

https://www.phoenixcontact.com/in/products/1786077



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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: Female connector, number of potentials: 15, number of rows: 1, number of positions: 15, number of connections: 15, product range: ICV 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.6 mm, number of solder pins per potential: 2, plug-in system: CLASSIC COMBICON, 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
- · Easy PCB replacement thanks to plug-in modules
- · Well-known mounting principle allows worldwide use
- · Inverted header with socket contacts for touch-proof device outputs or PCB/PCB connections

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Commercial Data

Order Key	1786077
Packing unit	50 pc
Minimum order quantity	50 pc
Sales Key	AAA
Product Key	AACSAG
Catalog Page	Page 333 (C-1-2013)
GTIN	4017918042226
Weight per Piece (including packing)	13.7 g
Weight per Piece (excluding packing)	10.142 g
Customs tariff number	85366930
Country of origin	DE



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Technical Data

Product properties

Туре	Inverted
Number of positions	15
Number of connections	15
Number of rows	1
Connector system	CLASSIC COMBICON
Mounting flange	without
Number of potentials	15
Pin layout	Linear pinning

Electrical properties

Maximum load current	12 A
Rated voltage (II/2)	630 V
Rated voltage (III/2)	320 V
Rated surge voltage (II/2)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (III/3)	4 kV
Nominal voltage U _N	320 V
Nominal current I _N	12 A
Nominal current I _N	12 A

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	hot-dip tin-plated
Metal surface contact area (top layer)	Tin (4 - 8 μm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 μm Sn)
Material data - housing	
Housing color	green (6021)

Housing color	green (6021)
Insulating material	PA
Insulating material group	1
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



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Dimensions

Dimensional drawing	
Width	78.2 mm
Height	22.4 mm
Installed height	18.9 mm
Length of the solder pin	3.6 mm
Length	10.2 mm
Length of the solder pin	3.6 mm
Pin dimensions	0.47 x 1.15 mm
Hole diameter	1.4 mm
Pitch	5.08 mm
PCB design	
Pin spacing	5.08 mm

Mechanical tests

Specification	IEC 60999-1:1999-11	
Result	Test passed	
epeated connection and disconnection		
Specification	IEC 60999-1:1999-11	
Result	Test passed	
ull-out test		
Specification	IEC 60999-1:1999-11	
Conductor cross section/conductor type/tractive force	0.2 mm² / solid / > 10 N	
setpoint/actual value	0.2 mm² / flexible / > 10 N	
	2.5 mm² / solid / > 50 N	
	2.5 mm² / flexible / > 50 N	
sertion and withdrawal forces		
Result	Test passed	
No. of cycles	25	
Insertion strength per pos. approx.	8 N	
Withdraw strength per pos. approx.	6 N	
ontact holder in insert		
Specification	IEC 60512-15-1:2008-05	
Result	Test passed	

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Test force per pos.	32 N
Resistance of inscriptions	
Specification	IEC 60068-2-70:1995-12
Result	Test passed
Polarization and coding	
Polarization and coding Specification	IEC 60512-13-5:2006-02
Result	Test passed
Nesul	Test passeu
Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02
Result	Test passed
lectrical tests	
Electrical properties	
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Contact resistance	1.5 mΩ
Pollution degree	2
Thermal test Test group C	
Thermal test Test group C Specification	IEC 60512-5-1:2002-02
Tested number of positions	16
	10
Insulation resistance	
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	1
Comparative tracking index (IEC 60112:2003-01)	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

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minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

Environmental and real-life conditions

Specification	IEC 60068-2-6:2007-12		
Frequency	10 - 150 - 10 Hz		
Sweep speed	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		
urability test			
Specification	IEC 60512-9-1:2010-03		
Impulse withstand voltage at sea level	4.8 kV		
Contact resistance R ₁	1.5 mΩ		
Contact resistance R ₂	1.5 mΩ		
Insertion/withdrawal cycles	25		
Insulation resistance, neighboring positions	> 5 MΩ		
imatic 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		

