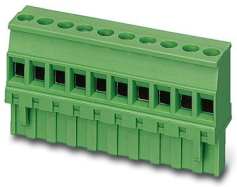
MVSTBR 3 PLUG KIT - Connector set

5605304

https://www.phoenixcontact.com/ae/products/5605304

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Connector set, nominal cross section: 2.5 mm^2, color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Sn, contact connection type: Socket, number of potentials: 8, number of rows: 1, number of positions: 8, number of connections: 8, product range: SET, pitch: 5 mm, connection method: Screw connection with tension sleeve, conductor/PCB connection direction: 90 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting method: without

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors

Commercial data

Item number	5605304
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	AA
Product key	AAHGAD
GTIN	4046356344401
Weight per piece (including packing)	50.66 g
Weight per piece (excluding packing)	50 g
Customs tariff number	85366990
Country of origin	DE

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Technical data

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.

Product properties

Product type	Connector set
Product family	SET
Product line	COMBICON Connectors M
Number of positions	8
Pitch	5 mm
Number of connections	8
Number of rows	1
Number of potentials	8
Mounting type	without

Electrical properties

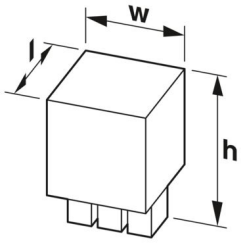
Properties

Nominal current I_N	12 A
Nominal voltage U_N	320 V
Contact resistance	2.5 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 method	Screw connection

Dimensions

Dimensional drawing	
Pitch	5 mm
Installed height	26 mm

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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	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

Connector

Connection 1

Insulating material	PA
CTI according to IEC 60112	600

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	24

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
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

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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

Mechanical tests

Test 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 setpoint/actual value	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	2.5 mm² / solid / > 50 N
	2.5 mm² / flexible / > 50 N

Insertion and withdrawal forces

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N

Torque test

Specification	IEC 60999-1:1999-11

Contact holder in insert

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

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

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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)
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	2.5 mΩ
Contact resistance R_2	2.5 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ

