

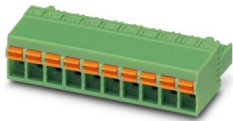
# FKCN 2,5/ 2-ST - PCB connector



1732742

<https://www.phoenixcontact.com/us/products/1732742>

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PCB connector, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 2, number of rows: 1, number of positions: 2, number of connections: 2, 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

## Your advantages

- Time saving push-in connection, tools not required
- Intuitive operation due to color-coded actuating push button
- Extremely small design for the respective conductor cross section
- Quick and convenient testing using integrated test option
- Can be combined with the MSTB 2,5 range

## Commercial data

Item number	1732742
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA03
Product key	AACFEA
Catalog page	Page 278 (C-1-2013)
GTIN	4046356163637
Weight per piece (including packing)	2.804 g
Weight per piece (excluding packing)	2.277 g
Customs tariff number	85366990
Country of origin	BG

# FKCN 2,5/ 2-ST - PCB connector



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## Technical data

### Product properties

Product type	PCB connector
Product family	FKCN 2,5/...-ST
Product line	COMBICON Connectors M
Type	Standard
Number of positions	2
Pitch	5 mm
Number of connections	2
Number of rows	1
Number of potentials	2
Mounting flange	without

### Data management status

Article revision	02
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### Electrical properties

Nominal current $I_N$	12 A
Nominal voltage $U_N$	320 V
Contact resistance	1.1 m $\Omega$
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
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

### Connection data

#### Connection technology

Type	Standard
Connector system	COMBICON MSTB 2,5
Nominal cross section	2.5 mm <sup>2</sup>
Contact connection type	Socket

#### Interlock

Locking type	without
Mounting flange	without

#### Conductor connection

Connection method	Push-in spring connection
Conductor/PCB connection direction	0 °
Conductor cross section rigid	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

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Conductor cross section AWG	24 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Cylindrical gauge a x b / diameter	2.4 mm x 1.5 mm / 1.6 mm
Stripping length	10 mm

## Specifications for ferrules without insulating collar

recommended crimping tool	1212034 CRIMPFOX 6
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## Specifications for ferrules with insulating collar

recommended crimping tool	1212034 CRIMPFOX 6
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## 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 terminal point (top layer)	Tin (4 - 8 µm Sn)
Metal surface contact area (top layer)	Tin (4 - 8 µm Sn)

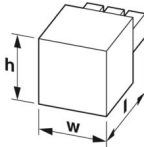
### Material data - housing

Color (Housing)	green (6021)
Insulating material	PBT
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

### Material data – actuating element

Color (Actuating element)	orange (2003)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

## Dimensions

Dimensional drawing	
Pitch	5 mm
Width [w]	10 mm
Height [h]	10.9 mm

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Length [l]	27.1 mm
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## Notes

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.
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## Mechanical tests

### Conductor connection

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

### Test for conductor damage and slackening

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

### Repeated connection and disconnection

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 mm <sup>2</sup> / solid / > 10 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	1.5 mm <sup>2</sup> / solid / > 40 N
	2.5 mm <sup>2</sup> / flexible / > 50 N

### Insertion and withdrawal forces

Specification	IEC 60512-13-2:2006-02
Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N

### Resistance of inscriptions

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
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Result	Test passed
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## Environmental and real-life conditions

### Vibration 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 <sub>1</sub>	1.1 mΩ
Contact resistance R <sub>2</sub>	1.1 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ

### Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	2.21 kV

### Ambient 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

## Electrical tests

### Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	18

### 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	I
Comparative tracking index (IEC 60112)	CTI 600

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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

## Packaging specifications

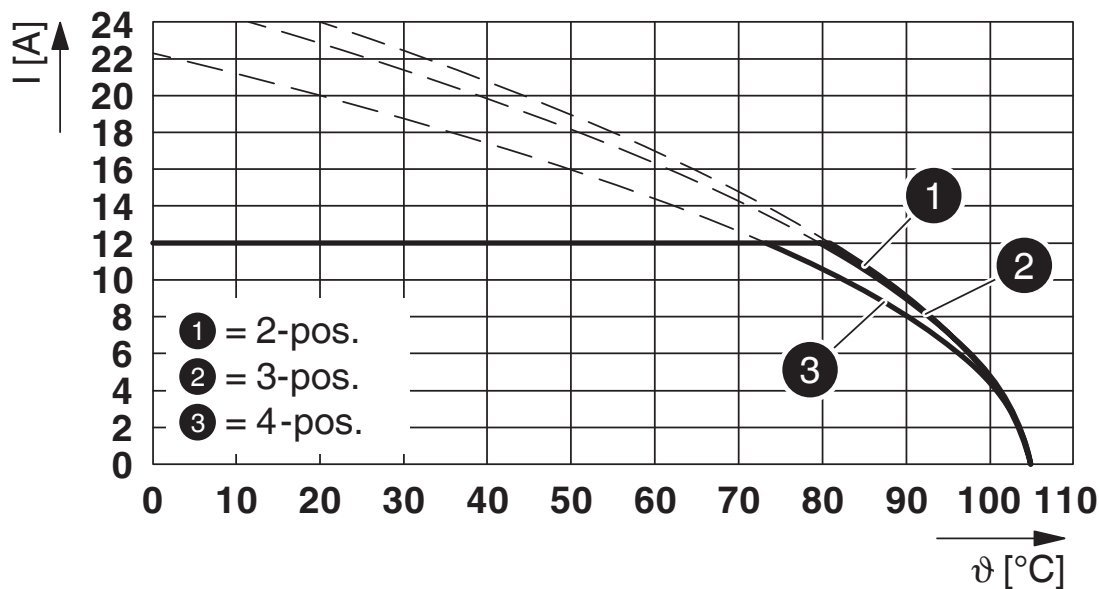
Type of packaging	packed in cardboard
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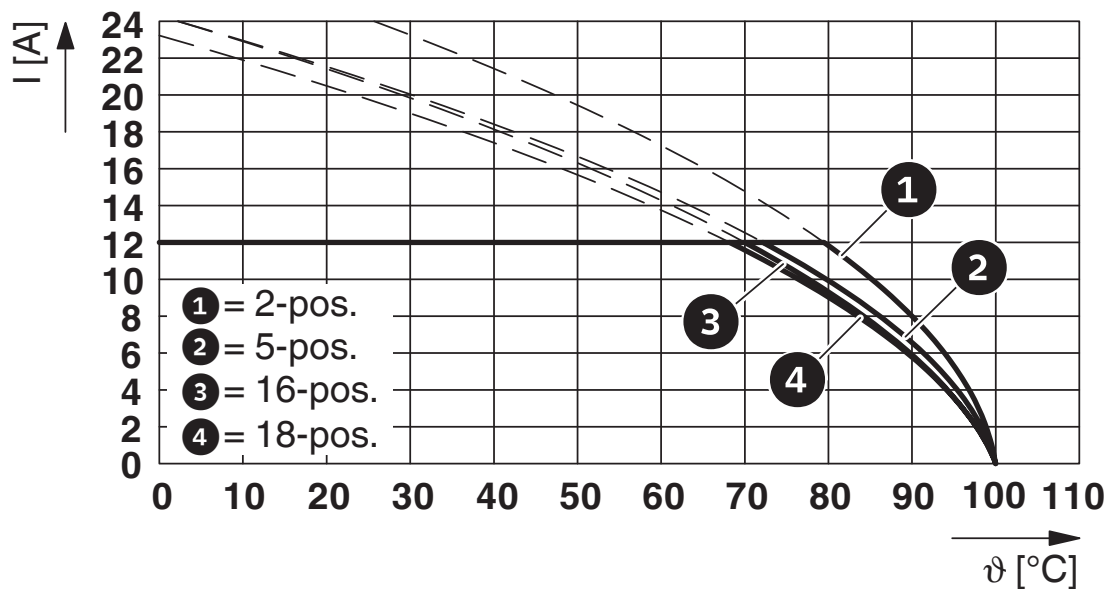
## Drawings

