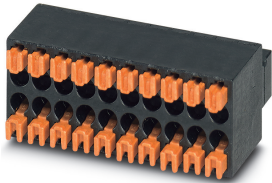


Printed-circuit board connector - DFMC 0,5/ 4-ST-2,54 - 1844594

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The figure shows a 10-pos. version with 20 contacts

PCB connector, nominal cross section: 0.5 mm², color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Gold, type of contact: Female connector, number of potentials: 8, Number of rows: 2, Number of positions per row: 4, number of connections: 8, product range: DFMC 0,5/...-ST, pitch: 2.54 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, plug-in system: MICRO COMBICON - DFMC 0,5, Locking: without, mounting: without, type of packaging: packed in cardboard

Your advantages

- ✓ Gold-plated contacts ensure transfer quality remains stable over the long term
- ✓ Time saving push-in connection, tools not required
- ✓ Defined contact force ensures that contact remains stable over the long term
- ✓ Intuitive use through colour coded actuation lever
- ✓ Optimized for tight installation situations: operation and conductor connection from one direction



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	100 pc
GTIN	 4 046356 964265
GTIN	4046356964265
Weight per Piece (excluding packing)	1.800 g
Custom tariff number	85366990
Country of origin	Germany

Technical data

Item properties

Brief article description	PCB connector
Connector system	MICRO COMBICON - DFMC 0,5

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Technical data

Item properties

Type of contact	Female connector
Range of articles	DFMC 0,5/...-ST
Pitch	2.54 mm
Number of positions	4
Locking	without
Number of rows	2
Number of connections	8
Number of potentials	8

Electrical parameters

Nominal current	6 A
Nom. voltage	160 V
Rated voltage (III/3)	32 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 kV

Connection capacity

Connection method	Push-in spring connection
Conductor cross section solid	0.14 mm² ... 0.5 mm²
Conductor cross section flexible	0.14 mm² ... 0.5 mm²
Conductor cross section AWG / kcmil	26 ... 20
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 0.34 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.14 mm² ... 0.25 mm²
Cylindrical gauge a x b / diameter	- / 1.2 mm
Stripping length	7 mm

Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Selective coating
Metal surface terminal point (top layer)	Tin (5 - 7 µm Sn)
Metal surface terminal point (middle layer)	Nickel (1 - 3 µm Ni)
Metal surface contact area (top layer)	Gold (0.25 Au)
Metal surface contact area (middle layer)	Nickel (2 - 3 µm Ni)

Material data - housing

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Technical data

Material data - housing

Housing color	black (9005)
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

Material data – actuating element

Insulating material	LCP
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	15.85 mm
Width [w]	10.66 mm
Height [h]	10.5 mm
Pitch	2.54 mm
Height (without solder pin)	10.5 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	100
Denomination packing units	Pcs.
Outer packaging type	Carton

Ambient conditions

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

Termination and connection method

Conductor connection test	The stripped-off ends of the largest conductor can be completely inserted in the opening of the terminal point without using excessive force.
Test result	Test passed
Test – repeated connection and release	IEC 60999-1:1999-11
	Test passed
Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

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Technical data

Pull-out test

Pull-out test	IEC 60999-1:1999-11
Conductor cross section / conductor type / tensile force	0.14 mm ² / solid / > 10 N
	0.14 mm ² / flexible / > 10 N
	0.5 mm ² / solid / > 20 N
	0.5 mm ² / flexible / > 20 N

Mechanical tests according to standard

Test specification	IEC 61984
Visual inspection	IEC 60512-1-1:2002-02
Dimension check	IEC 60512-1-2:2002-02
Resistance of inscriptions	IEC 60068-2-70:1995-12
Insertion and withdrawal force	IEC 60512-13-2:2006-02
No. of cycles	100
Insertion strength per pos. approx.	2 N
Withdraw strength per pos. approx.	1 N
Polarization and coding	IEC 60512-13-5:2006-02
Contact holder in insert	IEC 60512-15-1:2008-05
Test force per pos.	20 N

Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	1.5 mm
Minimum clearance - inhomogeneous field (III/2)	1.5 mm
Minimum clearance - inhomogeneous field (II/2)	1.5 mm
Minimum creepage distance value (III/3)	1.3 mm
Minimum creepage distance value (III/2)	1.6 mm
Minimum creepage distance value (II/2)	1.6 mm

Electrical tests - Function

Specification	IEC 60999-1:1999-11
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Temperature cycles

Specification	IEC 60999-1:1999-11
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Current carrying capacity / derating curves

Caption	Type: DFMC 0,5/...-ST-2,54 with DMC 0,5/...-G1-2,54 P...THR R...
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Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	2 N

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Technical data

Mechanical tests (A)

Withdraw strength per pos. approx.	1 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R ₁	2.7 mΩ
Insertion/withdrawal cycles	100
Contact resistance R ₂	2.9 mΩ
Contact resistance R ₂ 2nd level	3.1 mΩ
Impulse withstand voltage at sea level	2.95 kV
Insulation resistance, neighboring positions	> 5 MΩ