Climatic 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

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

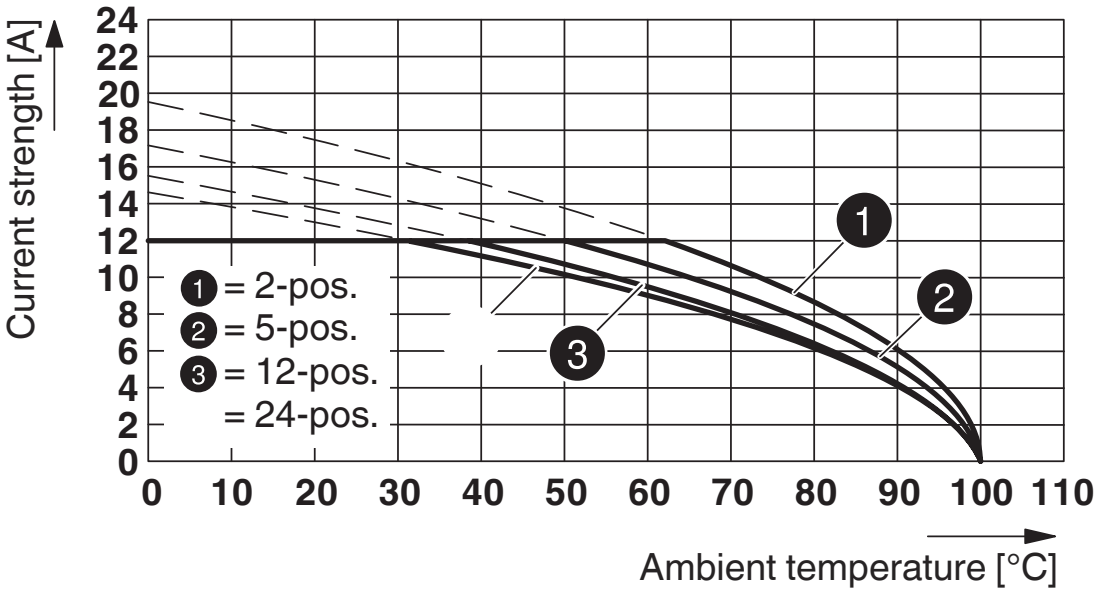
Standards and regulations

Connection in acc. with standard	EN-VDE

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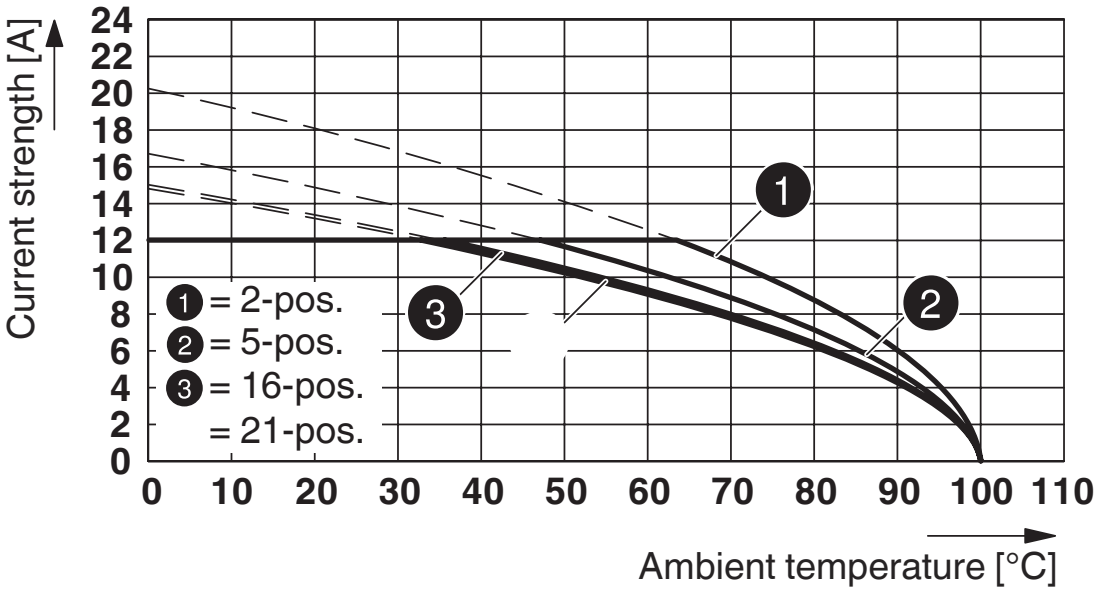
Drawings