Diagram



Type: FKCN 2,5/...-ST with MSTBO 2,5/...-G1R

Diagram



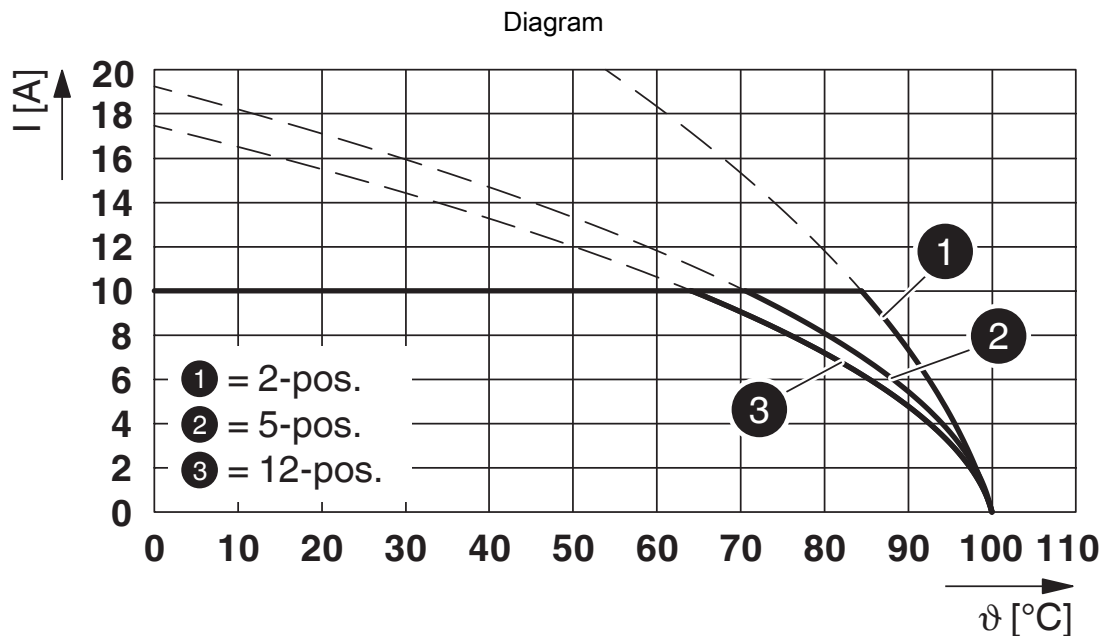
Type: FKCN 2,5/...-ST with MSTBA 2,5/...-G

# FKCN 2,5/ 2-ST - PCB connector

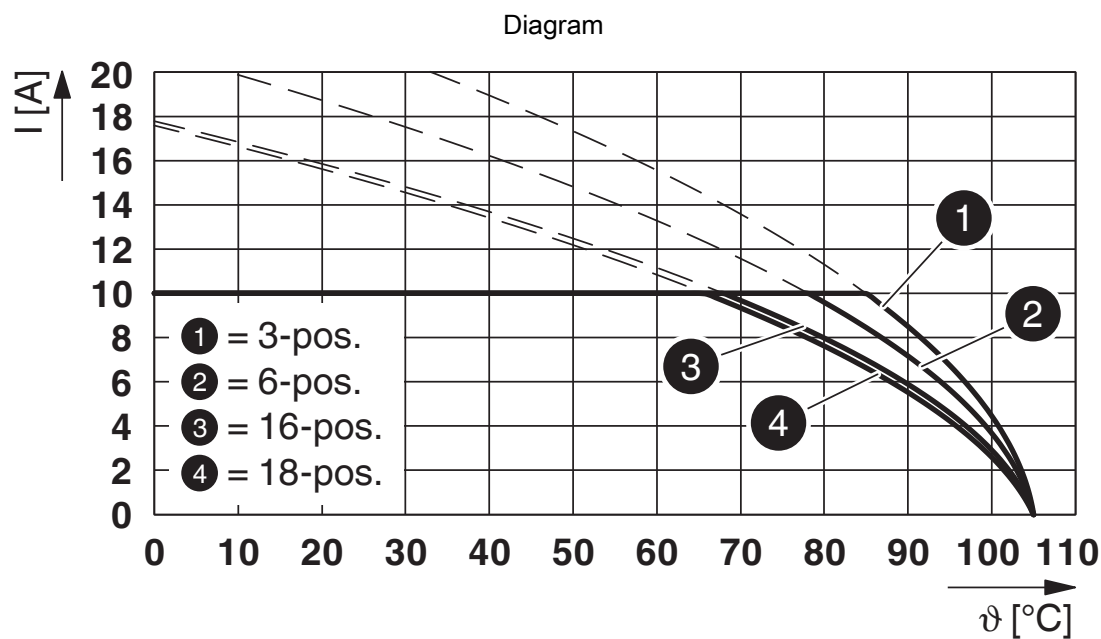


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Type: FKCN 2,5/...-ST with MDSTBW 2,5/...-G



