

Feed-through header - MSTB 2,5/ 3-G-5,08 BK VPE500 - 1715044

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm², number of positions: 3, pitch: 5.08 mm, color: black, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.5 mm




The figure shows a 10-position version of the product

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
- ✓ Plug-in direction parallel to the PCB
- ✓ Items that can be aligned in various pitches support flexible and space-saving PCB assembly



Key Commercial Data

Packing unit	500 pc
Minimum order quantity	500 pc
GTIN	 4 046356 099936
GTIN	4046356099936

Technical data

Item properties

Brief article description	Feed-through header
Plug-in system	CLASSIC COMBICON
Type of contact	Male connector
Range of articles	MSTB 2,5/..-G
Pitch	5.08 mm
Number of positions	3
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without

Feed-through header - MSTB 2,5/ 3-G-5,08 BK VPE500 - 1715044

Technical data

Item properties

Number of levels	1
Number of connections	3
Number of potentials	3

Electrical parameters

Nominal current	12 A
Nom. voltage	320 V
Rated voltage	320 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	630 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	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 for the product

Length [l]	12 mm
Width [w]	15.24 mm
Height [h]	12.1 mm
Pitch	5.08 mm
Height (without solder pin)	8.6 mm
Solder pin [P]	3.5 mm
Pin dimensions	1 x 1 mm
Dimension a	10.16 mm

Feed-through header - MSTB 2,5/ 3-G-5,08 BK VPE500 - 1715044

Technical data

Dimensions for PCB design

Hole diameter	1.4 mm
---------------	--------

Packaging information

Type of packaging	packed in cardboard
Pieces per package	500
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 mm
Minimum creepage distance value (II/2)	3.2 mm

Mechanical tests (A)

Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 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	1.4 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	> 0.3 TΩ

Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °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

Feed-through header - MSTB 2,5/ 3-G-5,08 BK VPE500 - 1715044

Technical data

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

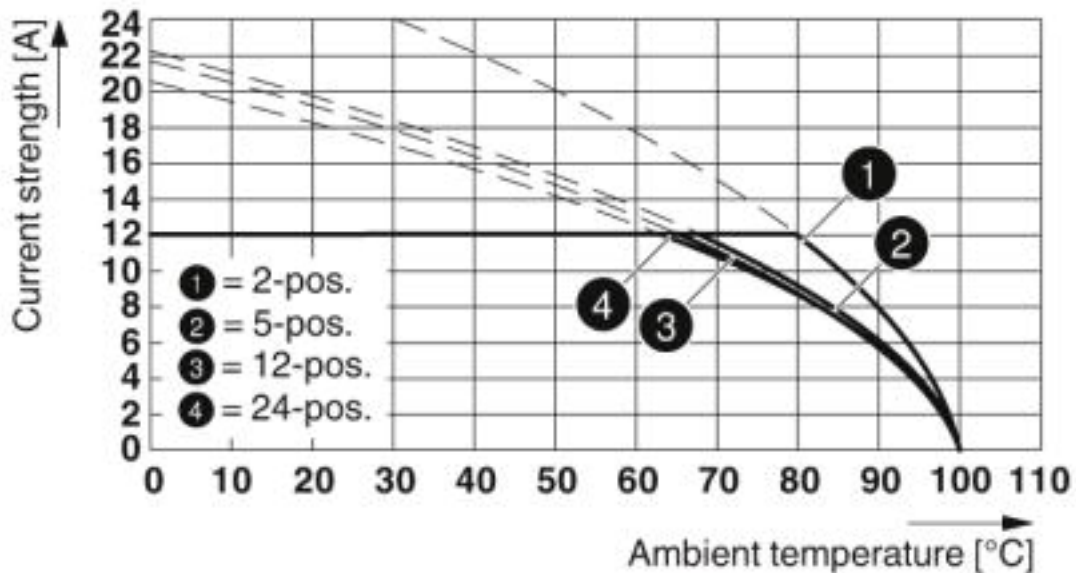
Connection in acc. with standard	EN-VDE
	CSA

