

1786268

https://www.phoenixcontact.com/in/products/1786268

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 connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Pin, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, 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: COMBICON MSTB 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard

Your advantages

- · Well-known connection principle allows worldwide use
- Easy PCB replacement thanks to plug-in modules
- · Inverted connector with pin contacts for touch-proof device outputs or free-hanging cable/cable connections
- · Can be combined with the MSTB 2,5 range
- · Low temperature rise, thanks to maximum contact force

Commercial data

Item number	1786268
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AAC
Product key	AACADA
Catalog page	Page 272 (C-1-2013)
GTIN	4017918042417
Weight per piece (including packing)	18.877 g
Weight per piece (excluding packing)	18.503 g
Customs tariff number	85366990
Country of origin	DE



https://www.phoenixcontact.com/in/products/1786268



Technical data

Product properties

Product type	PCB connector
Product family	IC 2,5/ST
Product line	COMBICON Connectors M
Туре	Inverted
Number of positions	11
Pitch	5.08 mm
Number of connections	11
Number of rows	1
Number of potentials	11
Mounting flange	without

Electrical properties

Nominal current I _N	12 A
Nominal voltage U _N	320 V
Contact resistance	2.9 mΩ
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

Connection data

Connection technology

Туре	Inverted
Connector system	COMBICON MSTB 2,5
Nominal cross section	2.5 mm ²
Contact connection type	Pin

Interlock

Locking type	without
Mounting flange	without

Conductor connection

Connection method	Screw connection with tension sleeve
Conductor/PCB connection direction	0°
Conductor cross section rigid	0.2 mm² 2.5 mm²
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross section AWG	24 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 2.5 mm²



1786268

https://www.phoenixcontact.com/in/products/1786268

Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 2.5 mm²
2 conductors with same cross section, solid	0.2 mm ² 1 mm ²
2 conductors with same cross section, flexible	0.2 mm² 1.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 1 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² 1.5 mm ²
Cylindrical gauge a x b / diameter	2.8 mm x 2.0 mm / 2.4 mm
Stripping length	7 mm
Drive form screw head	Slotted (L)
Tightening torque	0.5 Nm 0.6 Nm
Specifications for ferrules without insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6
Specifications for ferrules with insulating collar	
recommended crimping tool	1212034 CRIMPFOX 6

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 terminal point (top layer)	Tin (5 - 7 μm Sn)
Metal surface terminal point (middle layer)	Nickel (2 - 3 µm Ni)
Metal surface contact area (top layer)	Tin (5 - 7 μm Sn)
Metal surface contact area (middle layer)	Nickel (2 - 3 µm Ni)

Material data - housing

Color (Housing)	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

Dimensions



1786268

Visual inspection

https://www.phoenixcontact.com/in/products/1786268

Dimensional drawing	
	h
Pitch	5.08 mm
Width [w]	57.38 mm
Height [h]	15 mm
Length [I]	19.2 mm
tes	
Notes on operation	In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load
chanical tests	
est 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	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
nsertion and withdrawal forces	
Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	25
•	0.11
Insertion strength per pos. approx.	8 N
	7 N
Insertion strength per pos. approx. Withdraw strength per pos. approx.	
Insertion strength per pos. approx.	
Insertion strength per pos. approx. Withdraw strength per pos. approx. Forque test Specification	7 N
Insertion strength per pos. approx. Withdraw strength per pos. approx. Forque test	7 N
Insertion strength per pos. approx. Withdraw strength per pos. approx. Forque test Specification Resistance of inscriptions	7 N IEC 60999-1:1999-11
Insertion strength per pos. approx. Withdraw strength per pos. approx. Forque test Specification Resistance of inscriptions Specification Result	7 N IEC 60999-1:1999-11 IEC 60068-2-70:1995-12
Insertion strength per pos. approx. Withdraw strength per pos. approx. Forque test Specification Resistance of inscriptions Specification	7 N IEC 60999-1:1999-11 IEC 60068-2-70:1995-12



https://www.phoenixcontact.com/in/products/1786268

Insulation resistance
Specification

Insulation resistance, neighboring positions



Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02
Result	Test passed
vironmental and real-life conditions	
/ibration test	
Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz 60.1 Hz)
Acceleration	5g (60.1 Hz 150 Hz)
Test duration per axis	2.5 h
Test directions	X-, Y- and Z-axis
Durability test	
Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	4.8 kV
Contact resistance R ₁	2.9 mΩ
Contact resistance R ₂	3 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ
limatic 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
	2.2.1.0
ambient conditions	40.00 400.00 (1)
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
ectrical tests	
The surrent bank I Took surrey of O	
Thermal test Test group C	UEO 00540 5 4 0000 00
Specification	IEC 60512-5-1:2002-02
Tested number of positions	16

