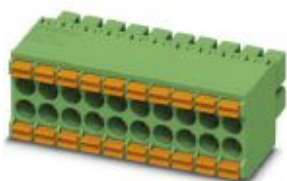


Printed-circuit board connector - DFMC 1,5/12-ST-3,5 - 1790205

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Plug, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 12 with 24 contacts, pitch: 3.5 mm, connection method: spring-cage connection, color: green, contact surface: tin



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

Your advantages

- ✓ 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	50 pc
GTIN	 4 046356 594356
GTIN	4046356594356

Technical data

Item properties

Brief article description	PCB connector
Plug-in system	MINI COMBICON - DFMC 1,5
Type of contact	Female connector
Range of articles	DFMC 1,5/...-ST
Pitch	3.5 mm
Number of positions	12
Locking	without
Number of levels	2
Number of connections	24
Number of potentials	24

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Technical data

Electrical parameters

Nominal current	8 A
Nom. voltage	160 V
Rated voltage	160 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	320 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
pluggable	Yes
Conductor cross section solid	0.2 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG / kcmil	24 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.14 mm ² ... 0.75 mm ²
Stripping length	10 mm

Specifications for ferrules

Recommended crimping pliers	1212034 CRIMPFOX 6
Ferrules without insulating collar, according to DIN 46228-1	Cross section: 0.25 mm ² ; Length: 7 mm
	Cross section: 0.34 mm ² ; Length: 7 mm
	Cross section: 0.5 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 0.75 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 1 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 1.5 mm ² ; Length: 10 mm
Recommended crimping pliers	1212034 CRIMPFOX 6
Ferrules with insulating collar, according to DIN 46228-4	Cross section: 0.14 mm ² ; Length: 8 mm
	Cross section: 0.25 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 0.34 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 0.5 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 0.75 mm ² ; Length: 10 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	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (4 - 8 µm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 µm Sn)

Material data - housing

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Technical data

Material data - housing

Housing color	green (6021)
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

Material data – actuating element

Color of the actuating lever	orange (2003)
Insulating material	PBT
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	23.35 mm
Width [w]	42.8 mm
Height [h]	13.25 mm
Pitch	3.5 mm
Height (without solder pin)	13.25 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

Ambient conditions

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

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)	2 mm
Minimum creepage distance value (III/2)	0.8 mm
Minimum creepage distance value (II/2)	1.6 mm

