

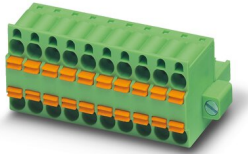
# TFKC 2,5/ 5-STF-5,08 - PCB connector



1962723

<https://www.phoenixcontact.com/in/products/1962723>

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 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Socket, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 10, product range: TFKC 2,5/.-STF, 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: Screw locking, mounting: Screw flange, type of packaging: packed in cardboard

## Your advantages

- Time saving push-in connection, tools not required
- Potentials can be easily looped through – ideal for BUS applications
- Intuitive use through colour coded actuation lever
- Can be combined with the MSTB 2,5 range
- Screwable flange for superior mechanical stability

## Commercial Data

Item number	1962723
Packing unit	50 pc
Minimum order quantity	50 pc
Sales Key	AAC
Product Key	AACFMB
Catalog Page	Page 285 (C-1-2013)
GTIN	4017918912154
Weight per Piece (including packing)	12.34 g
Weight per Piece (excluding packing)	12.34 g
Customs tariff number	85366990
Country of origin	BG

# TFKC 2,5/ 5-STF-5,08 - PCB connector



1962723

<https://www.phoenixcontact.com/in/products/1962723>

## Technical Data

### Product properties

Type	Bus plug component
Product line	COMBICON Connectors M
Product type	PCB plug
Product family	TFKC 2,5/...-STF
Number of positions	5
Pitch	5.08 mm
Number of connections	10
Number of rows	1
Mounting flange	Screw flange
Number of potentials	5

### Electrical properties

Nominal current $I_N$	12 A
Nominal voltage $U_N$	320 V
Degree of pollution	3
Contact resistance	2 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
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

### Conductor connection I2 / I3

Current carrying capacity	24 A
---------------------------	------

### Plug-in contact I1

Current carrying capacity	12 A
---------------------------	------

## Connection data

### Connection technology

Type	Bus plug component
Connector system	COMBICON MSTB 2,5
Nominal cross section	2.5 mm <sup>2</sup>
Type of contact	Socket

### Interlock

Locking type	Screw locking
Mounting flange	Screw flange
Tightening torque	0.3 Nm

### Conductor connection

# TFKC 2,5/ 5-STF-5,08 - PCB connector



1962723

<https://www.phoenixcontact.com/in/products/1962723>

Connection method	Push-in spring connection
Conductor/PCB connection direction	0 °
Conductor cross section rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Cylindrical gauge a x b / diameter	2.8 mm x 2.0 mm / 2.0 mm
Stripping length	10 mm

## 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	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

### Material data – actuating element

Color ( )	( )
Insulating material	PBT
Insulating material group	IIIa
CTI according to IEC 60112	275
Flammability rating according to UL 94	V0

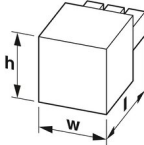
## Dimensions

# TFKC 2,5/ 5-STF-5,08 - PCB connector



1962723

<https://www.phoenixcontact.com/in/products/1962723>

Dimensional drawing	
Pitch	5.08 mm
Width [w]	35.2 mm
Height [h]	22.1 mm
Length [l]	25.7 mm

## Mounting

### Flange

Tightening torque	0.3 Nm
-------------------	--------

## 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.
--------------------	--

## Mechanical tests

### 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
	2.5 mm <sup>2</sup> / solid / > 50 N
	2.5 mm <sup>2</sup> / flexible / > 50 N

### Insertion and withdrawal forces

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	10 N
Withdraw strength per pos. approx.	9.5 N

### Contact holder in insert

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

# TFKC 2,5/ 5-STF-5,08 - PCB connector



1962723

<https://www.phoenixcontact.com/in/products/1962723>

## 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
Result	Test passed

## 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)
Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

### Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	4.8 kV
Contact resistance R <sub>1</sub>	2 mΩ
Contact resistance R <sub>2</sub>	2.2 mΩ
Insertion/withdrawal cycles	25

### 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

### Shocks

Specification	IEC 60068-2-27:2008-02
Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)