Packaging specifications

Type of packaging pac

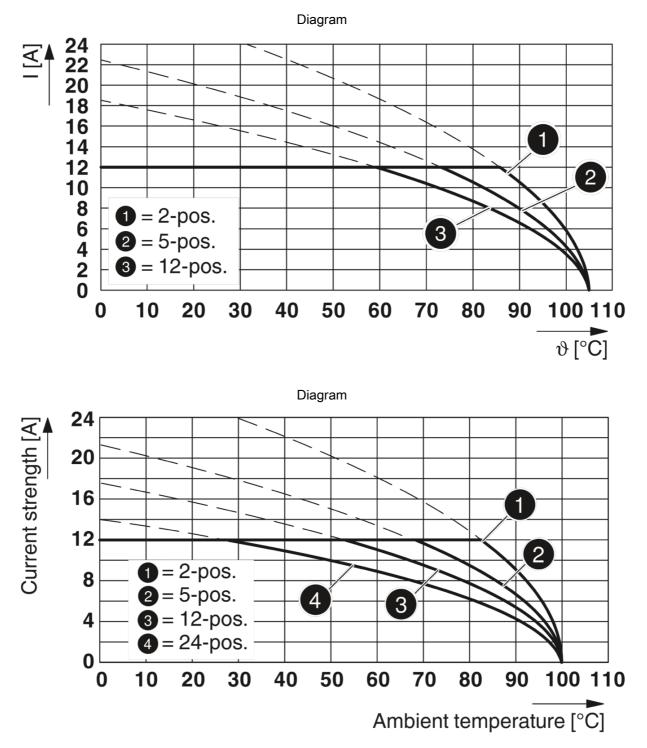
packed in cardboard

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Drawings

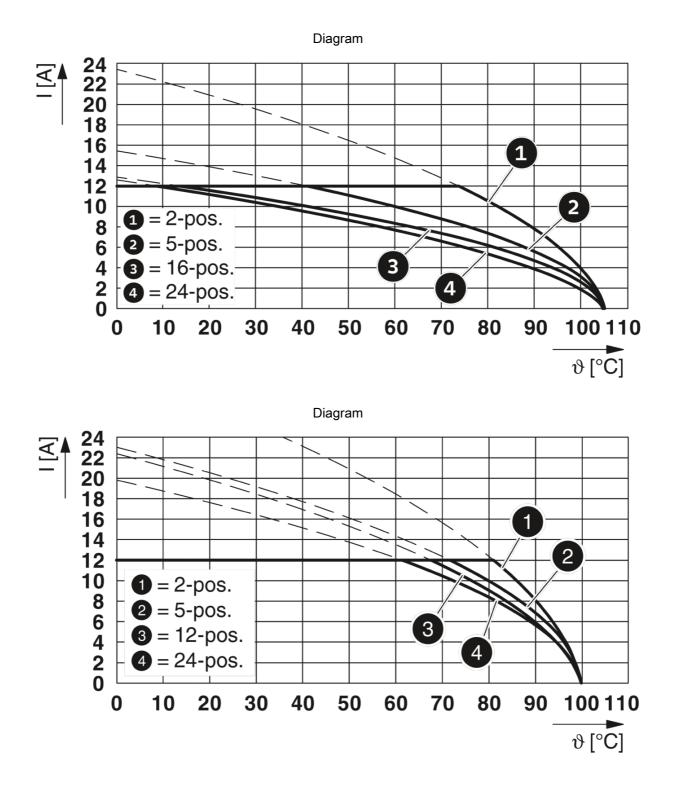


Type: ICV 2,5/..-G-5,08 with MSTBA 2,5/..-G-5,08

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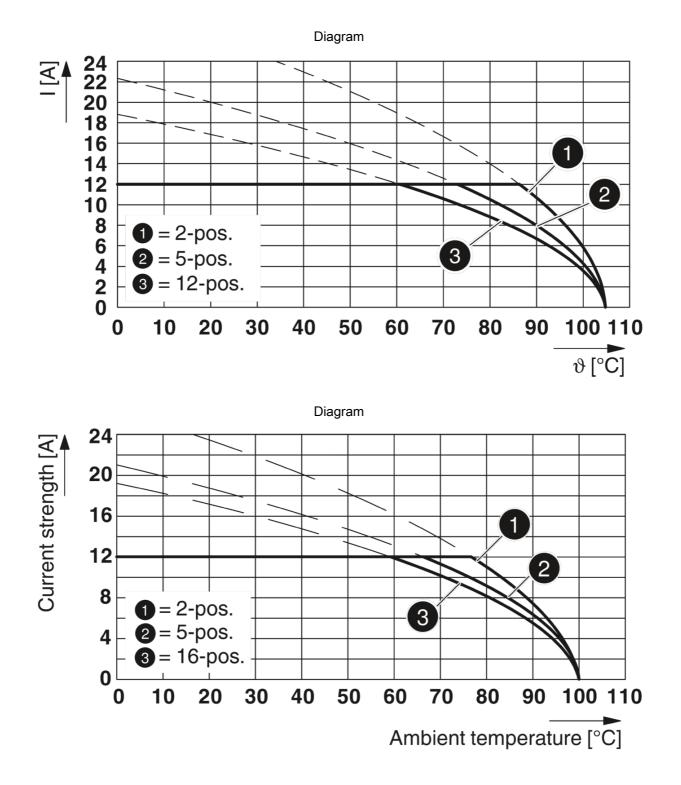


