

Printed-circuit board connector - CCV 2,5/21-GF-5,08-LR P26THR - 1827841

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PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 21, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm



The figure shows a 16-position version

Your advantages

- ✓ Designed for integration into the SMT soldering process
- ✓ Vertical connection enables multi-row arrangement on the PCB
- ✓ Screwable flange for superior mechanical stability
- ✓ Automatic locking and intuitive release through Lock and Release operating lever in contrasting color
- ✓ Maximum flexibility when it comes to device design – one header for connectors with different connection technologies



Key Commercial Data

Packing unit	52 pc
Minimum order quantity	52 pc
GTIN	 4 046356 953351
GTIN	4046356953351

Technical data

Item properties

Brief article description	Feed-through header
Plug-in system	CLASSIC COMBICON
Type of contact	Male connector
Range of articles	CCV 2,5/...-GF-LR
Pitch	5.08 mm
Number of positions	21
Mounting type	THR soldering
Pin layout	Linear pinning

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Technical data

Item properties

Locking	Lock & release threaded flange
Number of levels	1
Number of connections	21
Number of potentials	21

Electrical parameters

Nominal current	12 A
Nom. voltage	320 V
Rated voltage	250 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	400 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV

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	black (9005)
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

Dimensions for the product

Length [l]	8.57 mm
Width [w]	116.79 mm
Height [h]	14.6 mm
Pitch	5.08 mm
Height (without solder pin)	12 mm
Solder pin [P]	2.6 mm
Pin dimensions	1 x 1 mm

Dimensions for PCB design

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Dimensions for PCB design

Hole diameter	1.6 mm
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Packaging information

Type of packaging	packed in cardboard
Pieces per package	52
Denomination packing units	Pcs.

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	4 mm
Minimum creepage distance value (III/2)	3.2 mm
Minimum creepage distance value (II/2)	4 mm

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	11 N
Withdraw strength per pos. approx.	9 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R ₁	1.2 mΩ
Insertion/withdrawal cycles	25
Contact resistance R ₂	1.4 mΩ
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 33 GΩ

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	12
Conductor cross section	2.5 mm ²
Test current	12 A

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Thermal tests (C)

Upper limiting temperature requirements <100 °C	Test passed
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Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	105 °C/168 h
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV

Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

Vibration test

Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Standards and Regulations

Connection in acc. with standard	EN-VDE
Flammability rating according to UL 94	V0

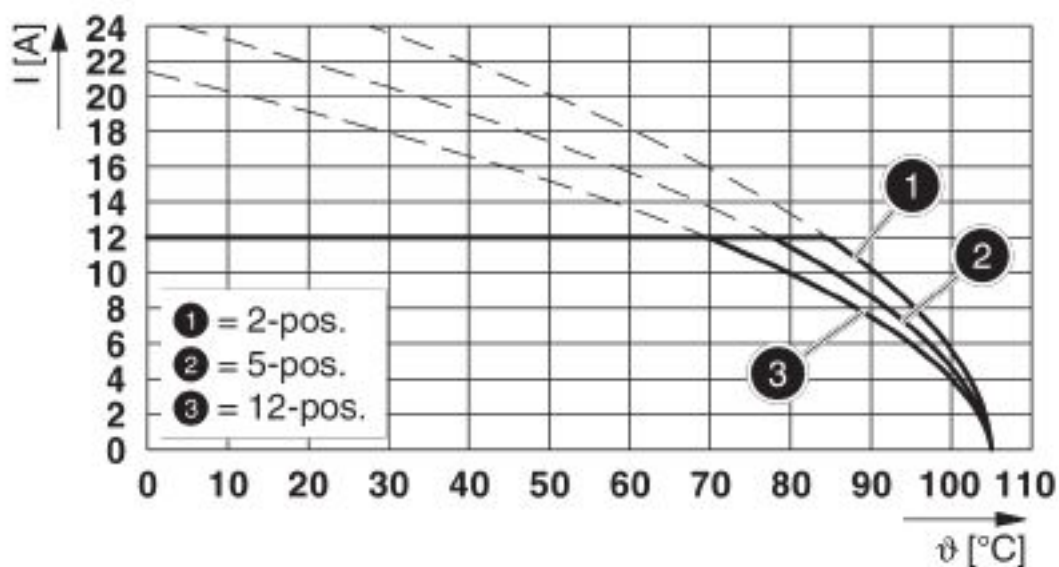
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