Type: FKCN 2,5/...-ST with MDSTB 2,5/...-G1

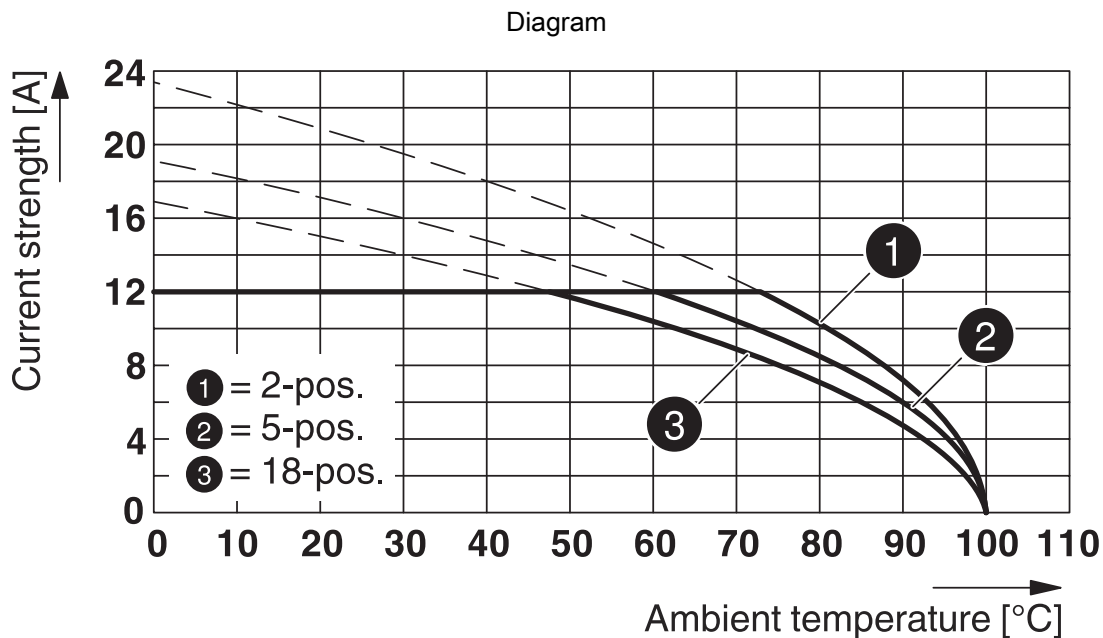


# FKCN 2,5/ 2-ST - PCB connector

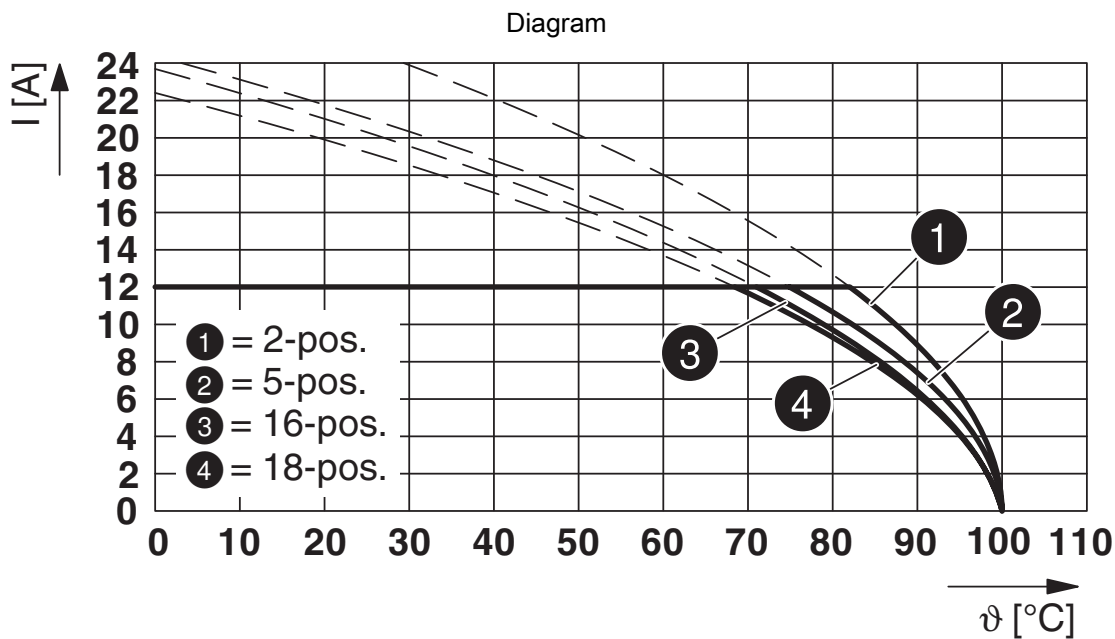


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Type: FKCN 2,5/...-ST with CCDN 2,5/...-G1 P26 THR