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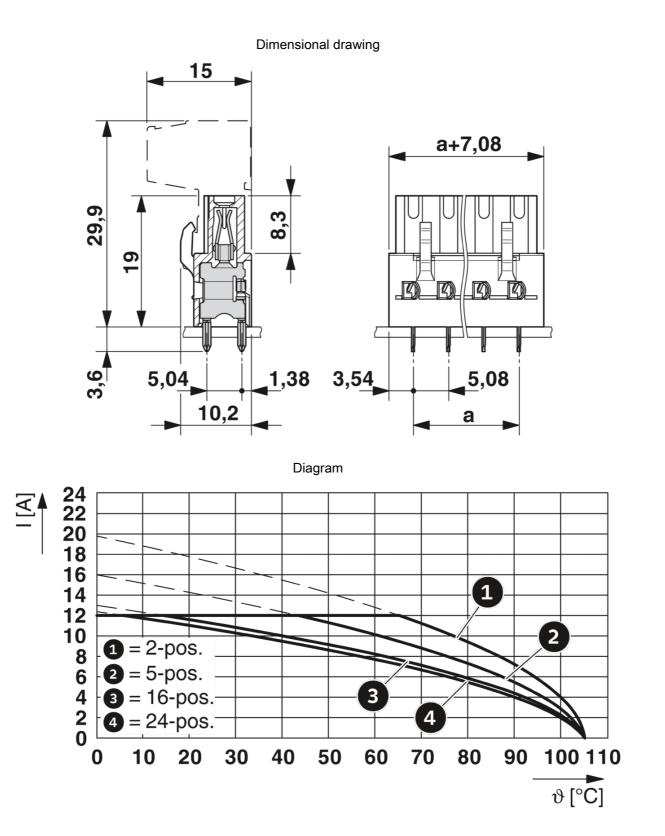


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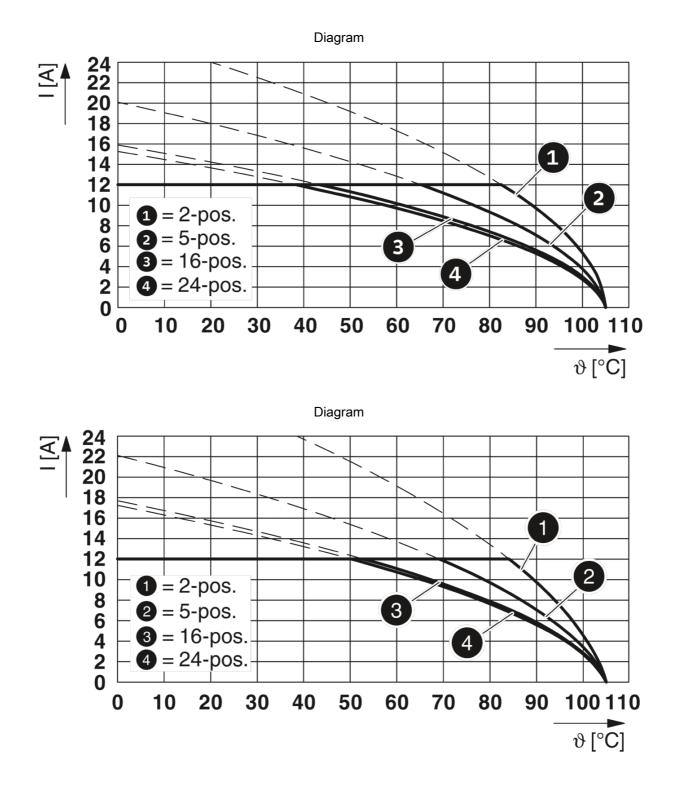


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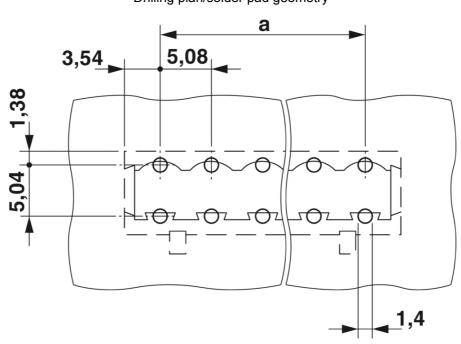
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Drilling plan/solder pad geometry



