

https://www.phoenixcontact.com/us/products/1757488



Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MSTBA 2,5/..-G, pitch: 5 mm, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard

Your advantages

- · Maximum flexibility when it comes to device design one header for connectors with different connection technologies
- · Well-known mounting principle allows worldwide use
- · Plug-in direction parallel to the PCB
- · Closed contour for optimum stability of the plug-in connection
- · Easy PCB replacement thanks to plug-in modules



https://www.phoenixcontact.com/us/products/1757488



Commercial Data

Item number	1757488
Packing unit	1 pc
Minimum order quantity	250 pc
Sales Key	A01
Product Key	AACSGG
Catalog Page	Page 313 (C-1-2013)
GTIN	4017918030018
Weight per Piece (including packing)	1.266 g
Weight per Piece (excluding packing)	1.266 g
Customs tariff number	85366930
Country of origin	DE



https://www.phoenixcontact.com/us/products/1757488



Technical Data

Product properties

Туре	Standard
Product line	COMBICON Connectors M
Product type	PCB headers
Number of positions	3
Pitch	5 mm
Number of connections	3
Number of rows	1
Mounting flange	without
Number of potentials	3
Pin layout	Linear pinning

Electrical properties

Nominal current I _N	12 A
Nominal voltage U _N	320 V
Pollution degree	3
Contact resistance	1.4 mΩ
Rated voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV

Mounting

Mounting type Wave soldering	Wave soldering
Mounting type	Wave soldering

Material specifications

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	Tin-plated
Metal surface contact area (top layer)	Tin (3 - 5 μm Sn)
Metal surface contact area (middle layer)	Nickel (1.3 - 3 µm Ni)
Metal surface soldering area (top layer)	Tin (3 - 5 μm Sn)
Metal surface soldering area (middle layer)	Nickel (1.3 - 3 µm Ni)

Material data - housing

Housing color	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600



https://www.phoenixcontact.com/us/products/1757488



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	P
Pitch	5 mm
Width [w]	17 mm
Height [h]	12.1 mm
Length [I]	12 mm
Installed height	8.6 mm
Solder pin length [P]	3.5 mm

Mechanical tests

Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
Result	Test passed

Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	2.5 mm² / solid / > 50 N
	2.5 mm² / flexible / > 50 N

Insertion and withdrawal forces

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N

Torque test

Contact holder in insert

Contact Holder III Moore		
Specification	IEC 60512-15-1:2008-05	
Contact holder in insert Requirements >20 N	Test passed	



https://www.phoenixcontact.com/us/products/1757488



D	•		
Resistance	Λt	inecri	ntione
1 (CSISIALICC	O.	1113011	puons

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

Electrical tests

Result

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	24
Insulation resistance	

Test passed

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	T .
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	4 mm
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 mm
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12



https://www.phoenixcontact.com/us/products/1757488



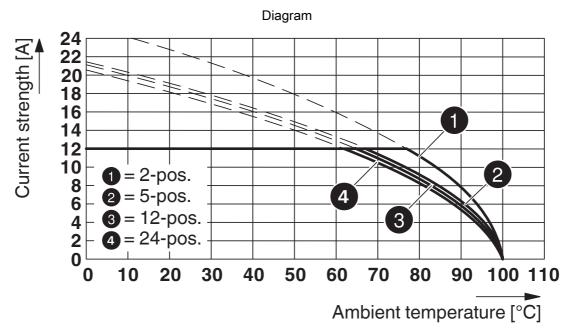
Frequency Sweep speed Amplitude	10 - 150 - 10 Hz 1 octave/min
Amplitude	
	0.35 mm (10 - 60.1 Hz)
Sweep speed	5g (60.1 - 150 Hz)
Test duration per axis	2.5 h
rability test	
Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	4.8 kV
Contact resistance R ₁	1.4 mΩ
Contact resistance R ₂	1.5 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ
matic test	
Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	2.21 kV
nbient conditions	
Ambient temperature (operation)	-40 °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