Environmental Product Compliance

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

Drawings

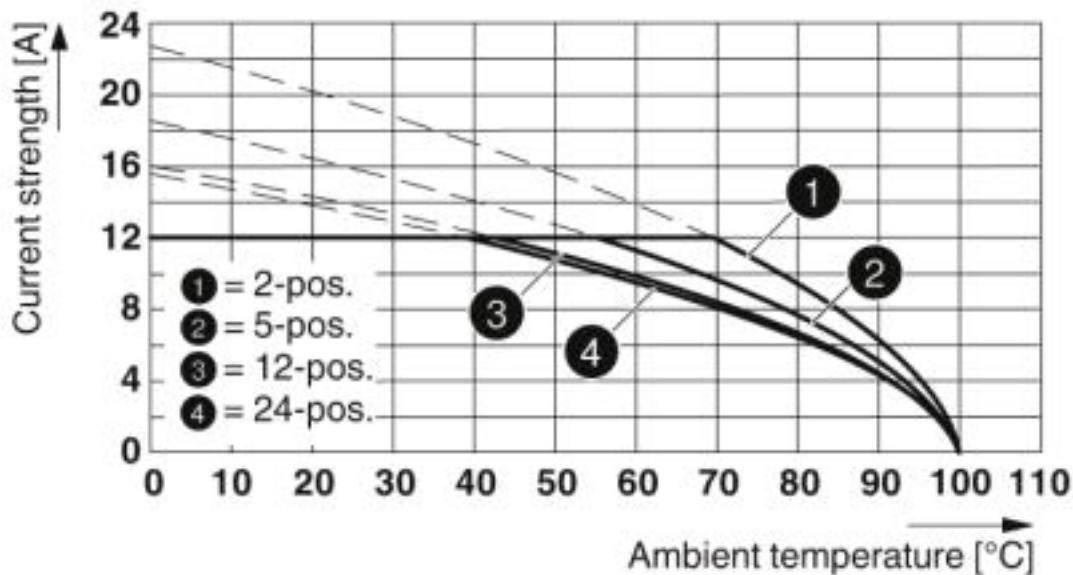
Diagram



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

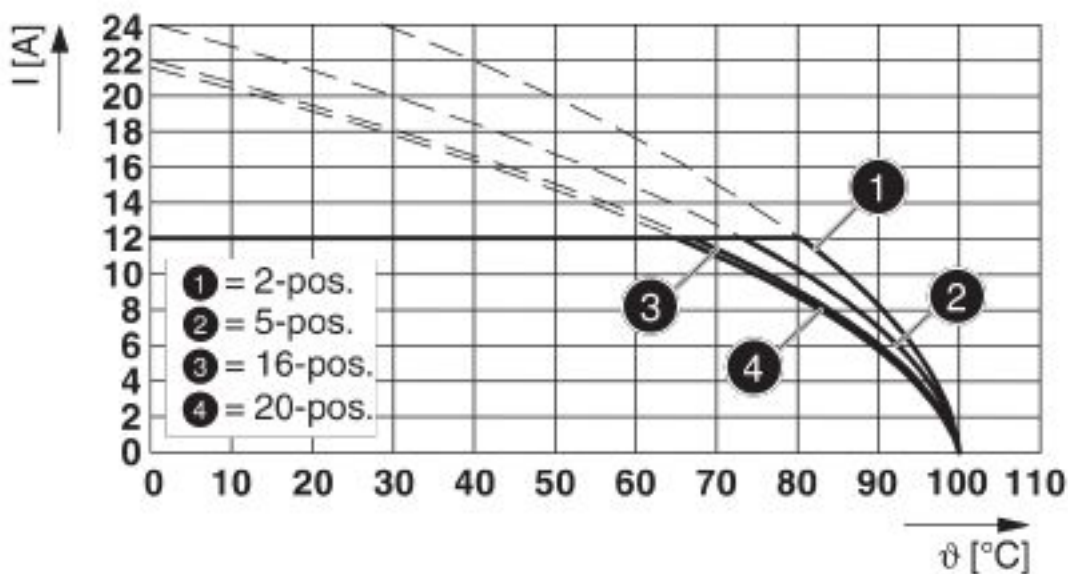
Feed-through header - MSTB 2,5/ 3-G-5,08 BK VPE500 - 1715044