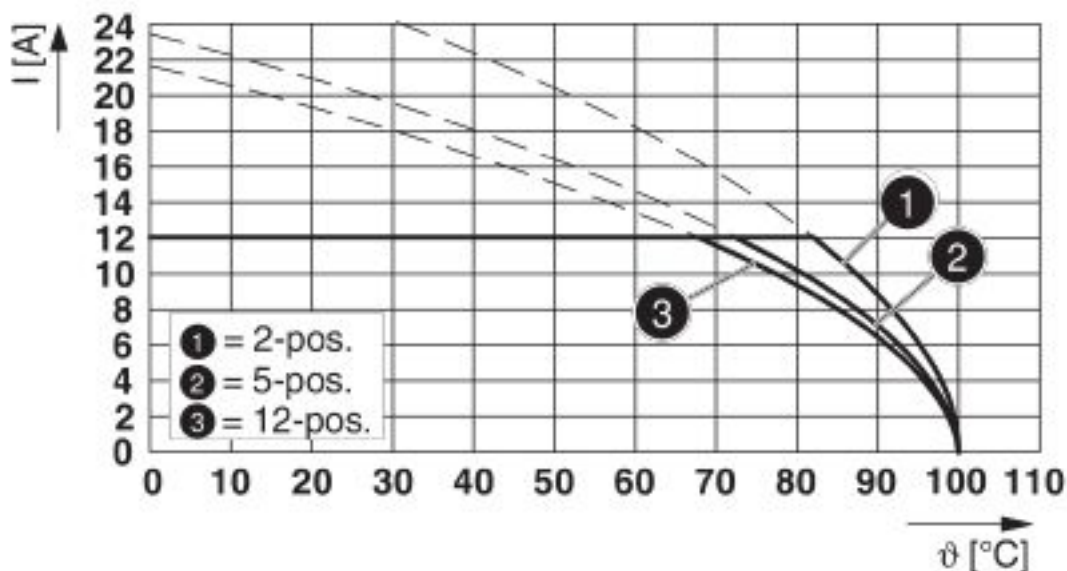
Printed-circuit board connector - CCV 2,5/21-GF-5,08-LR P26THR - 1827841