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Approvals

CSA 🐠	Nominal Voltage 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	-	-

Nominal Voltage U _N	Nominal Current I_N	Cross Section AWG	Cross Section mm ²
250 V	12 A	-	-

EAC [III

cULus Recognized	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm ²
Use group B				
	250 V	12 A	-	-
Use group D				
	300 V	10 A	-	-

VDE Zeichengenehmigung 企	Nominal Voltage U _N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
	250 V	12 A	-	-



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Classifications

ECLASS

ECLASS-9.0	27440402
ECLASS-10.0.1	27440402
ECLASS-11.0	27460201

ETIM

ETIM 6.0	EC002637

UNSPSC

UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409





Environmental Product Compliance

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





Accessories

Reducing plug

Reducing plug - RPS - 0201647



Reducing plug, color: gray

Mounting material

Mounting material - FLRP/ICV 80 - 1808353



Pair of guide rails, is inserted into the groove ICV/...G, height: 86 mm, hole diameter: $3.4\ \text{mm}$



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PCB header

PCB header - MSTBW 2,5/15-G-5,08 - 1735756



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: 15, number of rows: 1, number of positions: 15, number of connections: 15, product range: MSTBW 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: CLASSIC COMBICON, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: packed in cardboard

PCB header

PCB header - MDSTBV 2,5/15-G1-5,08 - 1762635



PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, number of potentials: 30, number of rows: 2, number of positions: 15, number of connections: 30, product range: MDSTBV 2,5/..-G1, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, number of solder pins per potential: 1, plug-in system: CLASSIC COMBICON, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: packed in cardboard, In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!



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PCB header

PCB header - MDSTB 2,5/15-G1-5,08 - 1762499



PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Male connector, number of potentials: 30, number of rows: 2, number of positions: 15, number of connections: 30, product range: MDSTB 2,5/..-G1, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: CLASSIC COMBICON, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: packed in cardboard, In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

PCB header

PCB header - SMSTBA 2,5/15-G-5,08 - 1767504



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: 15, number of rows: 1, number of positions: 15, number of connections: 15, product range: SMSTBA 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: CLASSIC COMBICON, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: packed in cardboard





Printed-circuit board connector

Printed-circuit board connector - IC 2,5/15-ST-5,08 - 1786307



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: Male connector, number of potentials: 15, number of rows: 1, number of positions: 15, number of connections: 15, product range: IC 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard

Printed-circuit board connector

Printed-circuit board connector - FKIC 2,5/15-ST-5,08 - 1873485



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: Male connector, number of potentials: 15, number of rows: 1, number of positions: 15, number of connections: 15, product range: FKIC 2,5/..-ST, pitch: 5.08 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, locking clip: - without locking clip, plug-in system: CLASSIC COMBICON, Locking: without, mounting: without, type of packaging: packed in cardboard





Printed-circuit board connector

Printed-circuit board connector - MSTBA 2,5/15-G-5,08 - 1757378



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: 15, number of rows: 1, number of positions: 15, number of connections: 15, product range: MSTBA 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: CLASSIC COMBICON, Pin connector pattern alignment: Standard, Locking: without, mounting: without

Printed-circuit board connector

Printed-circuit board connector - SMSTB 2,5/15-G-5,08 - 1769599



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: 15, number of rows: 1, number of positions: 15, number of connections: 15, product range: SMSTB 2,5/..-G, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm, number of solder pins per potential: 1, plug-in system: CLASSIC COMBICON, Pin connector pattern alignment: Standard, Locking: without, mounting: without, type of packaging: packed in cardboard





Printed-circuit board connector

Printed-circuit board connector - ICC 2,5/15-STZ-5,08 - 1823972



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, type of contact: Male connector, number of potentials: 15, number of rows: 1, number of positions: 15, number of connections: 15, product range: ICC 2,5/..-STZ, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0°, locking clip: - without locking clip, plug-in system: CLASSIC COMBICON, Locking: Snap-in locking, mounting: Engagement nose, type of packaging: packed in cardboard, Corresponding male crimp contacts with current [A] and conductor cross section range [mm²] data: 10A/ICC-MT 0,5-1,0 (3190577); 10A/ICC-MT 0,5-1,0 BA (3190603); 12A/ICC-MT 1,5-2,5 (3190580); 12A/ICC-MT 1,5-2,5 BA (3190593). BA = Bandkontakte

Coding profile

Coding profile - CP-MSTB - 1734634

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



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Test plugs

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 $\ensuremath{\mathsf{mm}}^2$ conductor cross section, color: gray

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