### Ambient conditions

# TFKC 2,5/ 5-STF-5,08 - PCB connector



1962723

<https://www.phoenixcontact.com/in/products/1962723>

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	10

### Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

### Temperature cycles

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

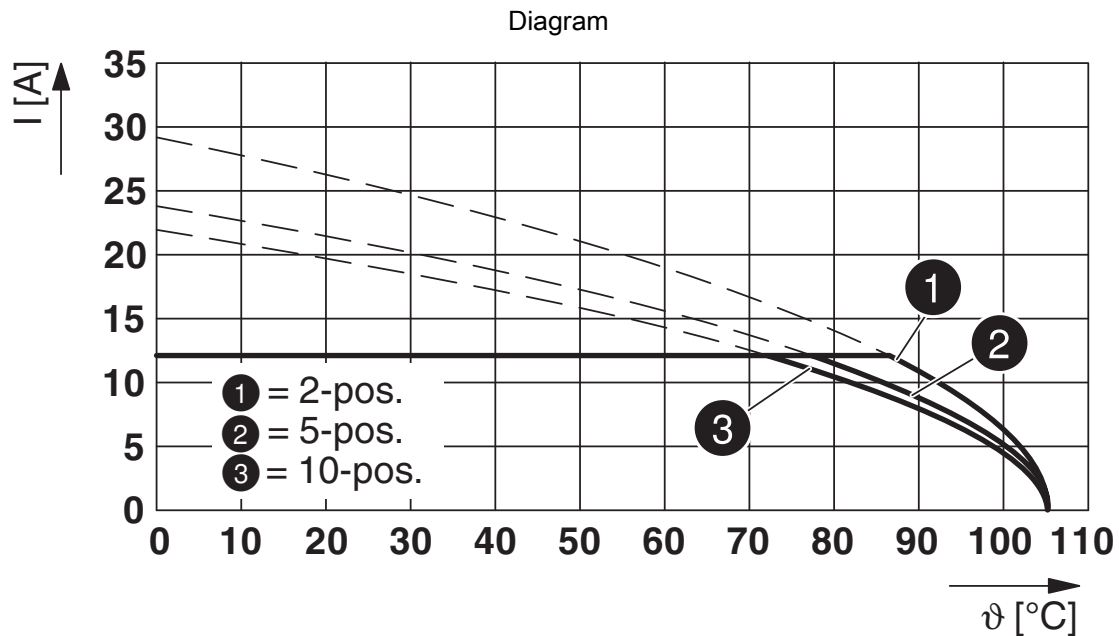
### Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
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