Diagram



Type: MSTBU 2,5/...-STD-5,08 with MSTB 2,5/...-G-5,08

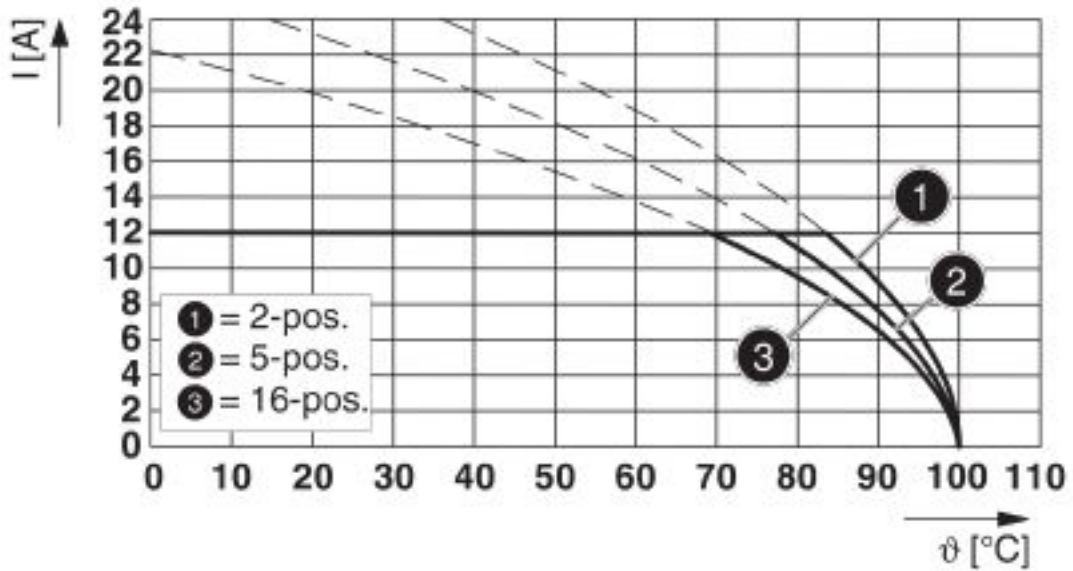
Diagram



Type: FKCT 2,5/...-ST-5,08 with MSTB 2,5/...-G-5,08

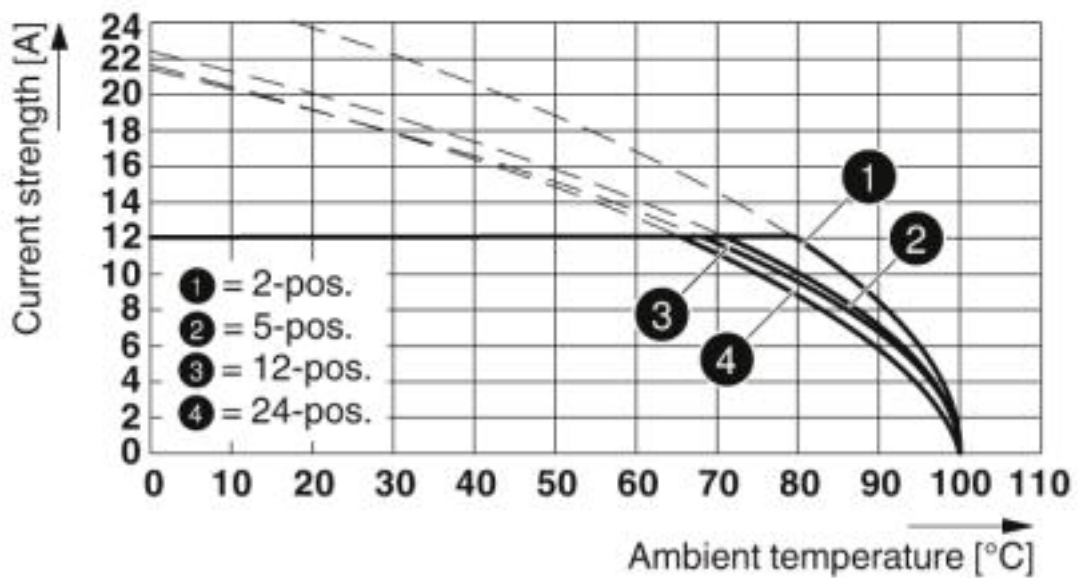
Feed-through header - MSTB 2,5/ 3-G-5,08 BK VPE500 - 1715044