Printed-circuit board connector - DFMC 1,5/12-ST-3,5 - 1790205

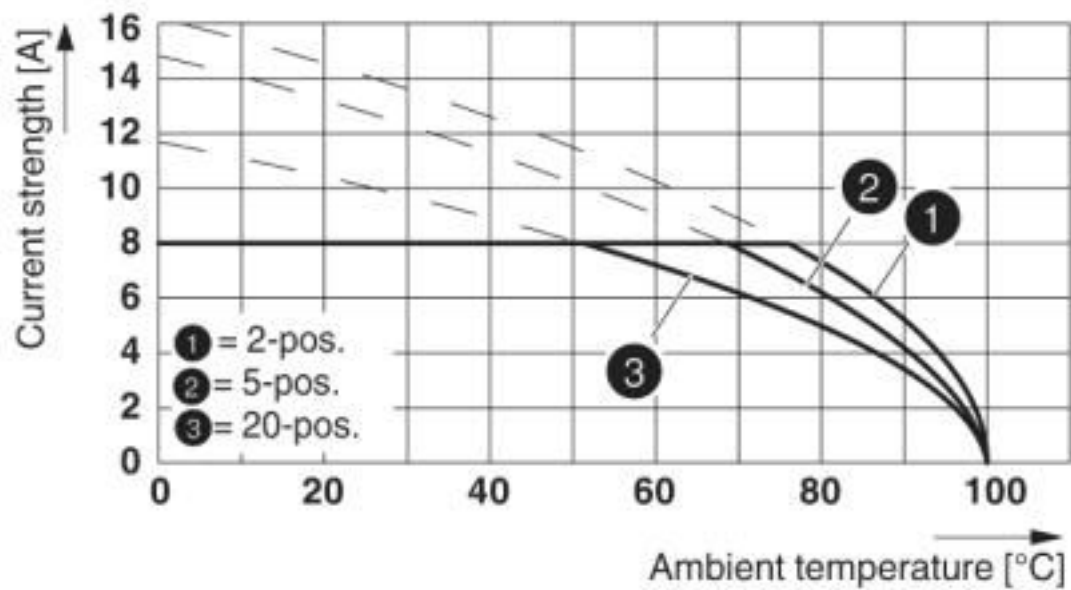
Technical data

Environmental Product Compliance

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

Drawings

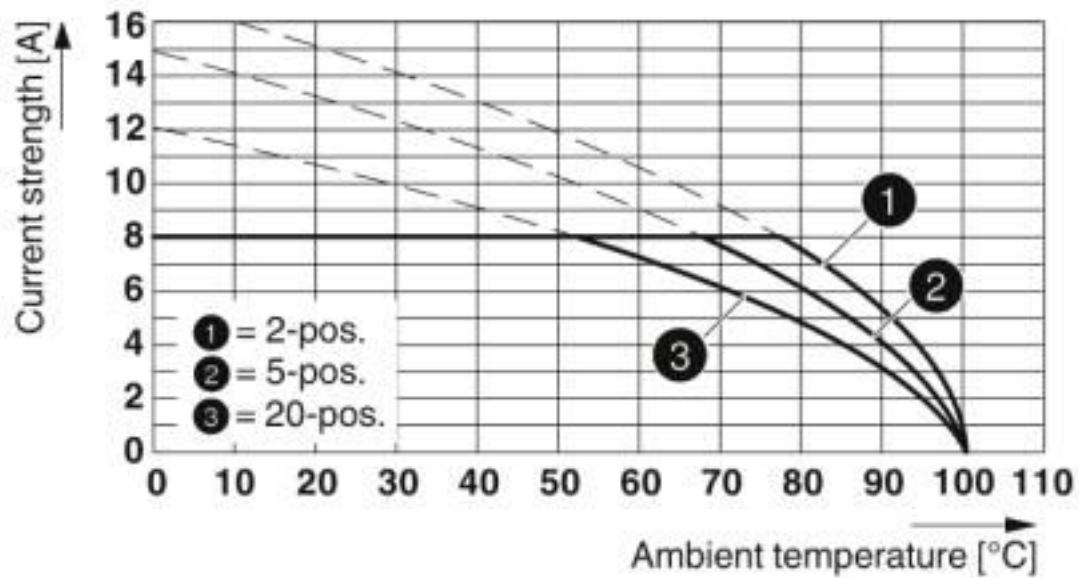
Diagram



Type: DFMC 1,5/...-ST-3,5 with DMC 1,5/...-G1-3,5 P20 THR

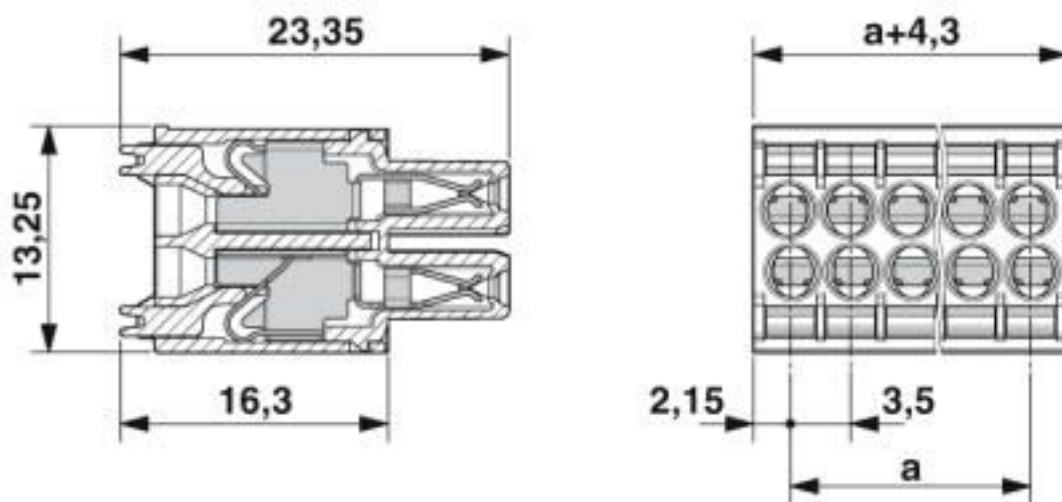
Printed-circuit board connector - DFMC 1,5/12-ST-3,5 - 1790205