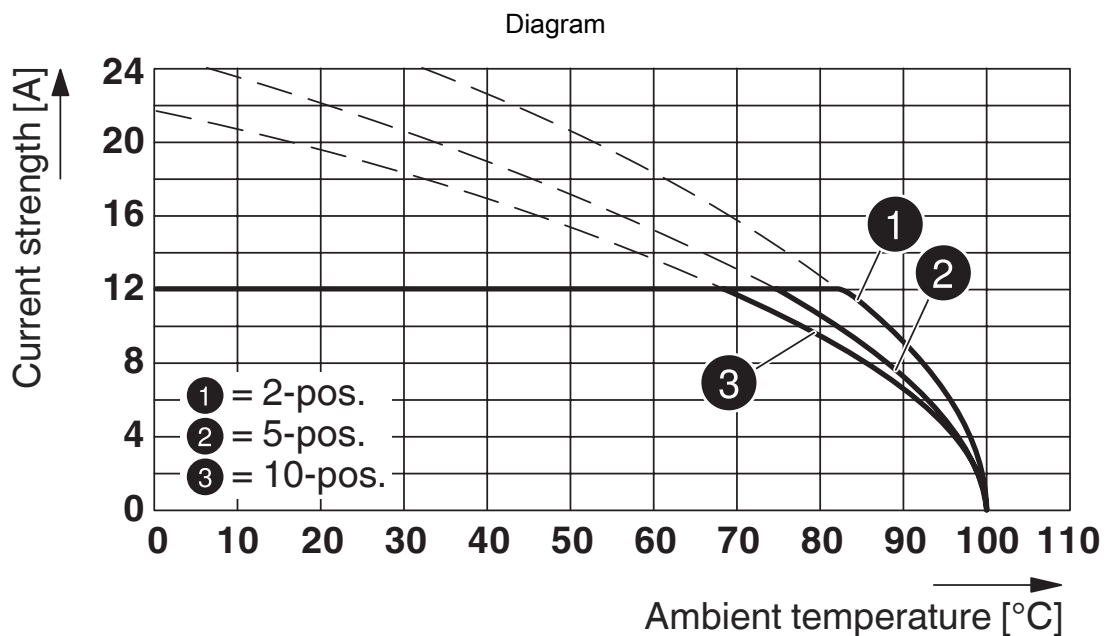
## Packaging specifications

Type of packaging	packed in cardboard
-------------------	---------------------

## Drawings



Type: TFKC 2,5/...-STF-5,08 with FKIC 2,5/...-STGF-5,08

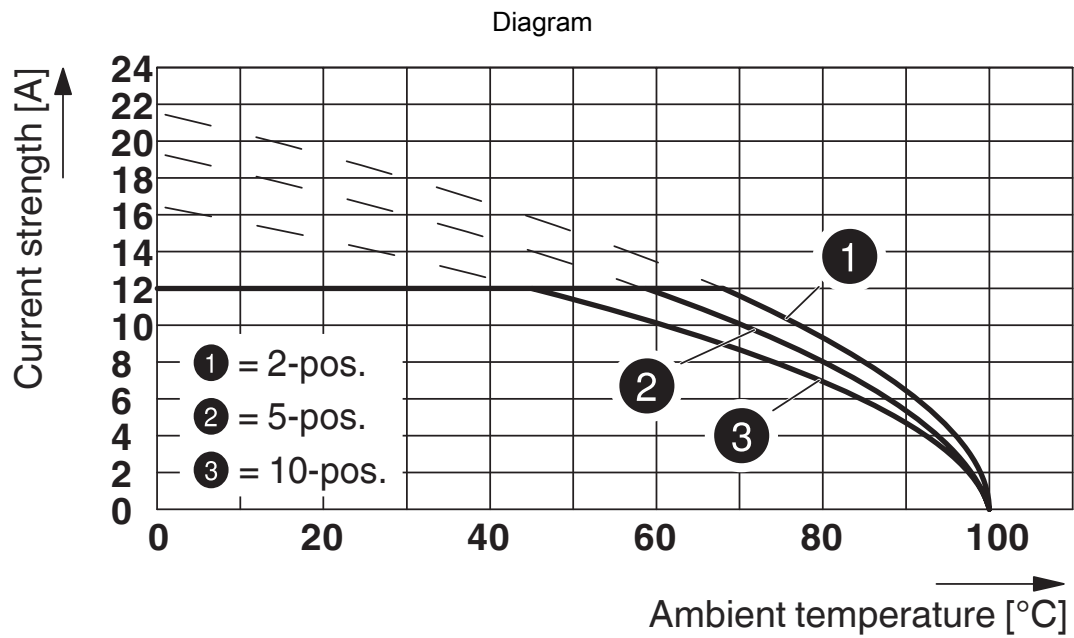


Type: TFKC 2,5/...-STF-5,08 with CCV 2,5/...-GF-5,08 P26THR