Diagram



Type: FKCV(W/R) 2,5/...-ST-5,08 with MSTB 2,5/...-G-5,08

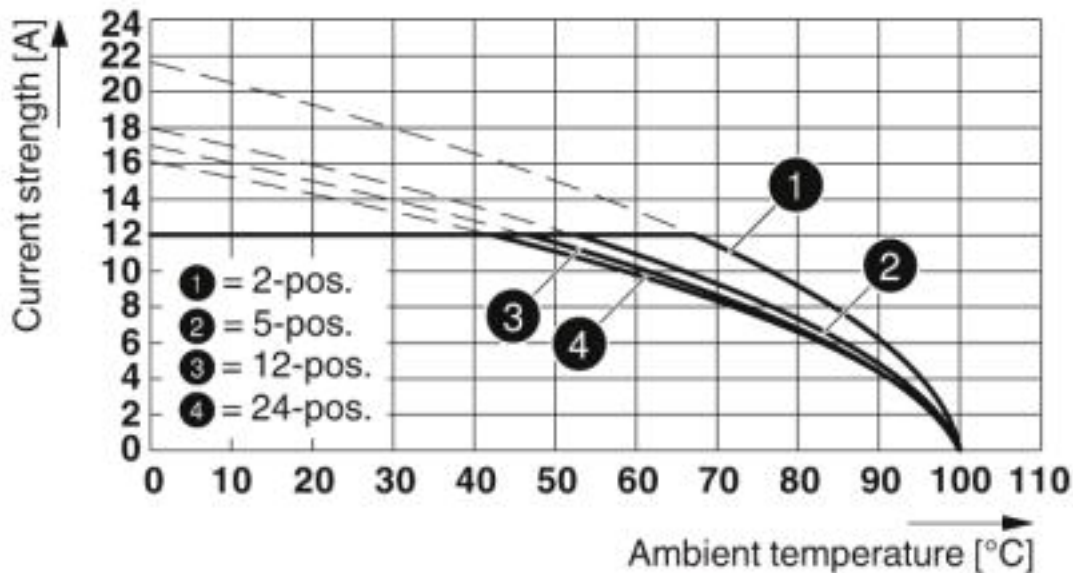
Diagram



Type: MSTBP 2,5/...-ST-5,08 with MSTB 2,5/...-G-5,08

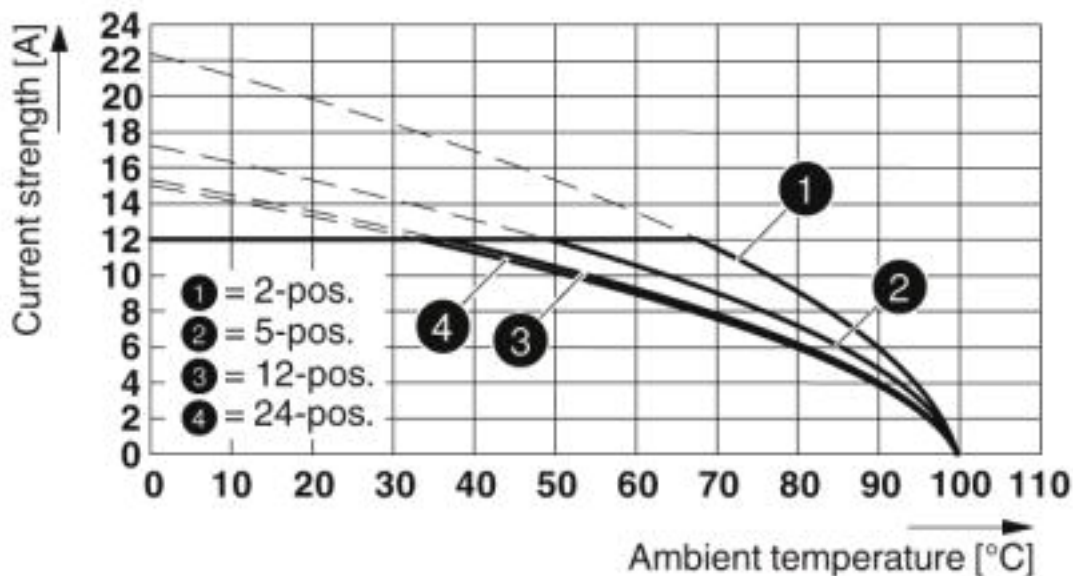
Feed-through header - MSTB 2,5/ 3-G-5,08 BK VPE500 - 1715044