Diagram



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

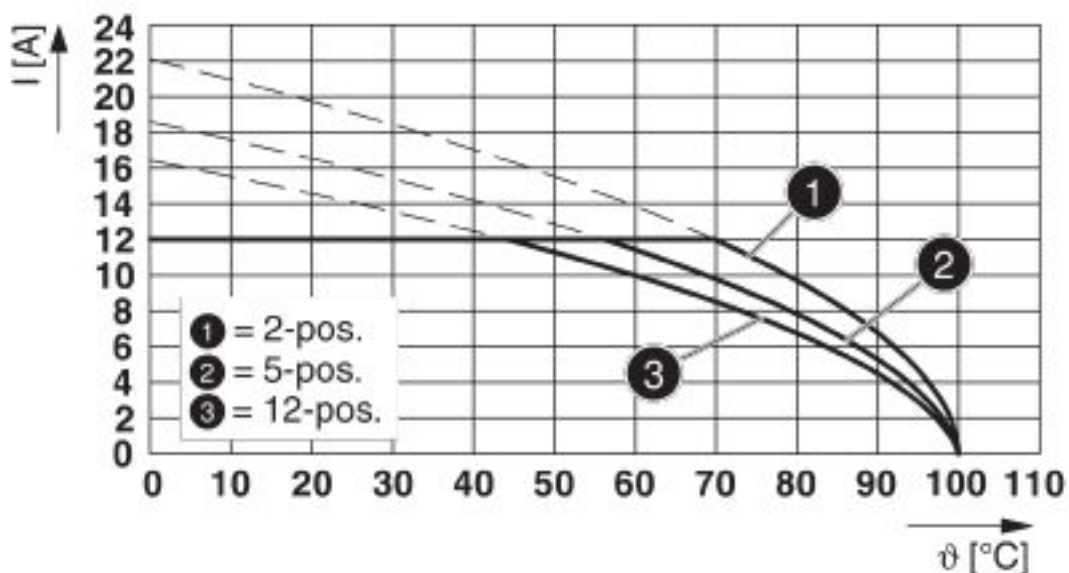
Diagram



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

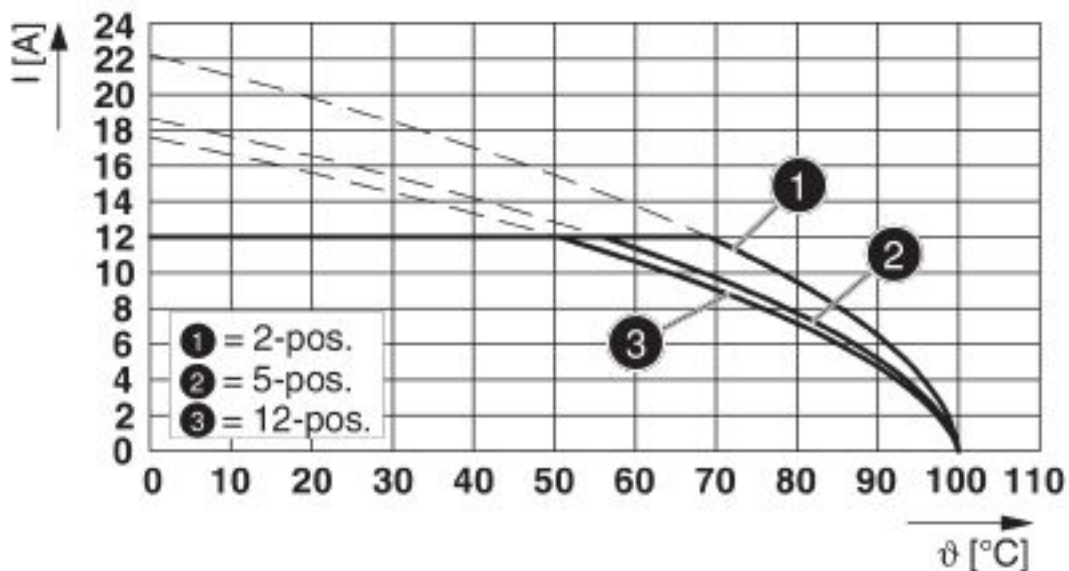
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Diagram