# TFKC 2,5/ 5-STF-5,08 - PCB connector

1962723

<https://www.phoenixcontact.com/in/products/1962723>



Type: TFKC 2,5/...-STF-5,08 with MSTBV 2,5/...-GF-5,08

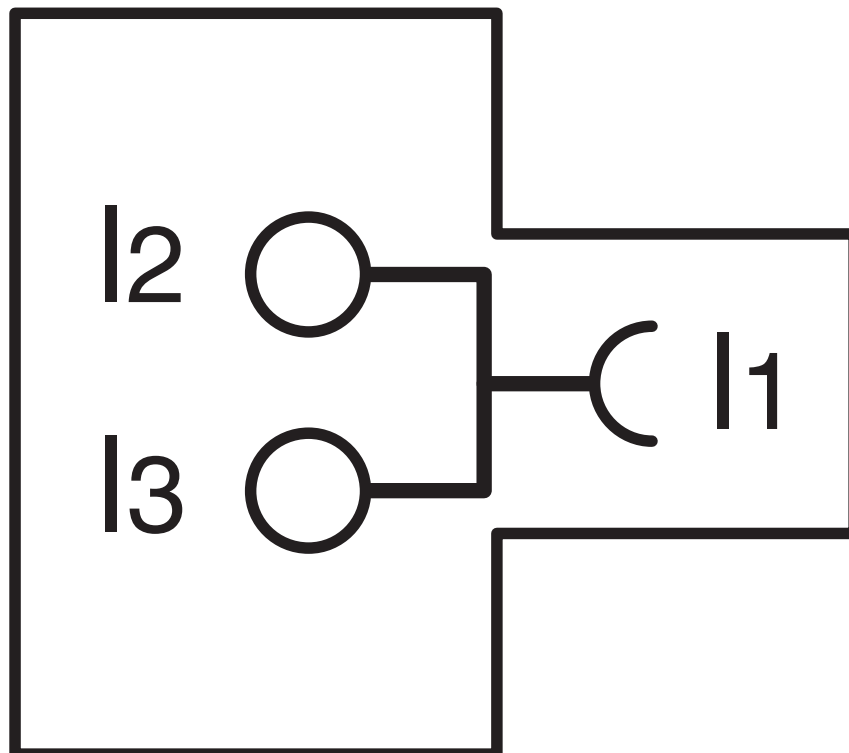


# TFKC 2,5/ 5-STF-5,08 - PCB connector

1962723

<https://www.phoenixcontact.com/in/products/1962723>

Circuit diagram

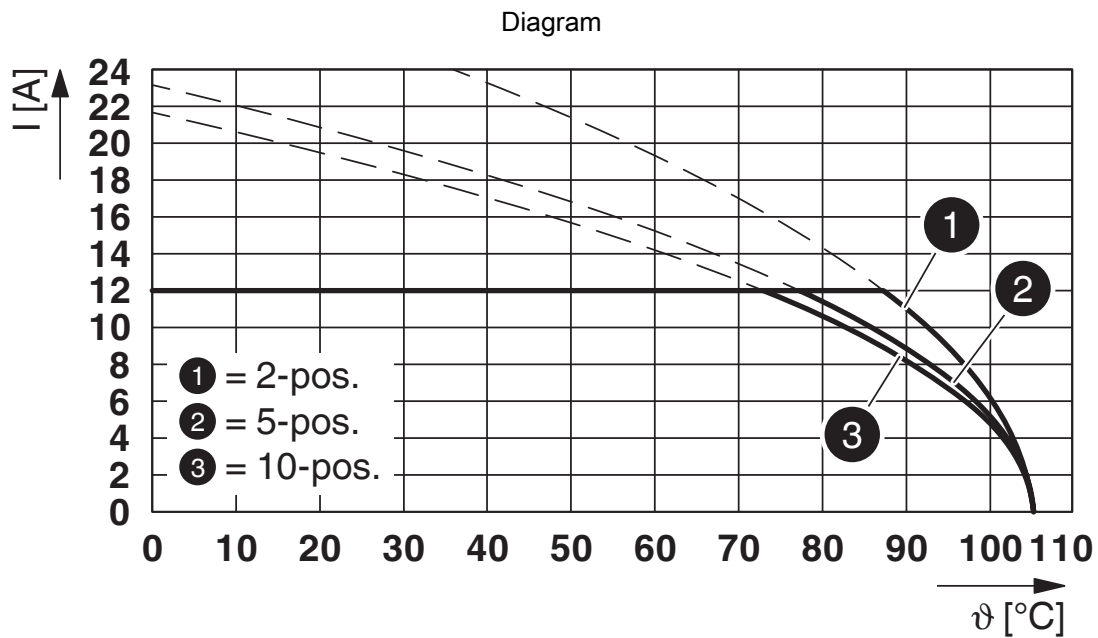