Diagram



Type: SMSTB 2,5/...-ST-5,08 with MSTB 2,5/...-G-5,08

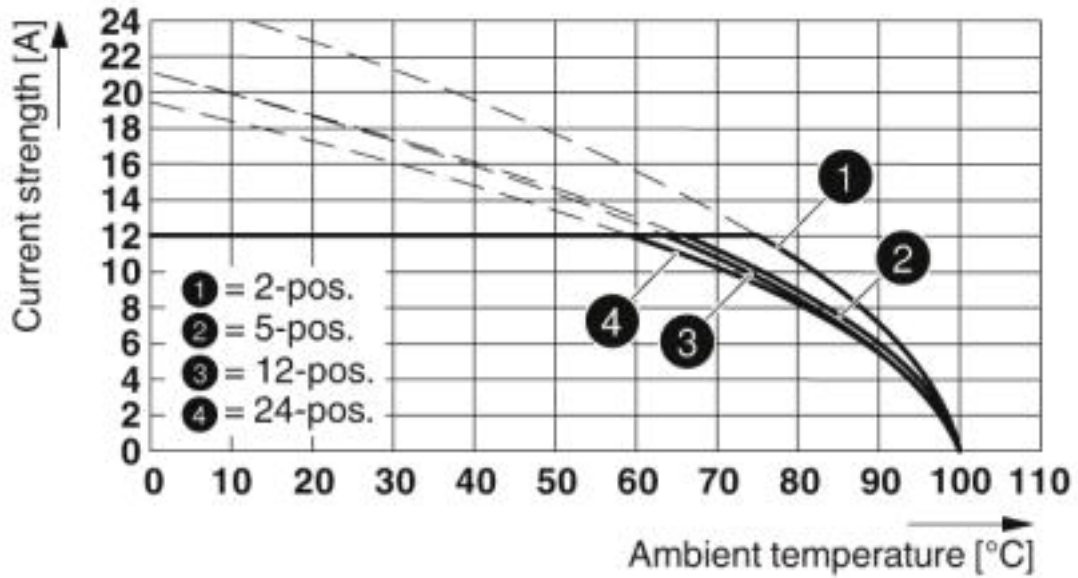
Diagram



Type: MVSTB(R/W) 2,5/...-ST with MDSTBVA 2,5/...-G-5,08

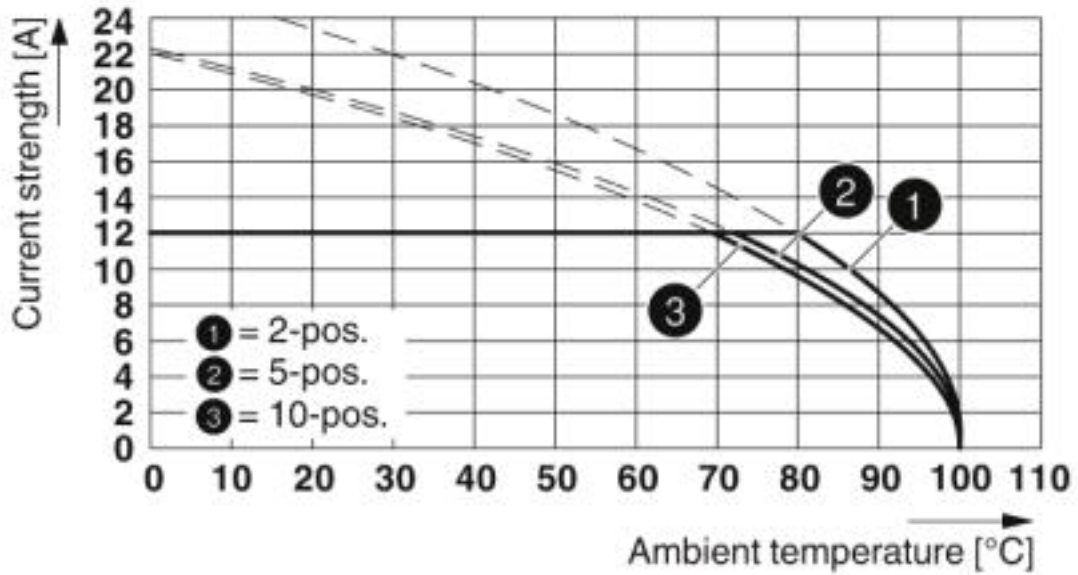
Feed-through header - MSTB 2,5/ 3-G-5,08 BK VPE500 - 1715044