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	16
Upper limiting temperature requirements <100 °C	Test passed

Climatic tests (D)

Specification	DIN 50018:2013-05
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	1.0 dm ³ SO ₂ on 300 dm ³ /40 °C/3 cycles
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV

Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

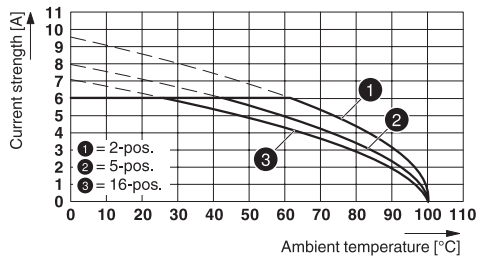
Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

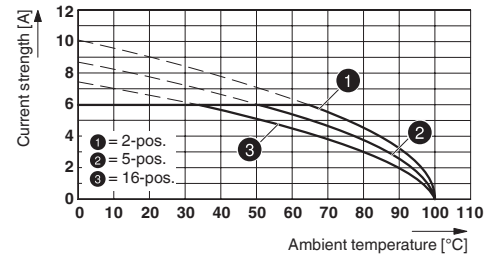
Drawings

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Diagram



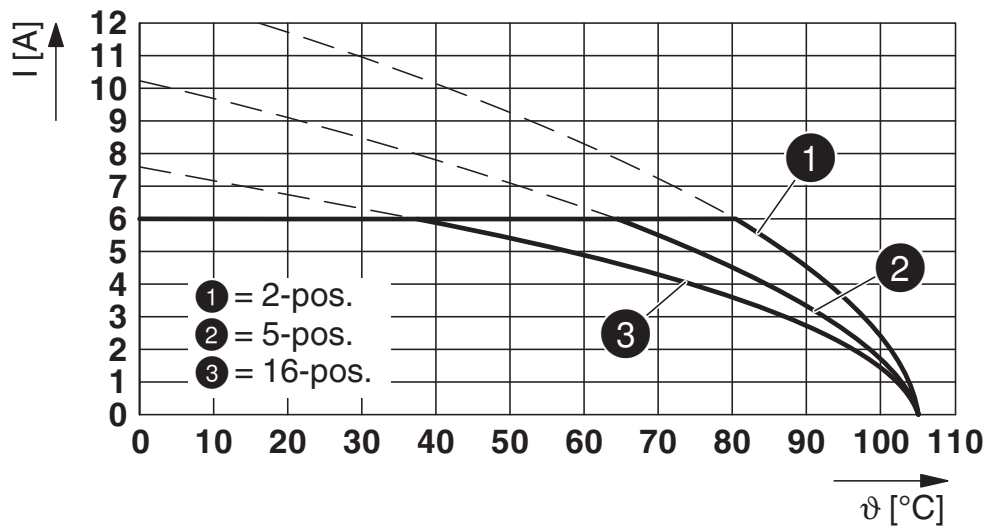
Diagram



Type: DFMC 0,5/...-ST-2,54 with DMC 0,5/...-G1-2,54 P...THR R...

Type: DFMC 0,5/...-ST-2,54 with DMCV 0,5/...-G1-2,54 P... THRR...

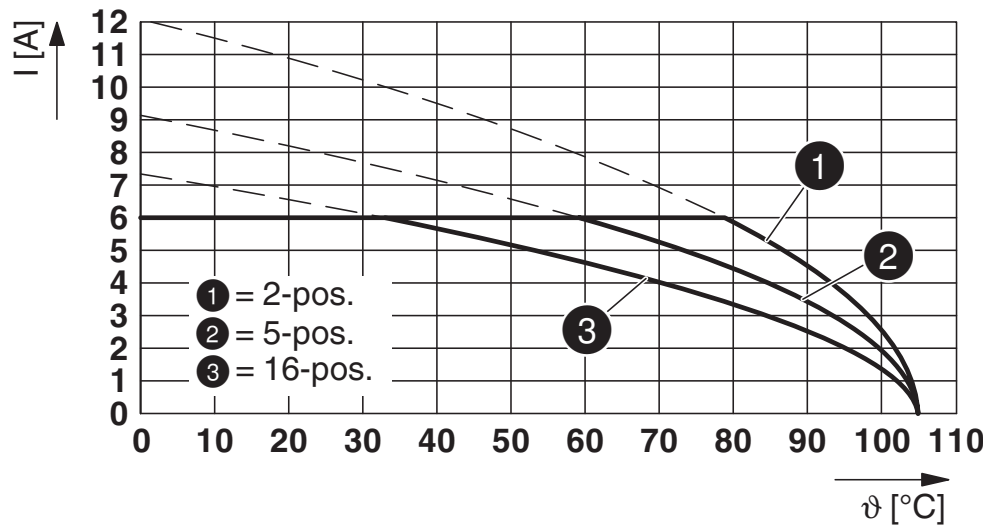
Diagram



Type: DFMC 0,5/...-ST-2,54 with DMC 0,5/...-G1-2,54 SMD R...