1757488

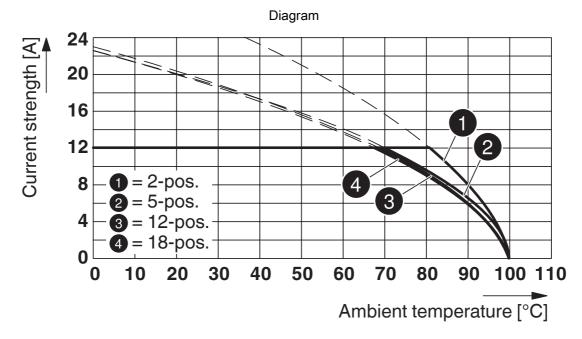
https://www.phoenixcontact.com/us/products/1757488



Drawings



Type: MSTB 2,5/...-ST with MSTBA 2,5/...-G

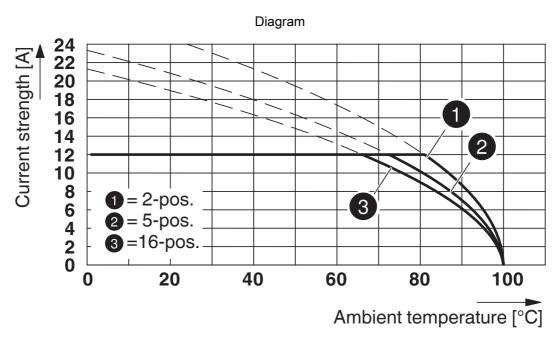


Type: MSTBT 2,5/...-ST with MSTBA 2,5/...-G

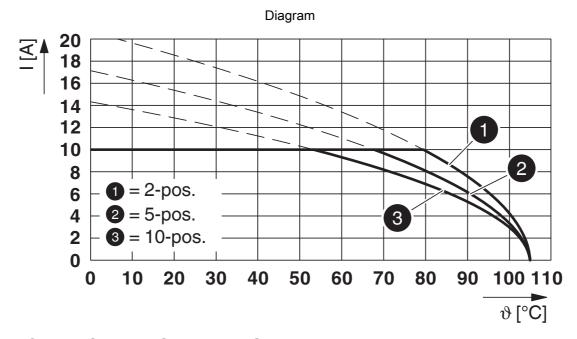


https://www.phoenixcontact.com/us/products/1757488





Type: FKCVW 2,5/...-ST with MSTBA 2,5/...-G

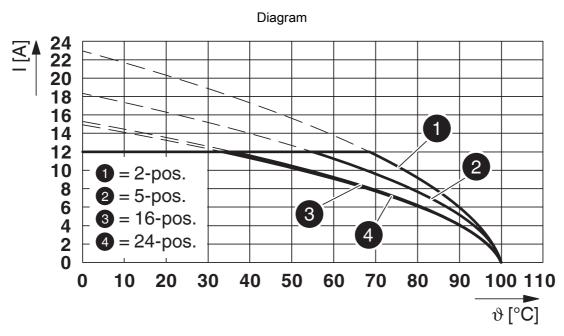


Type: TVFKC 1,5/...-ST with MSTBA 2,5/...-G

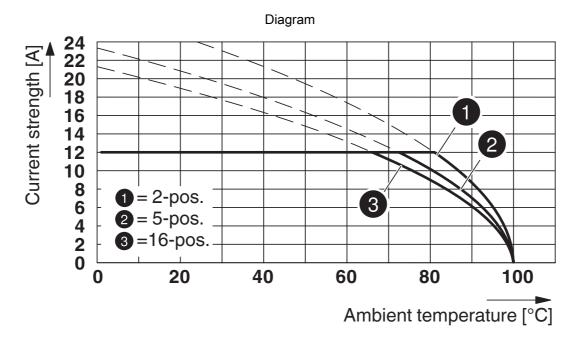


https://www.phoenixcontact.com/us/products/1757488





Type: MVSTBR 2,5/...-ST with MSTBA 2,5/...-G

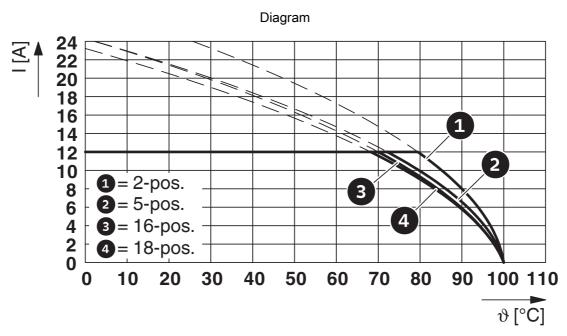


Type: FKCVR 2,5/...-ST with MSTBA 2,5/...-G

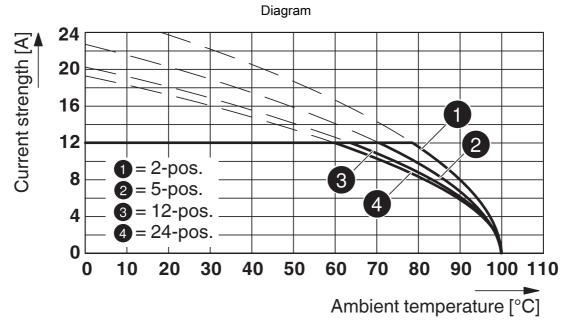
1757488

https://www.phoenixcontact.com/us/products/1757488





Type: FKCN 2,5/...-ST with MSTBA 2,5/...-G



Type: MSTBP 2,5/...-ST with MSTBA 2,5/...-G



https://www.phoenixcontact.com/us/products/1757488



Approvals

© CSA Approval ID: LR13631-2585950					
	Nominal Voltage \mathbf{U}_{N}	Nominal Current I _N	Cross Section AWG	Cross Section mm ²	
Use group B					
	300 V	10 A	-	-	
Use group D					
	300 V	10 A	-	-	

Approval ID: DE1-60988-B1B2					
		Nominal Voltage U _N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
		250 V	12 A	-	-

EAC
Approval ID: B.01687

cULus Recognized Approval ID: E60425-19931011					
	Nominal Voltage \mathbf{U}_{N}	Nominal Current I _N	Cross Section AWG	Cross Section mm ²	
Use group B					
	300 V	15 A	-	-	
Use group D					
	300 V	10 A	-	-	

VDE Zeichengeneh Approval ID: 40050648	nmigung			
	Nominal Voltage U _N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
	250 V	12 A	-	-



https://www.phoenixcontact.com/us/products/1757488



Classifications