# TFKC 2,5/ 5-STF-5,08 - PCB connector

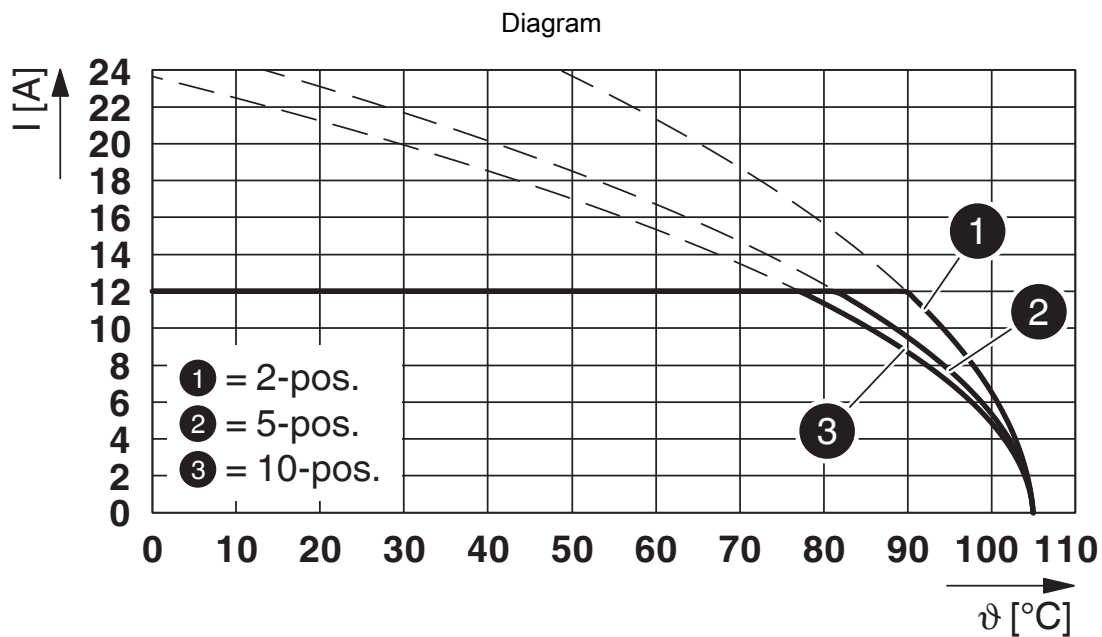


1962723

<https://www.phoenixcontact.com/in/products/1962723>



Type: TFKC 2,5/...-STF-5,08 with CC 2,5/...-GF-5,08-LR P...THR



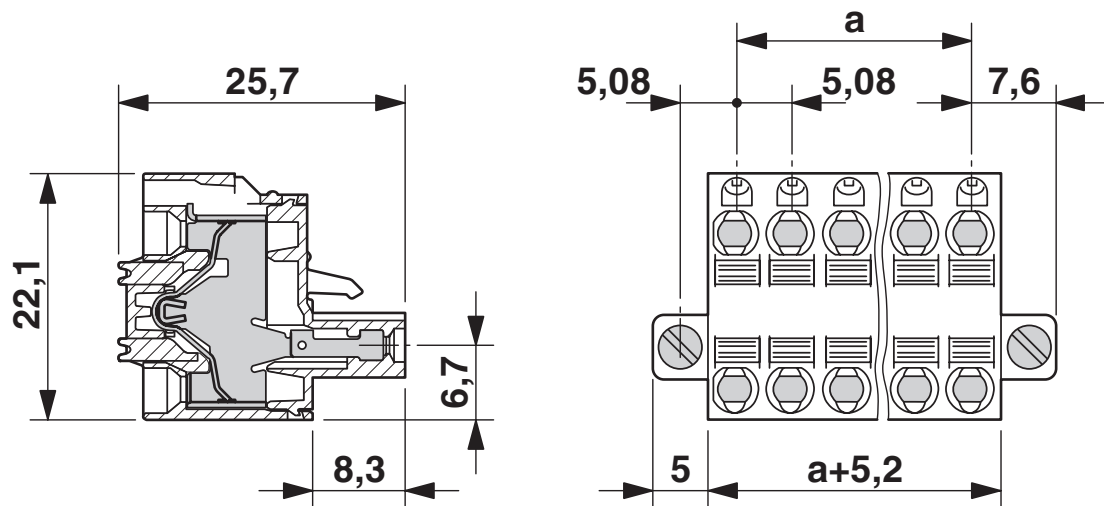
Type: TFKC 2,5/...-STF-5,08 with CC 2,5/...-GF-5,08 P26THR