Diagram



Type: FRONT-MSTB 2,5/...-ST-5,08 with MSTB 2,5/...-G-5,08

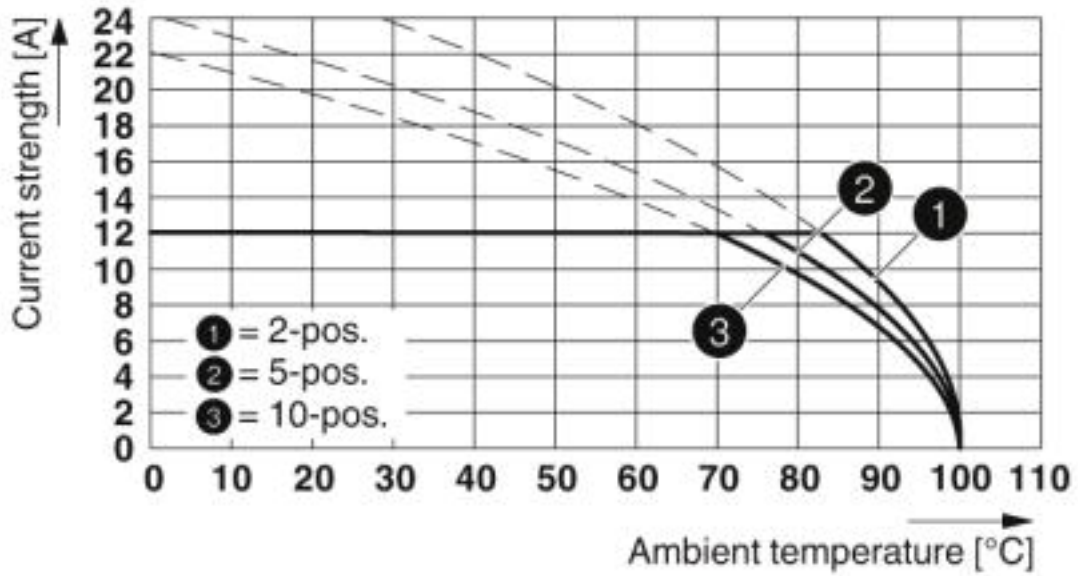
Diagram



Type: TMSTBP 2,5/...-ST-5,08 with MSTB 2,5/...-G-5,08

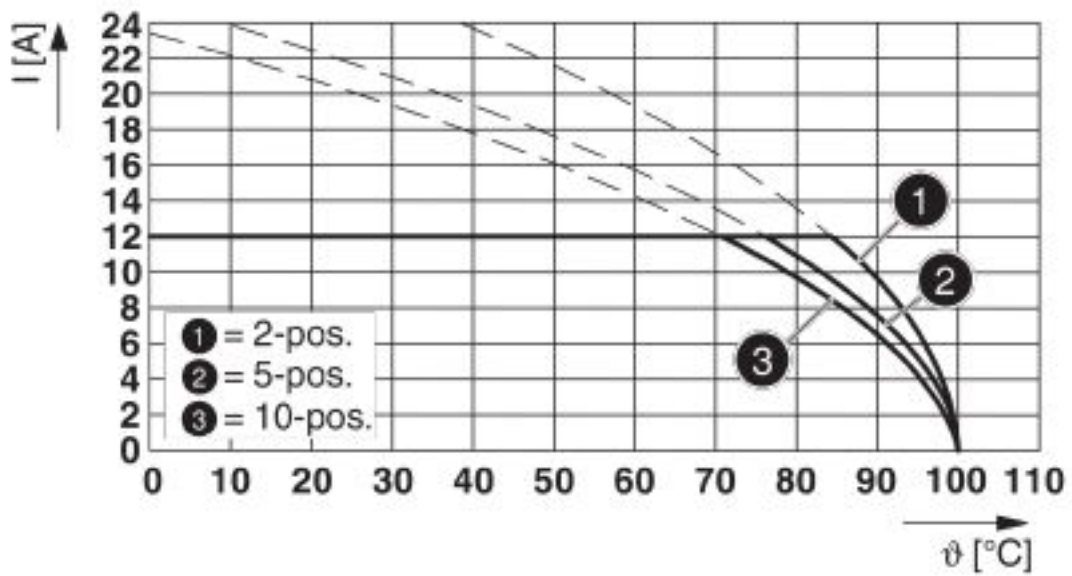
Feed-through header - MSTB 2,5/ 3-G-5,08 BK VPE500 - 1715044

