Test passed
Specification	IEC 60512-13-5:2006-02
Test force	20 N

12.6 Contact retention in insert

Contact retention in insert	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	20 N

13 Insertion and withdrawal forces

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

14 Electrical tests

14.1 Electrical data

Rated current / conductor cross section	6 A / 0.34 mm²
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Contact resistance	5.2 mΩ
Degree of pollution	2

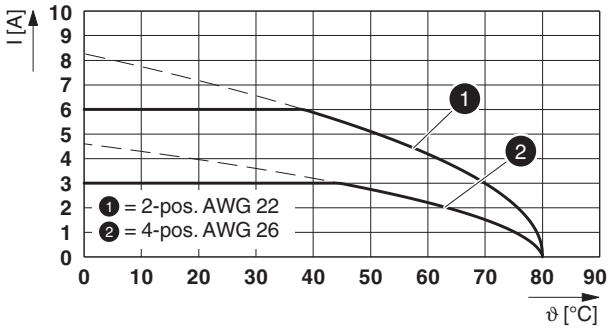
14.2 Air and creepage distances

Component	PCB connector		
Specification	IEC 60664-1:2007-04		
Mains type	unearthed mains		
Insulating material group	I		
Comparative tracking index (IEC 60112:2003-01)	CTI 600		
Rated insulation voltage	160 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV
Degree of pollution	3	2	2
Overvoltage category	III	III	II
Minimum clearance case A (inhomogeneous field)	1.5 mm	1.5 mm	1.5 mm
Minimum value of the creepage path requirement in acc. with table	2 mm	1.5 mm	1.6 mm

15 Current carrying capacity/derating curves

Specification	IEC 61984:2008-10
Note	Representation based on IEC 60512-5-2:2002-02
Note	For number of positions, see diagram
Reduction factor	0.8
Conductor cross section	0.34 mm²

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



16 Environmental and durability tests

16.1 Vibration test

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	50 m/s^2 (60.1 - 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis
Note	The connected conductor loops were guided to the test sample at a distance of approx. 10 cm.

16.2 Railway application, vibration test

Specification	IEC 61373:2010-05
Result	Test passed
Testing	Vibration, broadband noise
Frequency	5 - 150 Hz
Test directions	X-, Y- and Z-axis (pos. and neg.)
Spectrum	Service life test category 1, class B, body mounted

17 Classification for connectors

Specification	IEC 61984:2008-10
Main features	Connectors without switching capacity (COC)
Construction form	Fixed connectors
Strain relief elements	without strain relief
Connection method	Can be reconnected
Protection against electric shock	Not encapsulated - touch-proof when inserted
Protective conductor	without PE
Lock	no
Connection method	Crimp connections

18 Approvals / Certificates

19 Commercial Data

Order No.	1150807
Type	DMCC 0,5/ 2-ST-SHL 7,0-2,54
Pieces per package	100
Net weight	2.22 g
GTIN	4063151148409
	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1

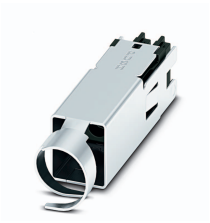
20 corresponding headers

Order No.	Type
1150791	DMC 0,5/ 2-G1SHL-2,54P20THRR24
1150824	DMCV 0,5/ 2-G1SHL-2,54P20THR24
1150816	DMCC 0,5/ 2-ST-WOSH-2,54
1150660	DMCC 0,5/ 2-SHIELD L 7,0-2,54

21 Accessories

Description	Order No.	Type
	1013425	MCC 0,5-MP AU 0,14-0,5
	1013420	MCC 0,5-MP AU 0,14-0,5 R
	1013419	MCC 0,5-MP AU 0,34-0,75
	1013418	MCC 0,5-MP AU 0,34-0,75 R
Crimping pliers, for COMBICON crimp connectors with cross section: 0.14 ... 0.75 mm^2. Unlockable pressure lock, precise parallel crimping, front entry, B crimp, incl. 2 positioning aids	1064998	CRIMPFOX-P CC 0.75 L
	1150791	DMC 0,5/ 2-G1SHL-2,54P20THRR24
	1150824	DMCV 0,5/ 2-G1SHL-2,54P20THR24
	1150816	DMCC 0,5/ 2-ST-WOSH-2,54
	1150660	DMCC 0,5/ 2-SHIELD L 7,0-2,54

22 Combination tests



DMCC 0,5/..-ST-SHL

IEC 61984	IEC 61984			
Mechanical tests (A)				
Insertion/withdrawal force per position	approx. 2 N / 1 N			
Polarization when inserted Requirement >20 N	Test passed			
Contact holder in insert Requirements >20 N	Test passed			
Durability tests (B)				
Contact resistance R_1	5.2 mΩ			
Insertion/withdrawal cycles	100			
Contact resistance R_2	4.6 mΩ			
Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 µs)	2.95 kV			
Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz)	1.39 kV			
Thermal tests (C)				
Tested number of positions	2			
Tested conductor cross section	0.34 mm^2			
Test current	6 A			
Upper limiting temperature Requirements < 100°C	Test passed			
Climatic tests (D)				
Test sequence 1: low temperature storage	-40 °C/2 h			
Test sequence 2: heat storage	80 °C/168 h			
Test sequence 3: noxious gas storage (ISO 6988)	0.2 dm^3 SO_2 on 300 dm^3/ 40 °C/1 cycle			
Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 µs)	2.95 kV			
Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz)	1.39 kV			
Environmental and endurance tests (E)				
Specification	IEC 61984:2008-10			
Degree of protection	Finger safety with IP20 test finger			

单击下面可查看定价，库存，交付和生命周期等信息

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