Type: MVSTB(R/W) 2,5/...-STF-5,08 with CCV 2,5/...-GF-5,08-LR P...THR

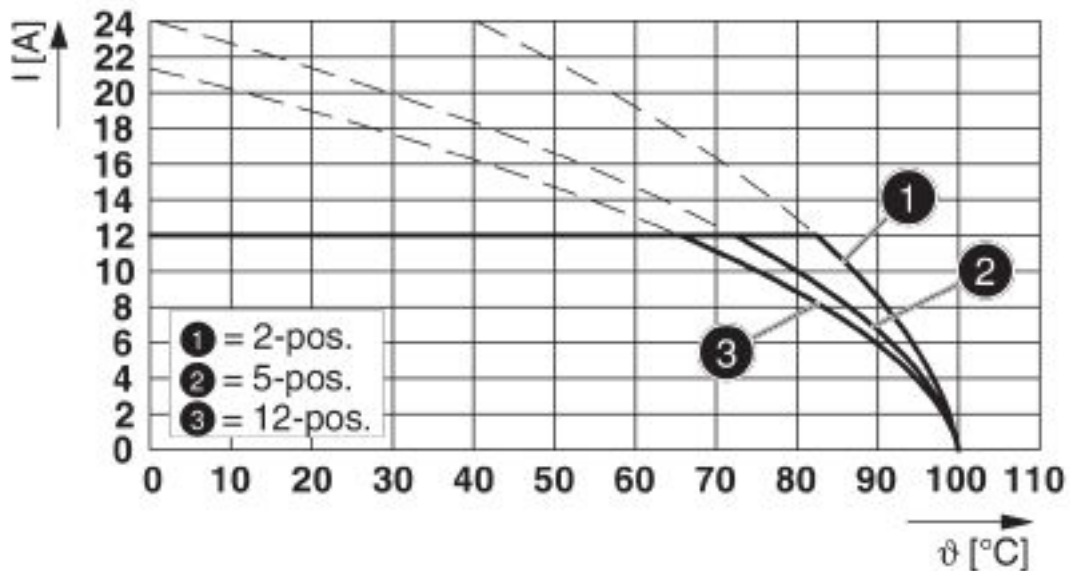
Diagram



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

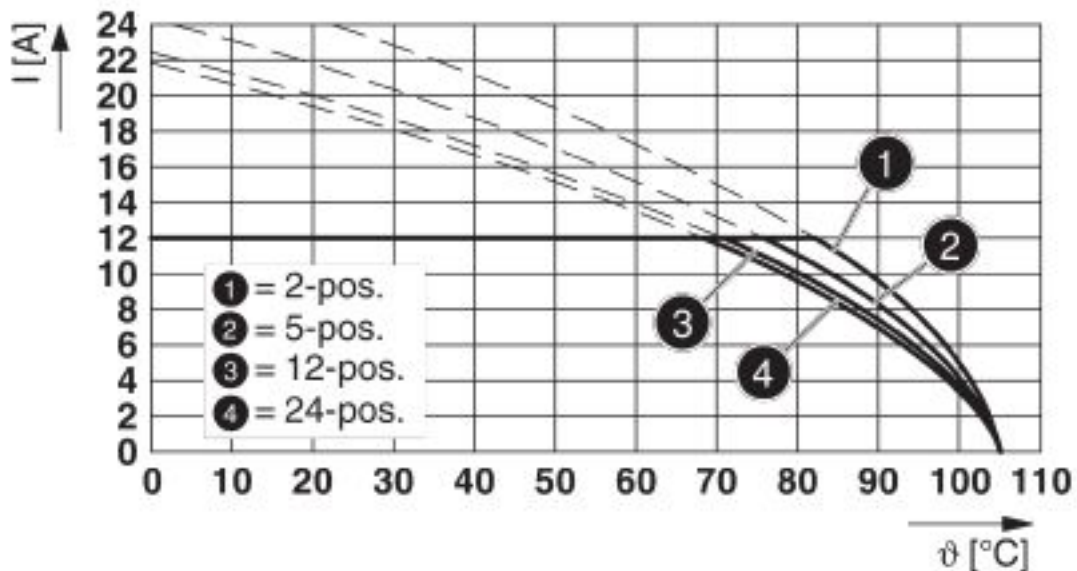
Printed-circuit board connector - CCV 2,5/21-GF-5,08-LR P26THR - 1827841