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Diagram



Type: DFMC 0,5/...-ST-2,54 with DMCV 0,5/...-G1-2,54 SMD R...

Classifications

eCl@ss

eCl@ss 10.0.1	27440309
eCl@ss 11.0	27460202
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440309
eCl@ss 9.0	27440309

ETIM

ETIM 4.0	EC002643
ETIM 6.0	EC002638
ETIM 7.0	EC002638

UNSPSC

UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409

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Classifications

UNSPSC

UNSPSC 21.0	39121409
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Approvals

Approvals

Approvals

VDE Gutachten mit Fertigungsüberwachung / IECCE CB Scheme / EAC / cULus Recognized

Ex Approvals

Approval details

VDE Gutachten mit Fertigungsüberwachung		http://www2.vde.com/de/Institut/Online-Service/ VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40042389
Nominal voltage UN	160 V		
Nominal current IN	6 A		
mm²/AWG/kcmil	0.14-.5		

IECEE CB Scheme		http://www.iecee.org/	DE1-55740
Nominal voltage UN	160 V		
Nominal current IN	6 A		
mm²/AWG/kcmil	0.14-.5		

EAC		B.01687
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Approvals

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19920306
	B	C	
Nominal voltage UN	150 V	50 V	
Nominal current IN	6 A	6 A	
mm²/AWG/kcmil	26-20	26-20	

Accessories

Accessories

Crimping tool

Crimping pliers - CRIMPFOX 6 - 1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

Ferrule

Ferrule - A 0,25- 7 - 3202478



Ferrule, length: 7 mm, color: silver

Ferrule - A 0,34- 7 - 3009202



Ferrule, length: 7 mm, color: silver

Labeled terminal marker

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Accessories

Marker card - SK 2,54/2,8:FORTL.ZAHLEN - 0804853



Marker card, Card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 99, mounting type: adhesive, for terminal block width: 2.54 mm, lettering field size: 2.54 x 2.8 mm

Screwdriver tools

Screwdriver - SZS 0,4X2,0 - 1205202



Micro screwdriver, bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip and twist cap

Additional products

Printed-circuit board connector - DMC 0,5/ 4-G1-2,54 P20THR R44 - 1844743



PCB headers, nominal cross section: 0.5 mm², color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Gold, type of contact: Male connector, number of potentials: 8, Number of rows: 2, Number of positions per row: 4, number of connections: 8, product range: DMC 0,5/...-G1-THR, pitch: 2.54 mm, mounting: THR soldering, pin layout: Linear double pinning, solder pin [P]: 2 mm, plug-in system: MICRO COMBICON - DFMC 0,5, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 44 mm wide tape, Sample values available under SAMPLE DMC...

Printed-circuit board connector - DMCV 0,5/ 4-G1-2,54 P20THR R32 - 1844895



PCB headers, nominal cross section: 0.5 mm², color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Gold, type of contact: Male connector, number of potentials: 8, Number of rows: 2, Number of positions per row: 4, number of connections: 8, product range: DMCV 0,5/...-G1-THR, pitch: 2.54 mm, mounting: THR soldering, pin layout: Linear double pinning, solder pin [P]: 2 mm, plug-in system: MICRO COMBICON - DFMC 0,5, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 32 mm wide tape, Sample values available under SAMPLE DMC...

Printed-circuit board connector - DFMC 0,5/ 4-ST-2,54 - 1844594

Accessories

Printed-circuit board connector - DMC 0,5/ 4-G1-2,54 SMD R44 - 1845043



PCB headers, nominal cross section: 0.5 mm², color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Gold, type of contact: Male connector, number of potentials: 8, Number of rows: 2, Number of positions per row: 4, number of connections: 8, product range: DMC 0,5/...-G1-SMD, pitch: 2.54 mm, mounting: SMD soldering, pin layout: Linear pad geometry, solder pin [P]: 2 mm, plug-in system: MICRO COMBICON - DFMC 0,5, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 44 mm wide tape, Sample values available under SAMPLE DMC...

Printed-circuit board connector - DMCV 0,5/ 4-G1-2,54 SMD R32 - 1845195



PCB headers, nominal cross section: 0.5 mm², color: black, nominal current: 6 A, rated voltage (III/2): 160 V, contact surface: Gold, type of contact: Male connector, number of potentials: 8, Number of rows: 2, Number of positions per row: 4, number of connections: 8, product range: DMCV 0,5/...-G1-SMD, pitch: 2.54 mm, mounting: SMD soldering, pin layout: Linear pad geometry, solder pin [P]: 2 mm, plug-in system: MICRO COMBICON - DFMC 0,5, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: 32 mm wide tape, Sample values available under SAMPLE DMC...