# TFKC 2,5/ 5-STF-5,08 - PCB connector

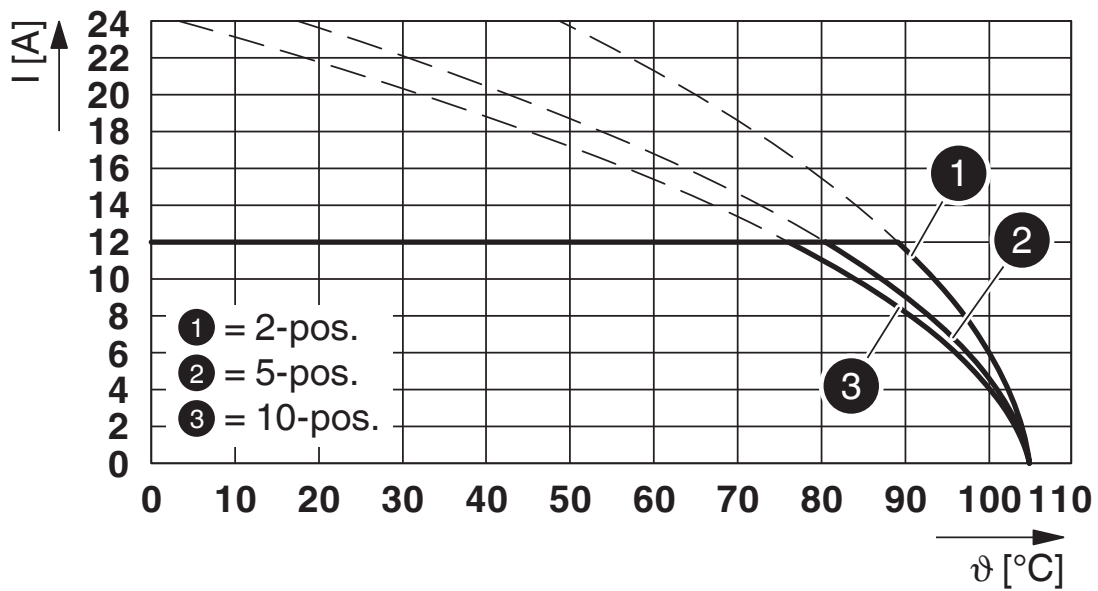
1962723

<https://www.phoenixcontact.com/in/products/1962723>

Dimensional drawing



Diagram



Type: TFKC 2,5/...-STF-5,08 with CCV 2,5/...-GF-5,08-LR P...THR

# TFKC 2,5/ 5-STF-5,08 - PCB connector





1962723

<https://www.phoenixcontact.com/in/products/1962723>

## Approvals

 <b>IECEE CB Scheme</b> Approval ID: DE1-60988-B1B2				
	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	250 V	12 A	-	0.2 - 2.5

 <b>EAC</b> Approval ID: B.01687				
--	--	--	--	--

 <b>cULus Recognized</b> Approval ID: E60425-19931011				
	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	300 V	10 A	26 - 12	-
	300 V	10 A	26 - 12	-

 <b>VDE Zeichengenehmigung</b> Approval ID: 40050694				
	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	250 V	12 A	-	0.2 - 2.5

# TFKC 2,5/ 5-STF-5,08 - PCB connector



1962723

<https://www.phoenixcontact.com/in/products/1962723>

## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC002638
----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

# TFKC 2,5/ 5-STF-5,08 - PCB connector



1962723

<https://www.phoenixcontact.com/in/products/1962723>

## Environmental Product Compliance

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

# TFKC 2,5/ 5-STF-5,08 - PCB connector

1962723

<https://www.phoenixcontact.com/in/products/1962723>

## Accessories

### CP-MSTB - Coding profile

1734634

<https://www.phoenixcontact.com/in/products/1734634>

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



---

### RPS - Reducing plug

0201647

<https://www.phoenixcontact.com/in/products/0201647>

Reducing plug, number of positions: 1, fuse type: , mounting type: , , color: gray



# TFKC 2,5/ 5-STF-5,08 - PCB connector

1962723

<https://www.phoenixcontact.com/in/products/1962723>



## 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 x 3.5 x 100 mm, 2-component grip, with non-slip grip

---

## SK U/2,8 WH:UNBEDRUCKT - Marker card

0803883

<https://www.phoenixcontact.com/in/products/0803883>



Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm, Number of individual labels: 3600



# TFKC 2,5/ 5-STF-5,08 - PCB connector

1962723

<https://www.phoenixcontact.com/in/products/1962723>



## SK 5,08/2,8:FORTL.ZAHLEN - Marker card

0804280

<https://www.phoenixcontact.com/in/products/0804280>



Marker card, 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, lettering field size: 5.08 x 2.8 mm