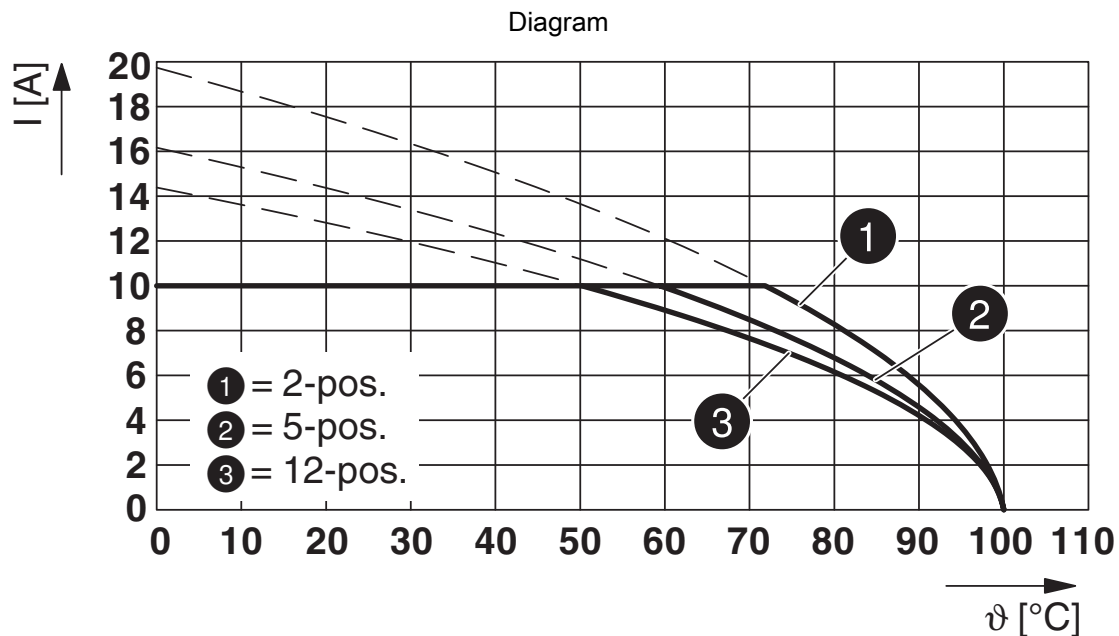
Type: FKCN 2,5/...-ST with MSTB 2,5/...-G

# FKCN 2,5/ 2-ST - PCB connector

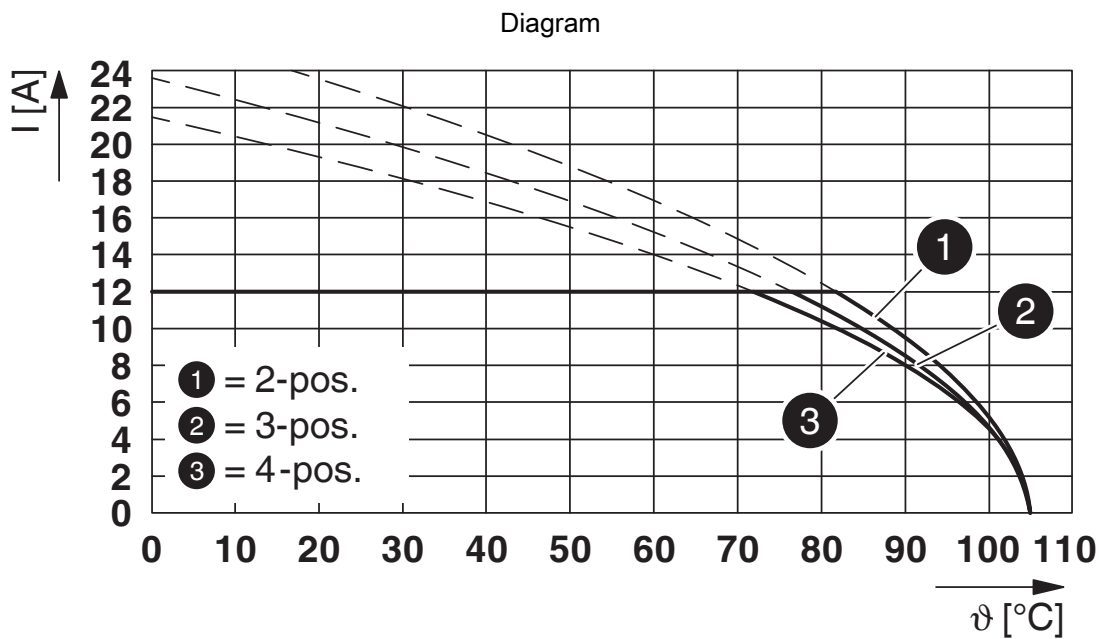


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Type: FKCN 2,5/...-ST with MDSTBV 2,5/...-G