Diagram



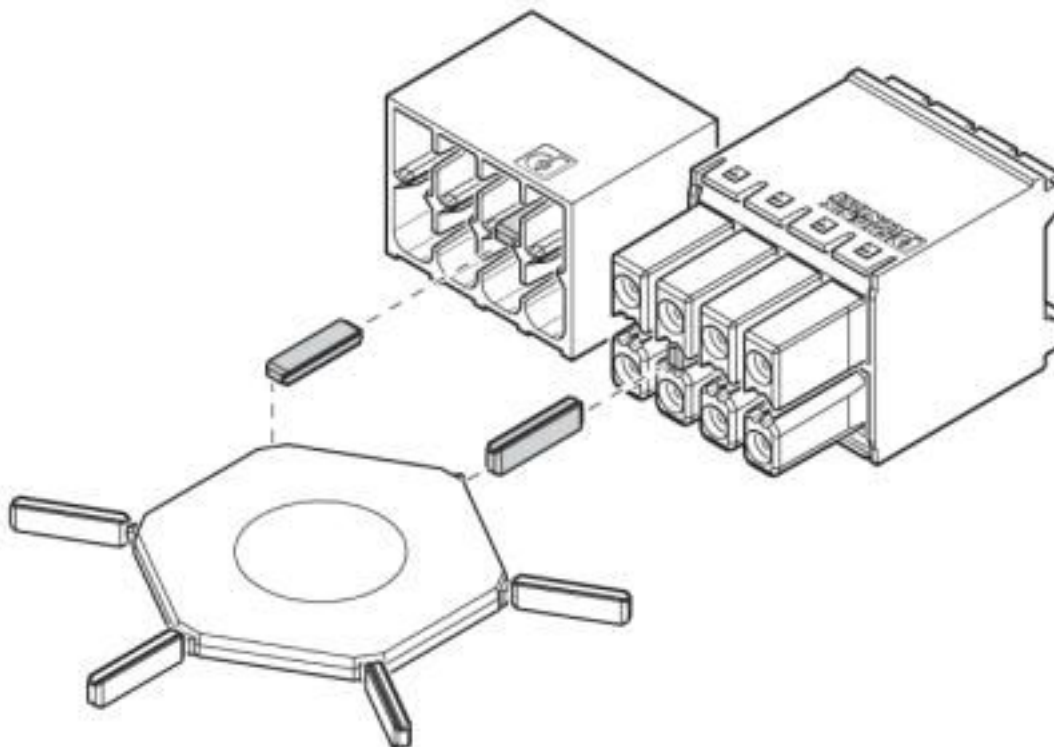
Typ: DFMC 1,5/...-ST-3,5 with DMCV 1,5/...-G1-3,5 P20 THR

Dimensional drawing



Printed-circuit board connector - DFMC 1,5/12-ST-3,5 - 1790205

Schematic diagram



Use of the CP-DMC... coding profile

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 8.0	27440309
eCl@ss 9.0	27440309

ETIM

ETIM 4.0	EC002638
ETIM 5.0	EC002638
ETIM 6.0	EC002638
ETIM 7.0	EC002638

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Classifications

UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

IECEE CB Scheme		http://www.iecee.org/	DE1-60359_B1_B2
Nominal voltage UN	160 V		
Nominal current IN	8 A		

VDE Gutachten mit Fertigungsüberwachung		http://www2.vde.com/de/Institut/Online-Service/ VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40038423
Nominal voltage UN	160 V		
Nominal current IN	8 A		
mm²/AWG/kcmil	0.2-1.5		

EAC		B.01687
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Printed-circuit board connector - DFMC 1,5/12-ST-3,5 - 1790205

Approvals

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19920306
	B	C	D
Nominal voltage UN	300 V	50 V	300 V
Nominal current IN	8 A	8 A	8 A
mm²/AWG/kcmil	24-16	24-16	24-16

Accessories

Accessories

Coding element

Coding profile - CP-DMC 1,5 NAT - 1790647



Coding profile, for insertion between the coding ribs of the connector and the header following the reflow soldering process, insulating material, color: natural

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

Screwdriver tools

Screwdriver - SZS 0,4X2,5 VDE - 1205037



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

Additional products

Printed-circuit board connector - DFMC 1,5/12-ST-3,5 - 1790205

Accessories

Printed-circuit board connector - DMC 1,5/12-G1-3,5 P20THR - 1786934



PCB headers, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 24, Number of rows: 2, Number of positions per row: 12, number of connections: 24, product range: DMC 1,5/..-G1-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, Stecksystem: MINI COMBICON - DFMC 1,5, Locking: without, type of packaging: packed in cardboard

Printed-circuit board connector - DMCV 1,5/12-G1-3,5 P20THR - 1787302



PCB headers, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 24, Number of rows: 2, Number of positions per row: 12, number of connections: 24, product range: DMCV 1,5/..-G1-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, Stecksystem: MINI COMBICON - DFMC 1,5, Locking: without, type of packaging: packed in cardboard

Printed-circuit board connector - DMC 1,5/12-G1-3,5 P20THR R72 - 1706051



PCB headers, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 24, Number of rows: 2, Number of positions per row: 12, number of connections: 24, product range: DMC 1,5/..-G1-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, Stecksystem: MINI COMBICON - DFMC 1,5, Locking: without, type of packaging: 72 mm wide tape

Printed-circuit board connector - DMCV 1,5/12-G1-3,5 P20THR R72 - 1818672



PCB headers, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, Number of potentials: 24, Number of rows: 2, Number of positions per row: 12, number of connections: 24, product range: DMCV 1,5/..-G1-THR, pitch: 3.5 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2 mm, Stecksystem: MINI COMBICON - DFMC 1,5, Locking: without, type of packaging: 72 mm wide tape