---

## MPS-IH RD - Insulating sleeve

0201676

<https://www.phoenixcontact.com/in/products/0201676>

Insulating sleeve, fuse type: , mounting type: , , color: red



# TFKC 2,5/ 5-STF-5,08 - PCB connector

1962723

<https://www.phoenixcontact.com/in/products/1962723>

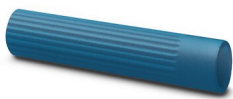


## MPS-IH BU - Insulating sleeve

0201689

<https://www.phoenixcontact.com/in/products/0201689>

Insulating sleeve, fuse type: , mounting type: , , color: blue

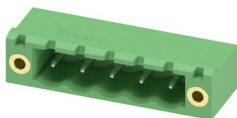


## MSTB 2,5/ 5-GF-5,08 - PCB header

1776537

<https://www.phoenixcontact.com/in/products/1776537>

PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Pin, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: MSTB 2,5/..-GF, 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: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard



# TFKC 2,5/ 5-STF-5,08 - PCB connector

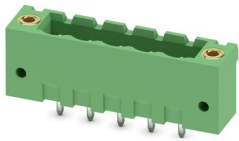
1962723

<https://www.phoenixcontact.com/in/products/1962723>

## MSTBV 2,5/ 5-GF-5,08 - PCB header

1777109

<https://www.phoenixcontact.com/in/products/1777109>

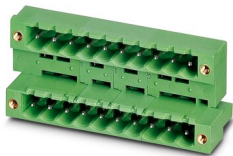


PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Pin, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: MSTBV 2,5/..-GF, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.9 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

## MDSTB 2,5/ 5-GF-5,08 - PCB header

1842393

<https://www.phoenixcontact.com/in/products/1842393>



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Pin, number of potentials: 10, number of rows: 2, number of positions: 5, number of connections: 10, product range: MDSTB 2,5/..-GF, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard, The article can be aligned to create different nos. of positions! 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!

# TFKC 2,5/ 5-STF-5,08 - PCB connector

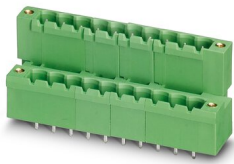
1962723

<https://www.phoenixcontact.com/in/products/1962723>

## MDSTBV 2,5/ 5-GF-5,08 - PCB header

1845662

<https://www.phoenixcontact.com/in/products/1845662>



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 10 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Pin, number of potentials: 10, number of rows: 2, number of positions: 5, number of connections: 10, product range: MDSTBV 2,5/..-GF, 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: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard, The article can be aligned to create different nos. of positions! 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!

## DFK-MSTBA 2,5/ 5-GF-5,08 - Feed-through header

1899016

<https://www.phoenixcontact.com/in/products/1899016>



Feed-through header, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Pin, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: DFK-MSTBA 2,5/..-GF, pitch: 5.08 mm, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.2 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

# TFKC 2,5/ 5-STF-5,08 - PCB connector

1962723

<https://www.phoenixcontact.com/in/products/1962723>

## DFK-MSTBVA 2,5/ 5-GF-5,08 - Feed-through header

1899317

<https://www.phoenixcontact.com/in/products/1899317>



Feed-through header, nominal cross section: 2.5 mm<sup>2</sup>, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Pin, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: DFK-MSTBVA 2,5/..-GF, 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: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard

---

## CCV 2,5/ 5-GF-5,08 P26THR - PCB header

1955662

<https://www.phoenixcontact.com/in/products/1955662>



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Pin, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: CCV 2,5/..-GF, pitch: 5.08 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: Screw locking, mounting: Threaded flange, type of packaging: packed in cardboard, For user information and design recommendations for through-hole reflow technology, go to: Downloads

# TFKC 2,5/ 5-STF-5,08 - PCB connector

1962723

<https://www.phoenixcontact.com/in/products/1962723>



## CCV 2,5/ 5-GF-5,08 P26THRR56 - PCB header

1955772

<https://www.phoenixcontact.com/in/products/1955772>



PCB headers, nominal cross section: 2.5 mm<sup>2</sup>, color: black, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, type of contact: Pin, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: CCV 2,5/..-GF, pitch: 5.08 mm, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, Pin connector pattern alignment: Standard, locking: Screw locking, mounting: Threaded flange, type of packaging: 56 mm wide tape, For user information and design recommendations for through-hole reflow technology, go to: Downloads

---

Phoenix Contact 2023 © - 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](mailto:info@phoenixcontact.co.in)