IEC 60512-3-1:2002-02

> 5 MΩ



1786268

https://www.phoenixcontact.com/in/products/1786268

Air clearances and creepage distances |

7 iii oloalanooo aha oloopago alotanooo	
Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 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

Packaging specifications

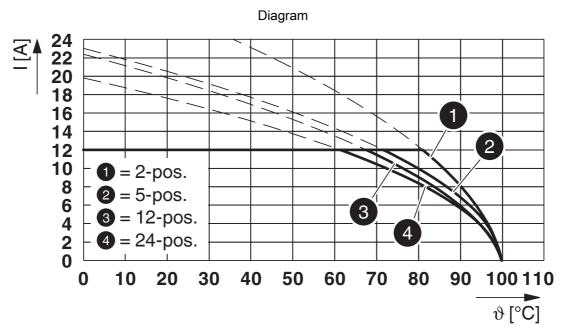
Type of packaging	packed in cardboard

1786268

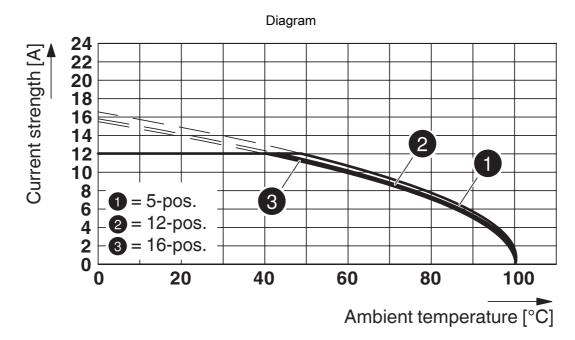
https://www.phoenixcontact.com/in/products/1786268



Drawings



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



Type: (U)MSTBVK 2,5/...-ST-5,08 with IC 2,5/...-ST-5,08



1786268

https://www.phoenixcontact.com/in/products/1786268

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/in/products/1786268

CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
	300 V	10 A	28 - 12	-
Use group D				
	300 V	10 A	28 - 12	-

cULus Recogn Approval ID: E6042	CULus Recognized Approval ID: E60425-19931014			
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
Use group B				
	250 V	12 A	30 - 12	-
Use group D				
	300 V	10 A	30 - 12	-

VDE approval of drawings Approval ID: 40050694				
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
	250 V	12 A	-	0.2 - 2.5



1786268

https://www.phoenixcontact.com/in/products/1786268

Classifications

ECLASS

	ECLASS-11.0	27460202				
	ECLASS-12.0	27460202				
	ECLASS-13.0	27460202				
ΕT	ETIM					
	ETIM 9.0	EC002638				
UNSPSC						
	UNSPSC 21.0	39121400				



1786268

https://www.phoenixcontact.com/in/products/1786268

Environmental product compliance

EU RoHS	
---------	--

Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%
EF3.0 Climate Change	
CO2e kg	0.171 kg CO2e



1786268

https://www.phoenixcontact.com/in/products/1786268

Accessories

MSTB-BL - Accessories

1755477

https://www.phoenixcontact.com/in/products/1755477



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

EBP 2-5 - Insertion bridge

1733169

https://www.phoenixcontact.com/in/products/1733169

Insertion bridge for connectors with 5.0 mm or 5.08 mm pitch





1786268

https://www.phoenixcontact.com/in/products/1786268

SZS 0,6X3,5 - Screwdriver

1205053

https://www.phoenixcontact.com/in/products/1205053



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

CR-MSTB - Coding section

1734401

https://www.phoenixcontact.com/in/products/1734401

Coding section, inserted into the recess in the header or the inverted plug, red insulating material $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right$





1786268

https://www.phoenixcontact.com/in/products/1786268

SK 5,08/3,8:FORTL.ZAHLEN - Marker card

0804293

https://www.phoenixcontact.com/in/products/0804293



Marker card, Sheet, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 . .. 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, Number of individual labels: 12, text field height: 3.8 mm, text field width: 5.08 mm

KGS-MSTB 2,5/11 - Cable housing

1783805

https://www.phoenixcontact.com/in/products/1783805



Cable housing, product range: KGS-MSTB 2,5



https://www.phoenixcontact.com/in/products/1786268



MSTB 2,5/11-ST-5,08 - PCB connector

1757103

https://www.phoenixcontact.com/in/products/1757103



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: MSTB 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: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard

MVSTBR 2,5/11-ST-5,08 - PCB connector

1792333

https://www.phoenixcontact.com/in/products/1792333



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: MVSTBR 2,5/..-ST, pitch: 5.08 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 method: without, type of packaging: packed in cardboard



https://www.phoenixcontact.com/in/products/1786268



MSTBVK 2,5/11-ST-5,08 - DIN rail connector

1831401

https://www.phoenixcontact.com/in/products/1831401



DIN rail connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: MSTBVK 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, plug-in system: COMBICON MSTB 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard

SMSTB 2,5/11-ST-5,08 - PCB connector

1826377

https://www.phoenixcontact.com/in/products/1826377



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: SMSTB 2,5/..-ST, pitch: 5.08 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 method: without, type of packaging: packed in cardboard



https://www.phoenixcontact.com/in/products/1786268



MSTBU 2,5/11-STD-5,08 - PCB connector

1824214

https://www.phoenixcontact.com/in/products/1824214



Direct plug-in block, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: MSTBU 2,5/..-STD, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Direct mounting, conductor/PCB connection direction: 0 °, plug-in system: COMBICON MSTB 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard

MSTBC 2,5/11-ST-5,08 - PCB connector

1808900

https://www.phoenixcontact.com/in/products/1808900



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: MSTBC 2,5/..-ST, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross section range [mm²] data: 10A/MSTBC-MT 0,5-1,0 (3190564); 10A/MSTBC-MT 0,5-1,0 BA (3190645); 12A/MSTBC-MT 1,5-2,5 (3190551); 12A/MSTBC-MT 1,5-2,5 BA (3190658). BA = Bandkontakte



https://www.phoenixcontact.com/in/products/1786268



MVSTBW 2,5/11-ST-5,08 - PCB connector

1792841

https://www.phoenixcontact.com/in/products/1792841



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: MVSTBW 2,5/..-ST, pitch: 5.08 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 method: without, type of packaging: packed in cardboard

ICV 2,5/11-G-5,08 - PCB header

1786035

https://www.phoenixcontact.com/in/products/1786035



PCB headers, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, 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: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: without, mounting method: without, type of packaging: packed in cardboard



https://www.phoenixcontact.com/in/products/1786268



FRONT-MSTB 2,5/11-ST-5,08 - PCB connector

1777374

https://www.phoenixcontact.com/in/products/1777374



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: FRONT-MSTB 2,5/..-ST, pitch: 5.08 mm, connection method: Front screw connection, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard

QC 1/11-ST-5,08 - PCB connector

1883349

https://www.phoenixcontact.com/in/products/1883349



PCB connector, nominal cross section: 1 mm², color: green, nominal current: 10 A, rated voltage (III/2): 630 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: QC 1/..-ST, pitch: 5.08 mm, connection method: Displacement connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard



https://www.phoenixcontact.com/in/products/1786268



FKCVR 2,5/11-ST-5,08 - PCB connector

1874044

https://www.phoenixcontact.com/in/products/1874044



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: FKCVR 2,5/..-ST, pitch: 5.08 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 method: without, type of packaging: packed in cardboard

FKCVW 2,5/11-ST-5,08 - PCB connector

1873744

https://www.phoenixcontact.com/in/products/1873744



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: FKCVW 2,5/..-ST, pitch: 5.08 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 method: without, type of packaging: packed in cardboard



https://www.phoenixcontact.com/in/products/1786268



FKC 2,5/11-ST-5,08 - PCB connector

1873142

https://www.phoenixcontact.com/in/products/1873142



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: FKC 2,5/..-ST, pitch: 5.08 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 method: without, type of packaging: packed in cardboard

MSTBP 2,5/11-ST-5,08 - PCB connector

1769104

https://www.phoenixcontact.com/in/products/1769104



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: MSTBP 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: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard



https://www.phoenixcontact.com/in/products/1786268



MSTB 2,5/11-STZ-5,08 - PCB connector

1764293

https://www.phoenixcontact.com/in/products/1764293



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 11, number of rows: 1, number of positions: 11, number of connections: 11, product range: MSTB 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: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting method: without, type of packaging: packed in cardboard, Pull-out aid (STZ13)

Phoenix Contact 2025 @ - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT (I) Pvt. Ltd. A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420 info@phoenixcontact.co.in