Diagram



Type: TVMSTB 2,5/...-ST-5,08 with MSTB 2,5/...-G-5,08

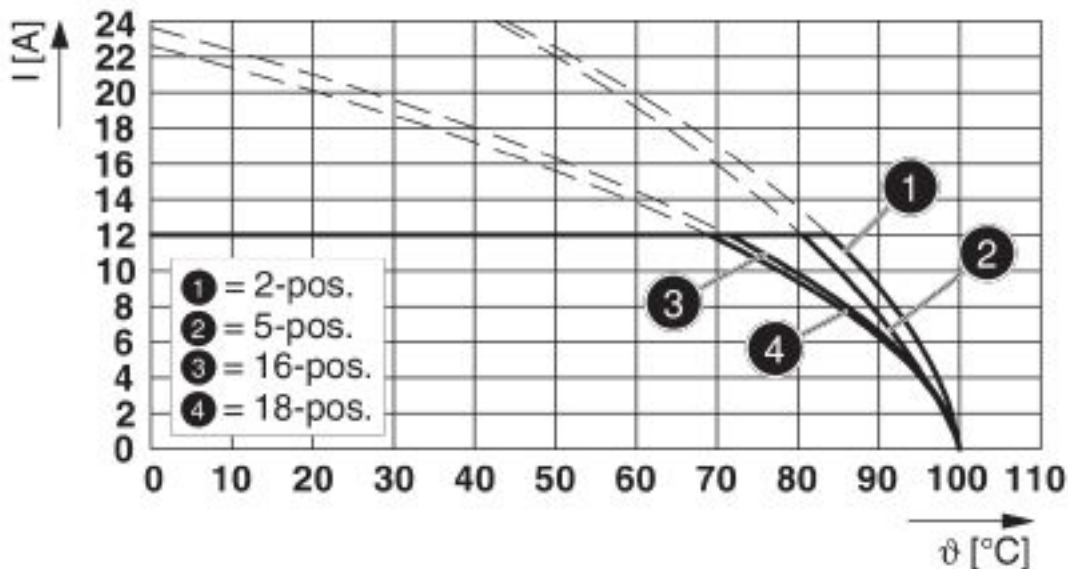
Diagram



Type: TFKC 2,5/...-ST-5,08 with MSTB 2,5/...-G-5,08

Feed-through header - MSTB 2,5/ 3-G-5,08 BK VPE500 - 1715044

Diagram



Type: FKCN 2,5/...-ST-5,08 with MSTB 2,5/...-G-5,08

Classifications

eCl@ss

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 3.0	EC001121
ETIM 4.0	EC002637
ETIM 5.0	EC002637
ETIM 6.0	EC002637
ETIM 7.0	EC002637

UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121409

Feed-through header - MSTB 2,5/ 3-G-5,08 BK VPE500 - 1715044

Classifications

UNSPSC

UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

Approvals


Approvals


Approvals

CSA / IECCE CB Scheme / EAC / cULus Recognized / VDE Zeichengenehmigung


Ex Approvals

Approval details

CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	


IECEE CB Scheme		http://www.iecee.org/	DE1-60988-B1B2
Nominal voltage UN	250 V		
Nominal current IN	12 A		

EAC		B.01687
-----	---	---------

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	15 A	10 A	

Feed-through header - MSTB 2,5/ 3-G-5,08 BK VPE500 - 1715044

Approvals

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40050648
Nominal voltage UN		250 V	
Nominal current IN		12 A	

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>