Diagram



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

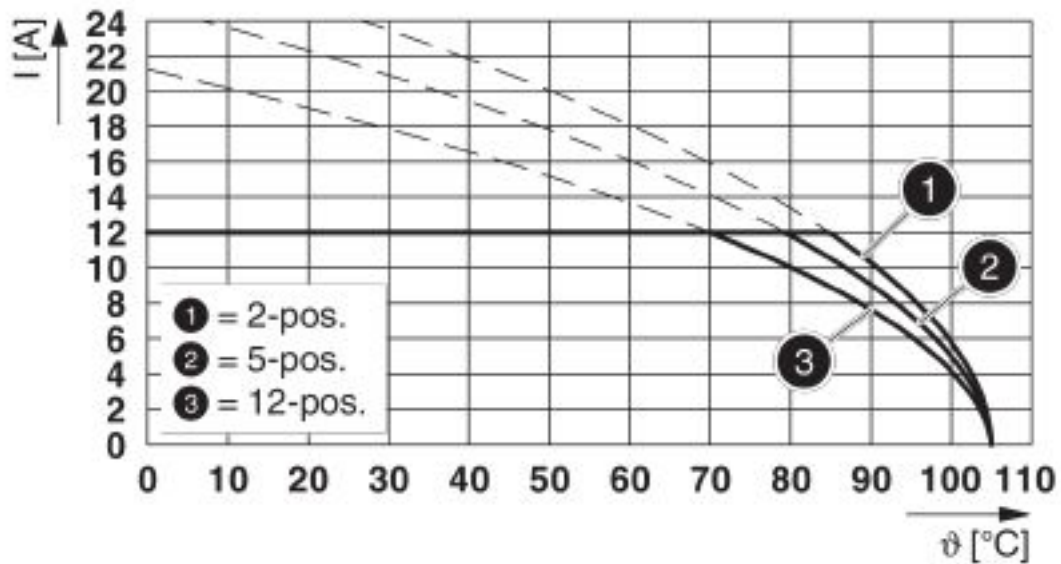
Diagram



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

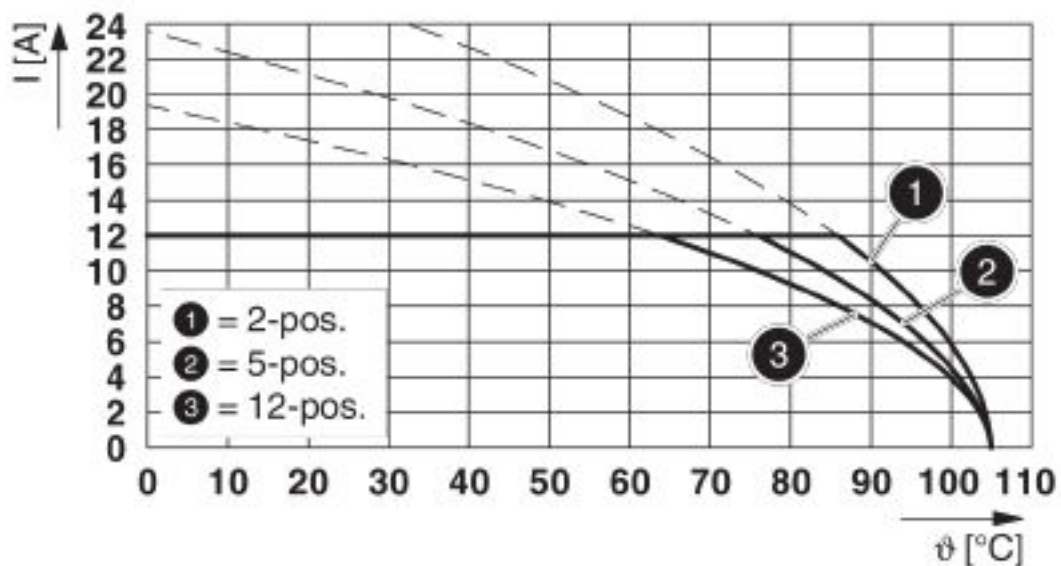
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Diagram



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

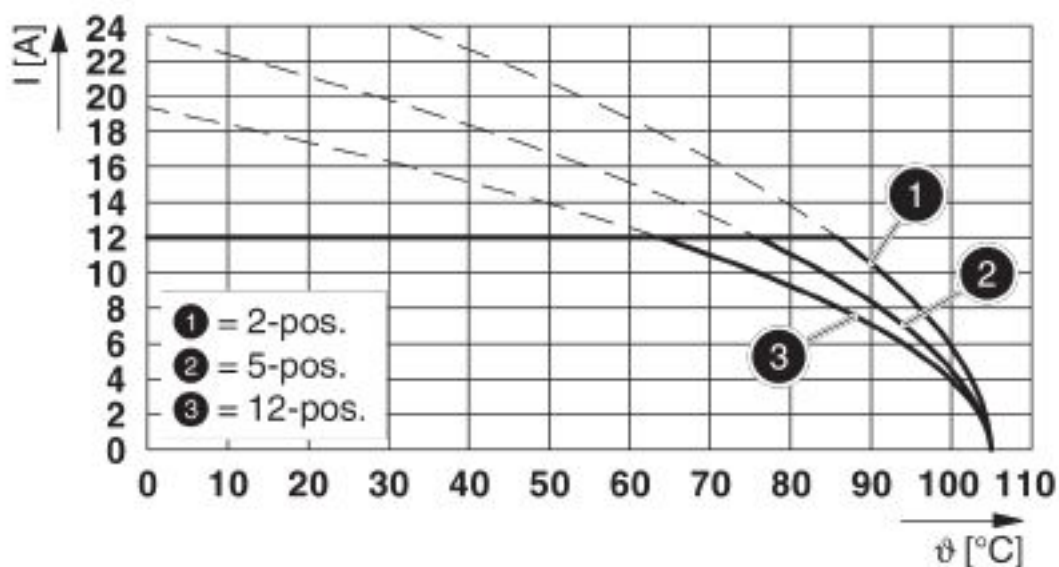
Diagram



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

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Diagram



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

Classifications

eCl@ss

eCl@ss 10.0.1	27440402
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440402
eCl@ss 8.0	27440402
eCl@ss 9.0	27440402

ETIM

ETIM 4.0	EC002637
ETIM 5.0	EC002637
ETIM 6.0	EC002637
ETIM 7.0	EC002637

UNSPSC

UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409

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Classifications

UNSPSC

UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

Approvals

Approvals

Approvals

IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

Ex Approvals

Approval details

IECEE CB Scheme		http://www.iecee.org/	DE1-58421-B1B2
Nominal voltage UN	400 V		
Nominal current IN	12 A		

VDE Gutachten mit Fertigungsüberwachung		http://www2.vde.com/de/Institut/Online-Service/ VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40041286
Nominal voltage UN	400 V		
Nominal current IN	12 A		

EAC		B.01687
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19931011
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	16 A	10 A	

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Accessories

Accessories

Coding element

Coding section - CR-MSTB - 1734401



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

Coding section - CR-MSTB NAT HT - 1954362



HT coding section, prior to the reflow soldering process it is inserted into the recess on the header, made from high-temperature-resistant beige insulation material

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