Type: FKCN 2,5/...-ST with MSTBO 2,5/...-G1L

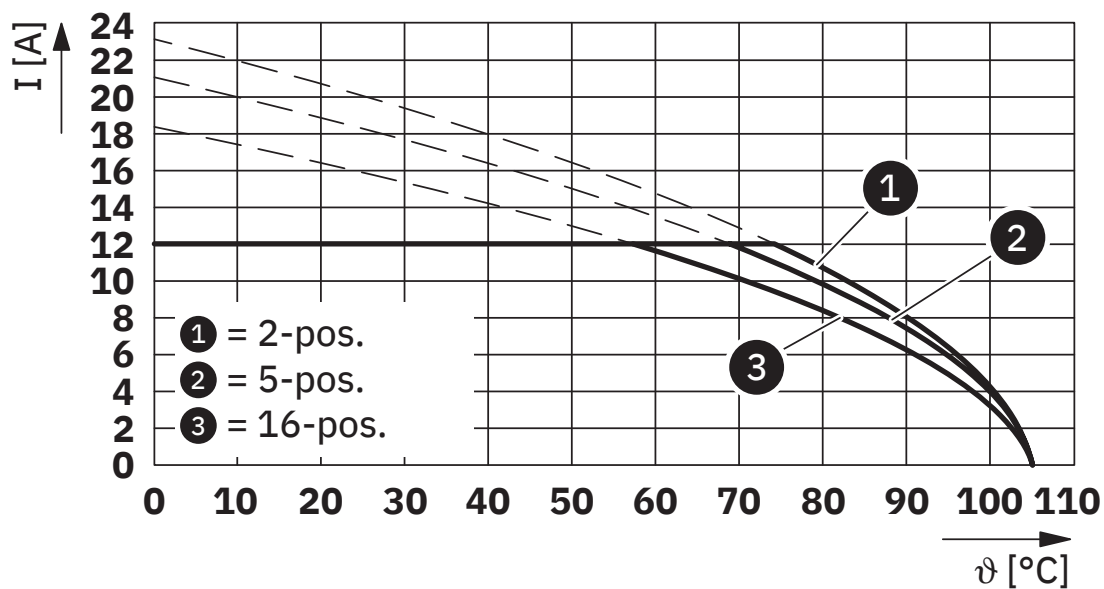
# FKCN 2,5/ 2-ST - PCB connector



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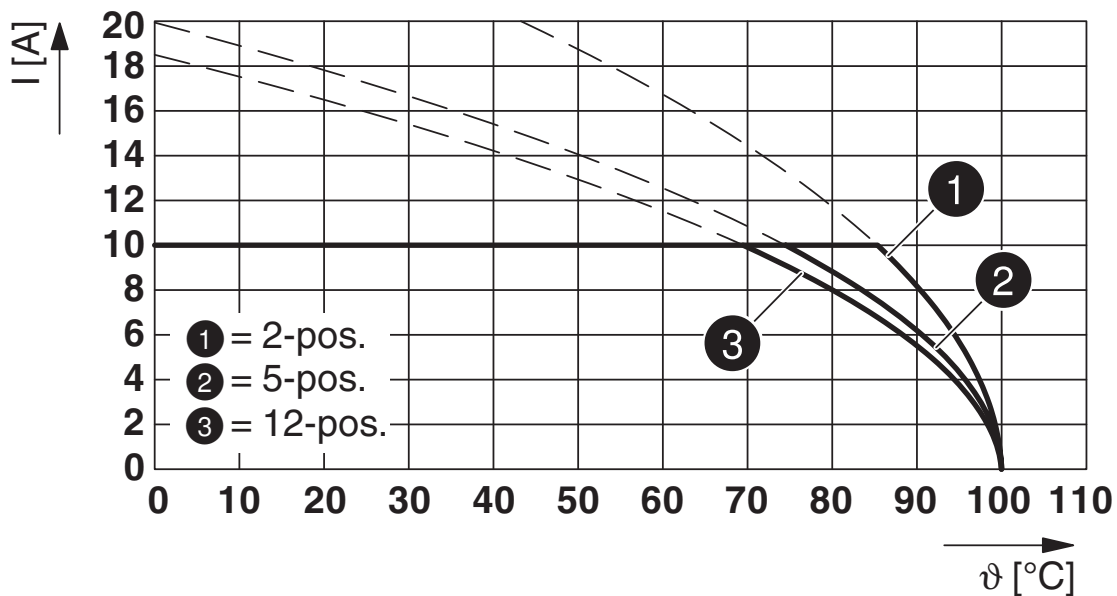
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Diagram



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

Diagram



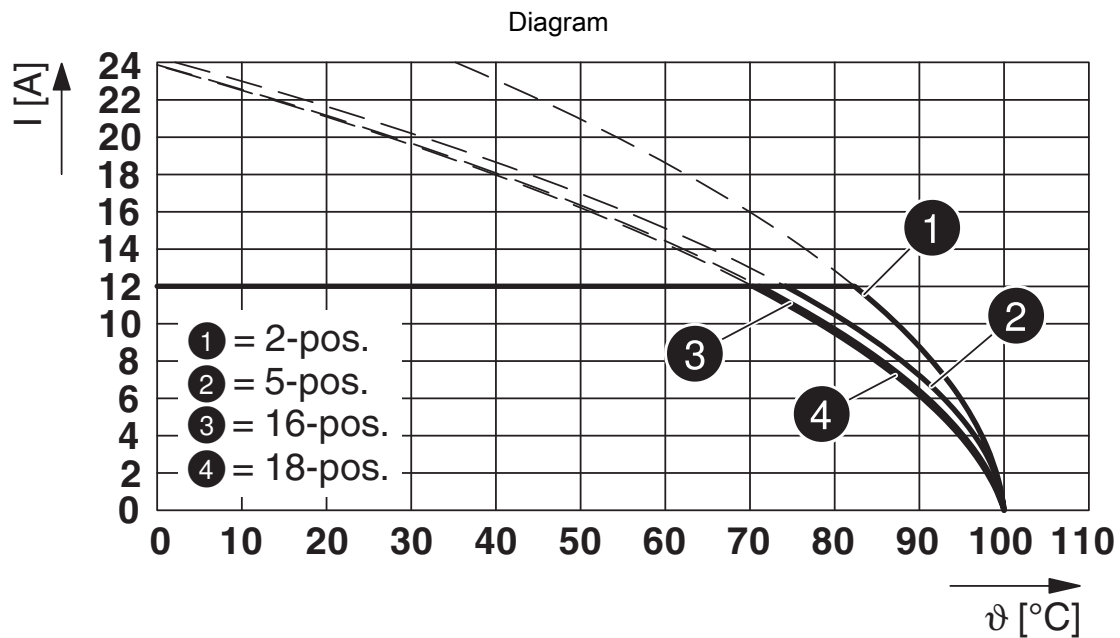
Type: FKCN 2,5/...-ST with MDSTB 2,5/...-G

