

Printed-circuit board connector - FRONT-GMSTB 2,5/ 2-STF-7,62 - 1805987

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PCB connector, nominal current: 12 A, rated voltage (III/2): 630 V, number of positions: 2, pitch: 7.62 mm, connection method: Front screw connection, color: green, contact surface: Tin




The figure shows a 10-position version of the product

Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Optimized for tight installation situations: operation and conductor connection from one direction
- ✓ Screwable flange for superior mechanical stability
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ Larger pitch for increased voltage requirements



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 046675
GTIN	4017918046675
Weight per Piece (excluding packing)	7.710 g
Custom tariff number	85366990
Country of origin	Germany

Technical data

Item properties

Brief article description	Printed-circuit board connector
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Technical data

Item properties

Plug-in system	CLASSIC COMBICON
Type of contact	Female connector
Range of articles	FRONT-GMSTB 2,5/...-STF
Pitch	7.62 mm
Number of positions	2
Connection method	Front screw connection
Drive form screw head	Slotted
Screw thread	M3
Locking	Screw flange
Number of levels	1

Electrical parameters

Rated current	12 A
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV

Connection capacity

Conductor cross section solid	0.2 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG / kcmil	24 ... 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 2.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 2.5 mm ²
2 conductors with same cross section, solid	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm ² ... 1 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm ² ... 1 mm ²
Cylindrical gauge a x b / diameter	2.8 mm x 2.4 mm / 2.5 mm
Stripping length	10 mm
Torque	0.5 Nm ... 0.6 Nm

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)

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Technical data

Material data - housing

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 for the product

Length [l]	27.3 mm
Width [w]	25.86 mm
Height [h]	15 mm
Pitch	7.62 mm
Height (without solder pin)	15 mm
Dimension a	7.62 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

Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	2.5 mm ² / solid / > 50 N
	2.5 mm ² / flexible / > 50 N

Mechanical tests according to standard

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Mechanical tests according to standard

Test specification	IEC 61984
Visual examination	Test passed IEC 60512-1-1:2002-02
Dimensional test	Test passed IEC 60512-1-2:2002-02
Resistance of marking	Test passed IEC 60068-2-70:1995-12
Result	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Polarization and coding	Test passed IEC 60512-13-5:2006-02
Result	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	41 N

Air clearances and creepage distances

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112:2003-01)	CTI 600
Voltage	400 V
Rated insulation voltage (III/3)	400 V
Rated insulation voltage (III/2)	630 V
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (III/3)	6 kV
Rated surge voltage (III/2)	6 kV
Rated surge voltage (II/2)	6 kV
Minimum clearance - inhomogeneous field (III/3)	5.5 mm
Minimum clearance - inhomogeneous field (III/2)	5.5 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	6.3 mm
Minimum creepage distance value (III/2)	3.2 mm
Minimum creepage distance value (II/2)	5 mm

Current carrying capacity / derating curves

Specification	IEC 61984
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Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	8 N

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Technical data

Mechanical tests (A)

Withdraw strength per pos. approx.	6 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	2.4 m Ω
Insertion/withdrawal cycles	25
Contact resistance R_2	2.6 m Ω
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 0.3 T Ω

Climatic tests (D)

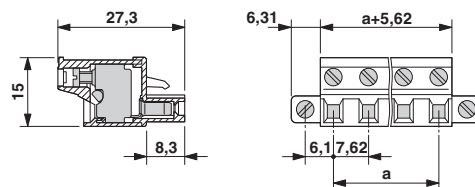
Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV

Environmental Product Compliance

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

Drawings

Dimensional drawing



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Classifications

eCl@ss

eCl@ss 4.0	272607xx
eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
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 3.0	EC001121
ETIM 4.0	EC002638
ETIM 5.0	EC002638
ETIM 6.0	EC002638

UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121409

Approvals

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

Ex Approvals

Approval details

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Approvals

CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm ² /AWG/kcmil	22-12	22-12	

VDE Gutachten mit Fertigungsüberwachung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40004701
Nominal voltage UN	400 V		
Nominal current IN	12 A		
mm ² /AWG/kcmil	0.34-2.5		

IECEE CB Scheme		http://www.iecee.org/	DE1-58978-B1B2
Nominal voltage UN	400 V		
Nominal current IN	12 A		
mm ² /AWG/kcmil	0.34-2.5		

EAC			B.01742
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19931013
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	15 A	
mm ² /AWG/kcmil	30-12	30-12	

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Accessories

Accessories

Assembly tool

Accessories - FRONT-MSTB-EW - 1763058



Removal aid, for FRONT-MSTB, facilitates extraction of several plugs mounted behind each other

Bridge

Insertion bridge - EBP 2- 5 - 1733169



Insertion bridge, fully insulated, for connectors with 5.0 or 5.08 mm pitch, no. of positions: 2

Coding element

Coding profile - CP-MSTB - 1734634



Coding profile, is inserted into the slot on the plug or inverted header, red insulating material

Labeled terminal marker

Marker card - SK 7,62/3,8:FORTL.ZAHLEN - 0804549



Marker card, Card, white, labeled, Horizontal: consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: 7.62 x 3.8 mm

Screwdriver tools

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Accessories

Screwdriver - SZS 0,6X3,5 - 1205053



Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

Additional products

Feed-through header - GMSTB 2,5/ 2-GF-7,62 - 1806229

PCB headers, nominal current: 12 A, rated voltage (III/2): 630 V, number of positions: 2, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering



Feed-through header - GMSTBV 2,5/ 2-GF-7,62 - 1829154

PCB headers, nominal current: 12 A, rated voltage (III/2): 630 V, number of positions: 2, pitch: 7.62 mm, color: green, contact surface: Tin, mounting: Wave soldering