UNSPSC 21.0

ECLASS

	ECLASS-9.0	27440402	
	ECLASS-10.0.1	27440402	
	ECLASS-11.0	27460201	
ETIM			
	ETIM 8.0	EC002637	
UNSPSC			

39121400



https://www.phoenixcontact.com/us/products/1757488



Environmental Product Compliance

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



https://www.phoenixcontact.com/us/products/1757488



Accessories

Accessories

Accessories - MSTB-BL - 1755477 https://www.phoenixcontact.com/us/products/1755477



Keying cap, for forming sections, plugs onto header pin, green insulating material

Marker card

Marker card - SK 5/3,8:FORTL.ZAHLEN - 0804183 https://www.phoenixcontact.com/us/products/0804183



Marker card, white, labeled, horizontal: consecutive numbers 1 \dots 10, 11 \dots 20, etc. up to 91 \dots (99)100, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: 5 x 3.8 mm



https://www.phoenixcontact.com/us/products/1757488



Coding section

Coding section - CR-MSTB - 1734401 https://www.phoenixcontact.com/us/products/1734401

Coding section, inserted into the recess in the header or the inverted plug, red insulating material



Marker card

Marker card - SK 5/3,8:UNBEDRUCKT - 0805409 https://www.phoenixcontact.com/us/products/0805409

Marker card, white, unlabeled, can be labeled with: Marker pen, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: 5 x 3.8 mm





https://www.phoenixcontact.com/us/products/1757488



PCB connector

PCB connector - TVFKC 1,5/ 3-ST - 1713842 https://www.phoenixcontact.com/us/products/1713842



PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 6, product range: TVFKC 1,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

PCB connector

PCB connector - TVFKCL 1,5/ 3-ST - 1715934 https://www.phoenixcontact.com/us/products/1715934



PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 6, product range: TVFKCL 1,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard



https://www.phoenixcontact.com/us/products/1757488



PCB connector

PCB connector - QC 1,5/ 3-ST - 1717974

https://www.phoenixcontact.com/us/products/1717974



PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: QC 1,5/..-ST, pitch: 5 mm, connection method: Displacement connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

PCB connector

PCB connector - FKCN 2,5/ 3-ST - 1732755

https://www.phoenixcontact.com/us/products/1732755



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FKCN 2,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard



https://www.phoenixcontact.com/us/products/1757488



PCB connector

PCB connector - MSTB 2,5/ 3-ST - 1754465 https://www.phoenixcontact.com/us/products/1754465



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MSTB 2,5/..-ST, pitch: 5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

PCB connector

PCB connector - MSTBP 2,5/ 3-ST - 1765784 https://www.phoenixcontact.com/us/products/1765784



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MSTBP 2,5/..-ST, pitch: 5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard



https://www.phoenixcontact.com/us/products/1757488



PCB connector

PCB connector - SMSTB 2,5/ 3-ST - 1768778 https://www.phoenixcontact.com/us/products/1768778



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: SMSTB 2,5/..-ST, pitch: 5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -45 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

PCB connector

PCB connector - FRONT-MSTB 2,5/ 3-ST - 1779424 https://www.phoenixcontact.com/us/products/1779424



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FRONT-MSTB 2,5/..-ST, pitch: 5 mm, connection method: Front screw connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard



https://www.phoenixcontact.com/us/products/1757488



PCB connector

PCB connector - MSTBT 2,5/ 3-ST - 1779848 https://www.phoenixcontact.com/us/products/1779848



PCB connector, nominal cross section: 2.5 mm², nominal current: 12 A, rated voltage (III/2): 320 V, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MSTBT 2,5/..-ST, pitch: 5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

PCB connector

PCB connector - MVSTBR 2,5/ 3-ST - 1792029 https://www.phoenixcontact.com/us/products/1792029



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MVSTBR 2,5/..-ST, pitch: 5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 90 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard



https://www.phoenixcontact.com/us/products/1757488



PCB connector

PCB connector - MVSTBW 2,5/ 3-ST - 1792537 https://www.phoenixcontact.com/us/products/1792537



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: MVSTBW 2,5/..-ST, pitch: 5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -90 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

PCB connector

PCB connector - FKCT 2,5/ 3-ST - 1909223

https://www.phoenixcontact.com/us/products/1909223



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FKCT 2,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

1757488

https://www.phoenixcontact.com/us/products/1757488



PCB connector

PCB connector - FKCVR 2,5/ 3-ST - 1909728 https://www.phoenixcontact.com/us/products/1909728



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FKCVR 2,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 90 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

PCB connector

PCB connector - FKCVW 2,5/ 3-ST - 1910047 https://www.phoenixcontact.com/us/products/1910047



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FKCVW 2,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: -90 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard



https://www.phoenixcontact.com/us/products/1757488



PCB connector

PCB connector - FKC 2,5/ 3-ST - 1910364 https://www.phoenixcontact.com/us/products/1910364



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FKC 2,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

PCB connector

PCB connector - QC 1/ 3-ST-BUS - 1921683 https://www.phoenixcontact.com/us/products/1921683



PCB connector, nominal cross section: 1 mm², color: green, nominal current: 10 A, rated voltage (III/2): 630 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: QC 1/..-ST-BUS, pitch: 5 mm, connection method: Displacement connection, conductor/PCB connection direction: 90 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard, The plug allows conductors to be looped through from module to module, without interruption



https://www.phoenixcontact.com/us/products/1757488



PCB connector

PCB connector - FKCS 2,5/ 3-ST - 1974740 https://www.phoenixcontact.com/us/products/1974740



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Female connector, number of potentials: 3, number of rows: 1, number of positions: 3, number of connections: 3, product range: FKCS 2,5/..-ST, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

Phoenix Contact 2022 © - all rights reserved https://www.phoenixcontact.com

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com