# FKCN 2,5/ 2-ST - PCB connector

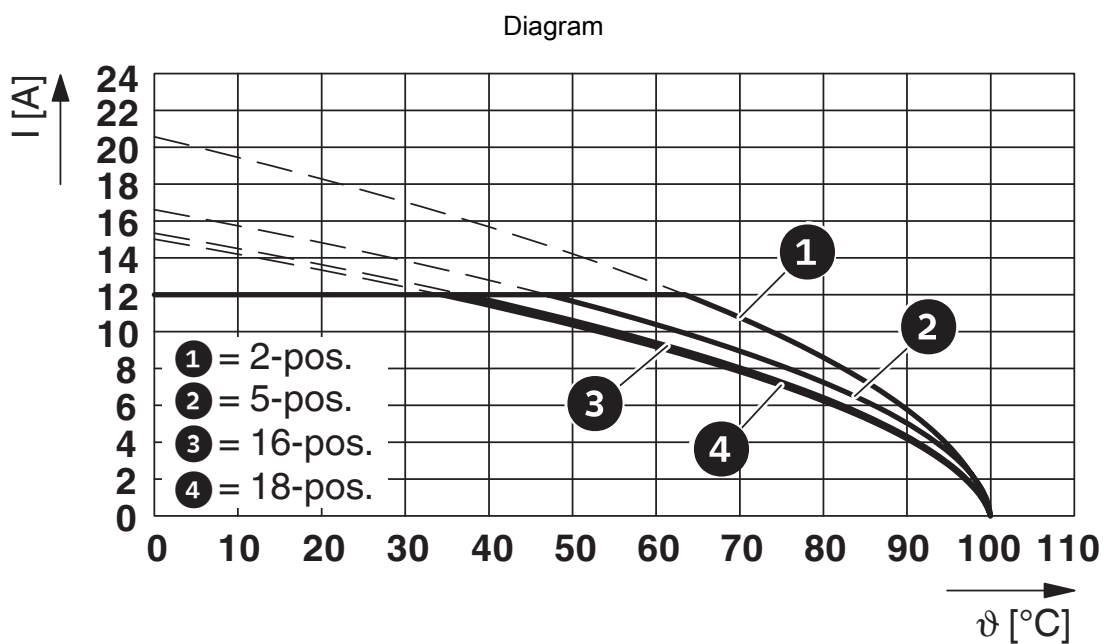


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Type: FKCN 2,5/...-ST with SMSTBA 2,5/...-G



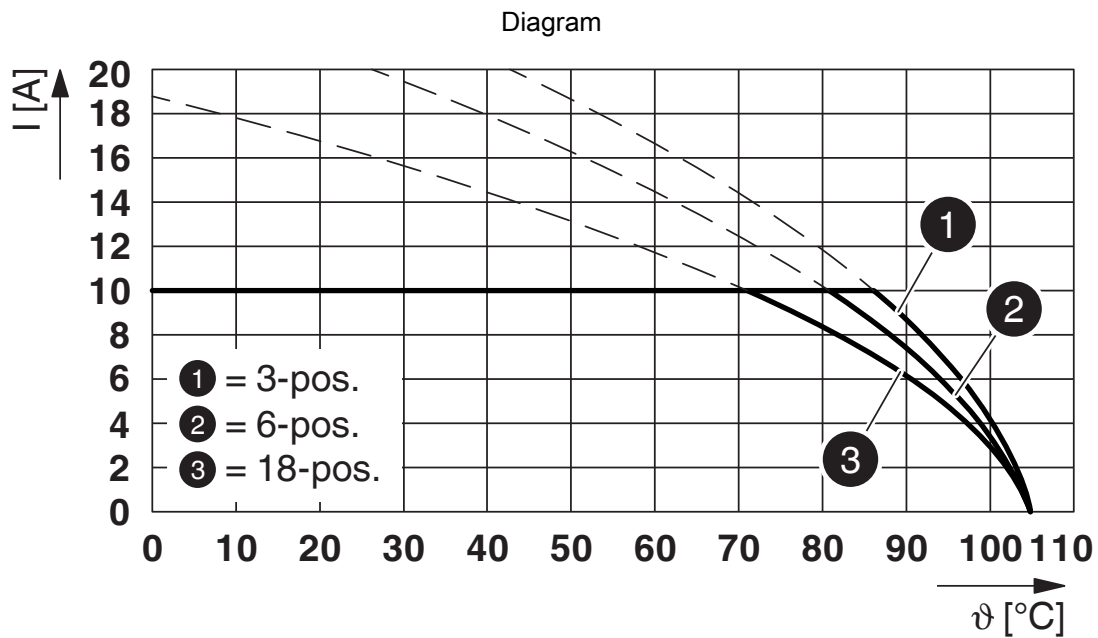
Type: FKCN 2,5/...-ST with MSTBVA 2,5/...-G

# FKCN 2,5/ 2-ST - PCB connector

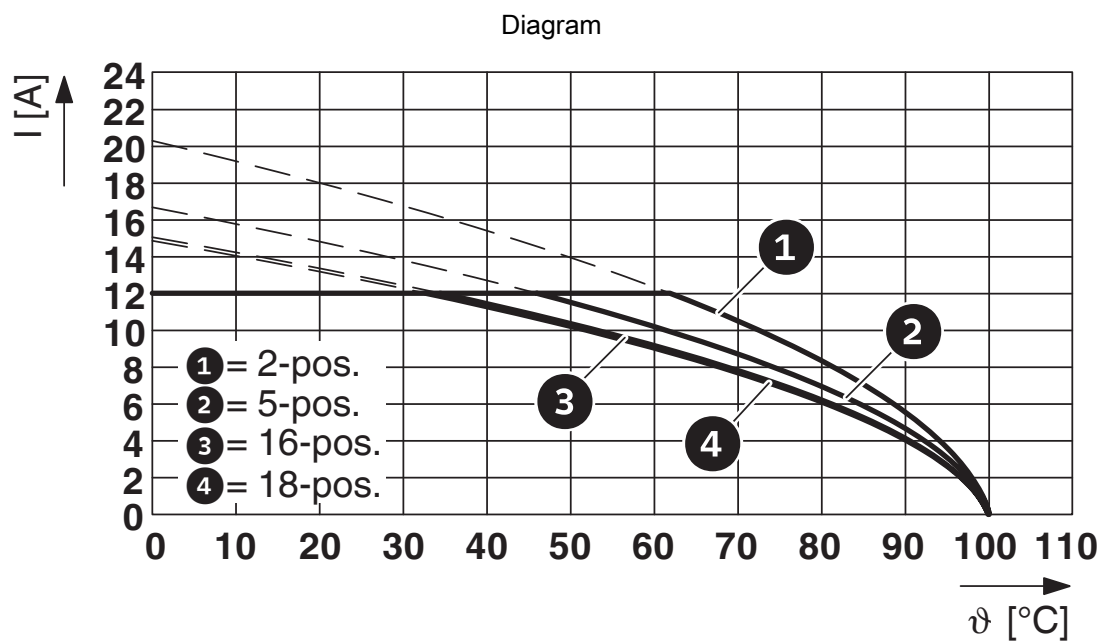


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Type: FKCN 2,5/...-ST with MDSTBV 2,5/...-G1



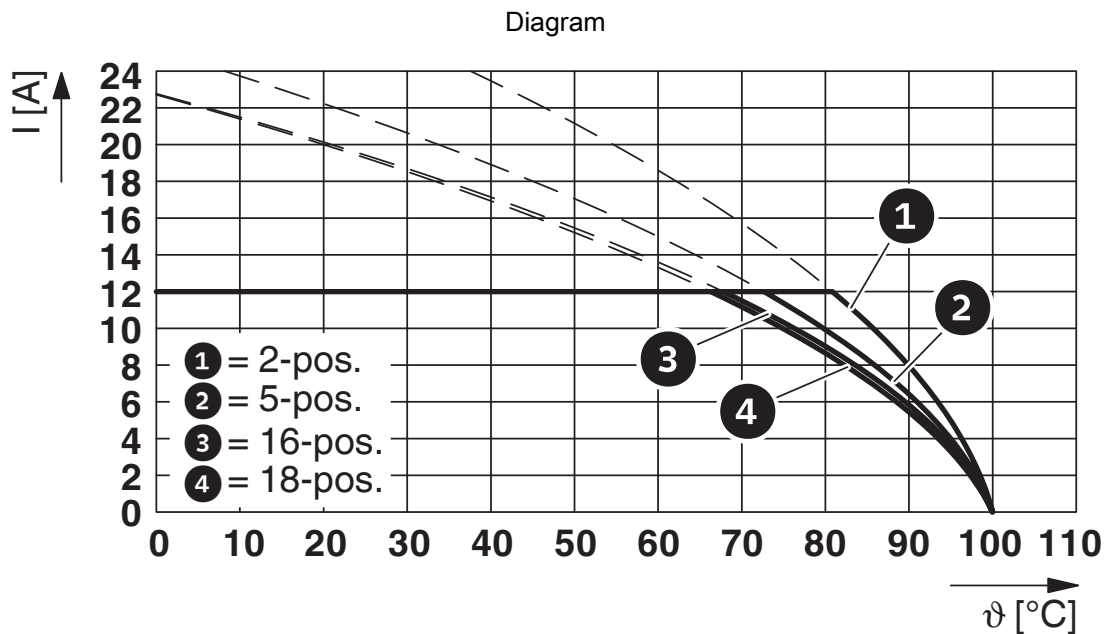
Type: FKCN 2,5/...-ST with MSTBV 2,5/...-G

# FKCN 2,5/ 2-ST - PCB connector

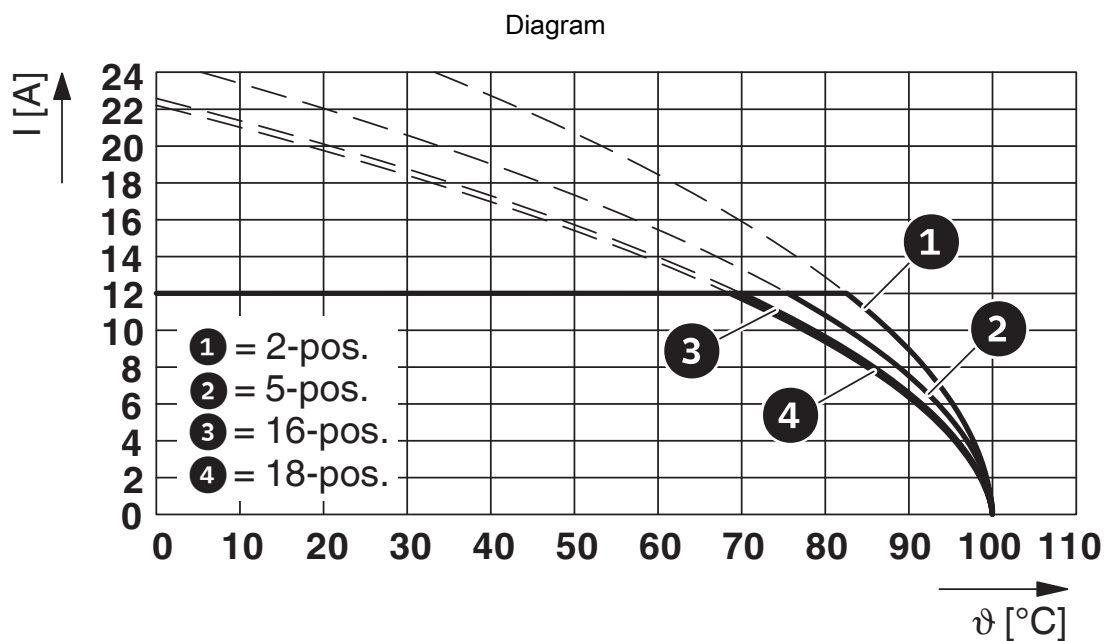


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Type: FKCN 2,5/...-ST with MSTBW 2,5/...-G



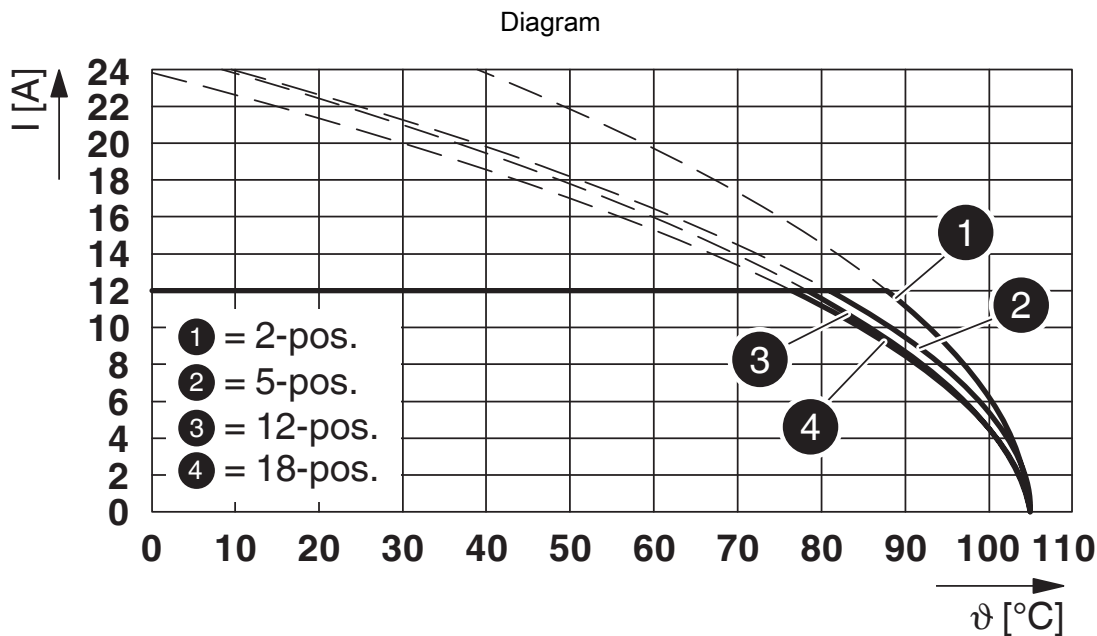
Type: FKCN 2,5/...-ST with SMSTB 2,5/...-G

# FKCN 2,5/ 2-ST - PCB connector

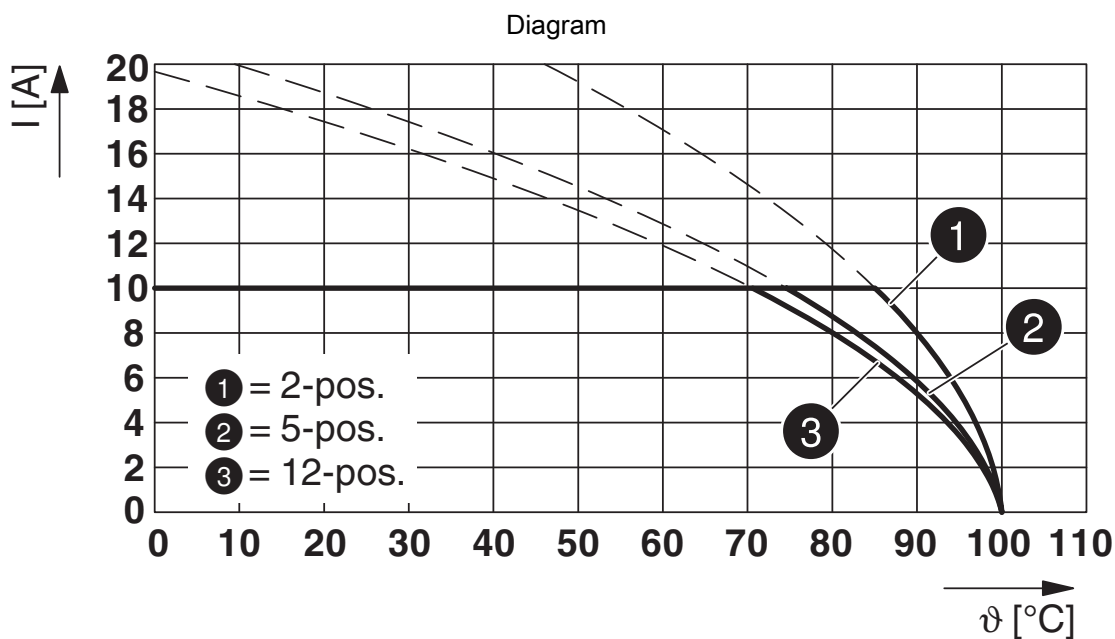


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Type: FKCN 2,5/...-ST with FKIC 2,5/...-ST



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

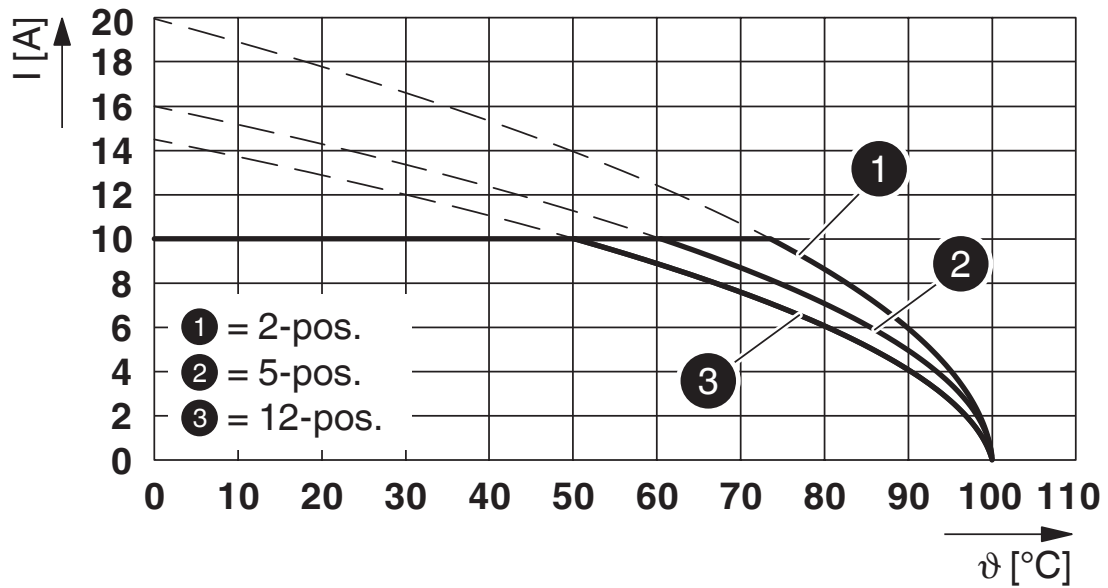
# FKCN 2,5/ 2-ST - PCB connector



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Diagram



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



# FKCN 2,5/ 2-ST - PCB connector




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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1732742>

 <b>VDE Gutachten mit Fertigungsüberwachung</b> Approval ID: 40041908				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	400 V	12 A	-	0.2 - 2.5

# FKCN 2,5/ 2-ST - PCB connector



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## Classifications

### ECLASS

ECLASS-11.0	27460202
ECLASS-12.0	27460202
ECLASS-13.0	27460202

### ETIM

ETIM 9.0	EC002638
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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%
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### EF3.0 Climate Change

CO2e kg	0.121 kg CO2e
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