Diagram



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

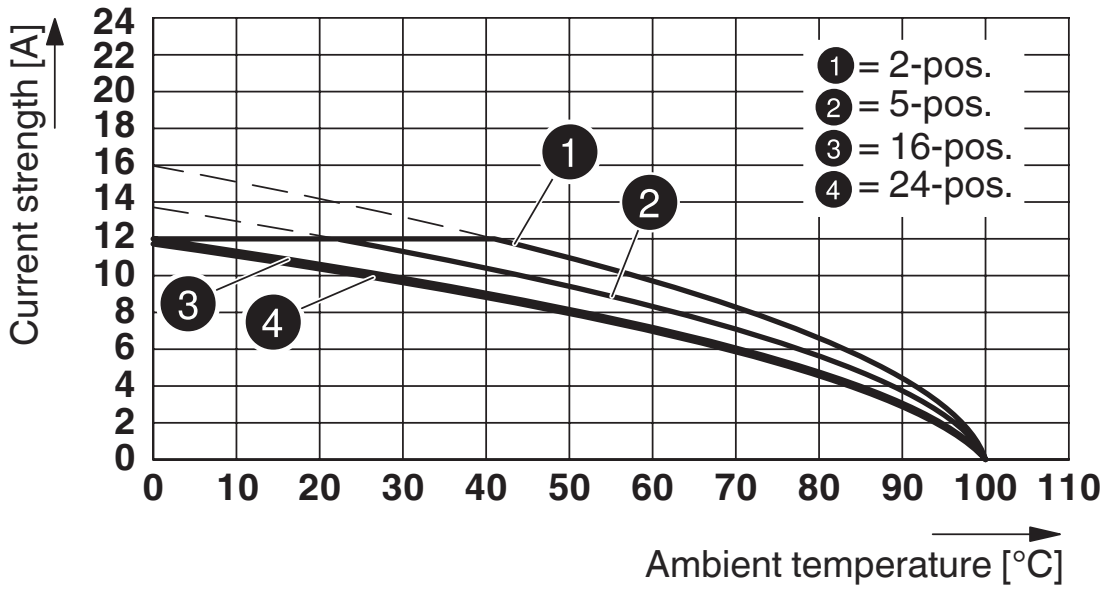
Diagram



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

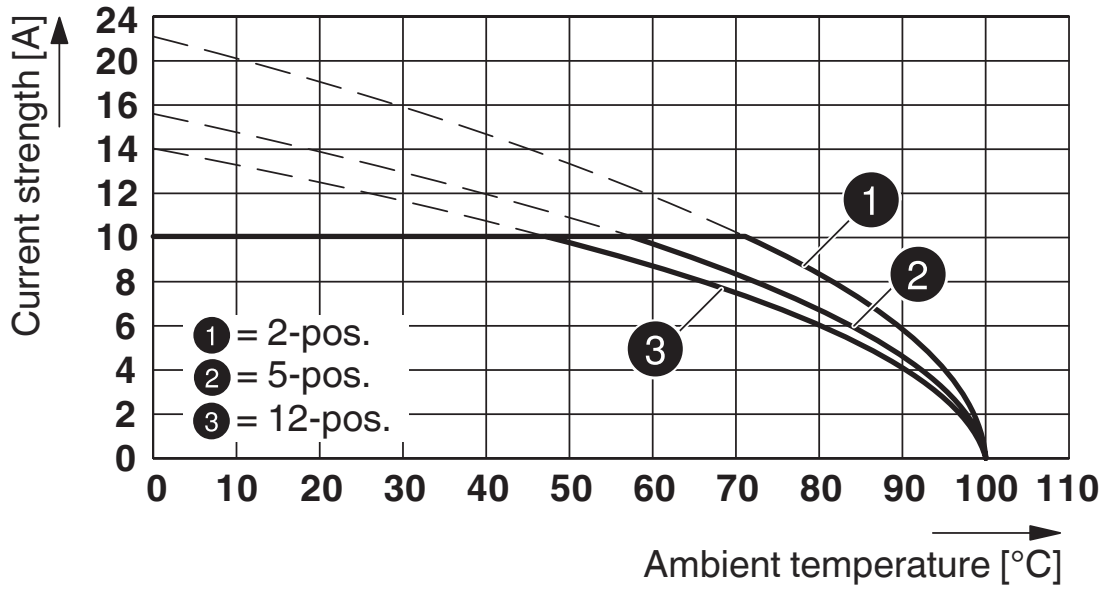
Downloaded from Arrow.com.

Diagram



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

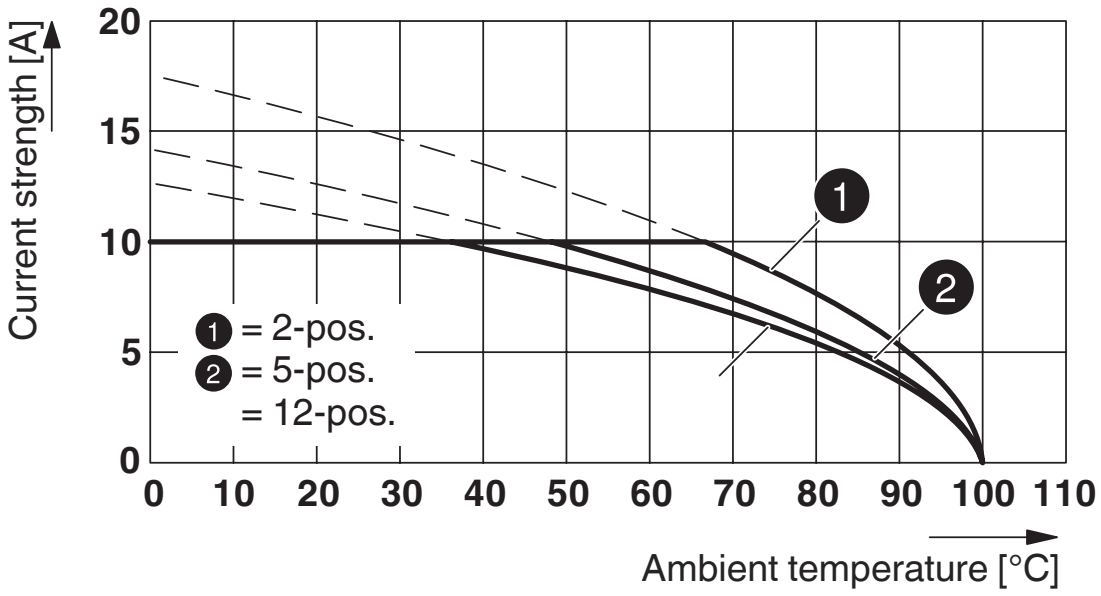
Diagram



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

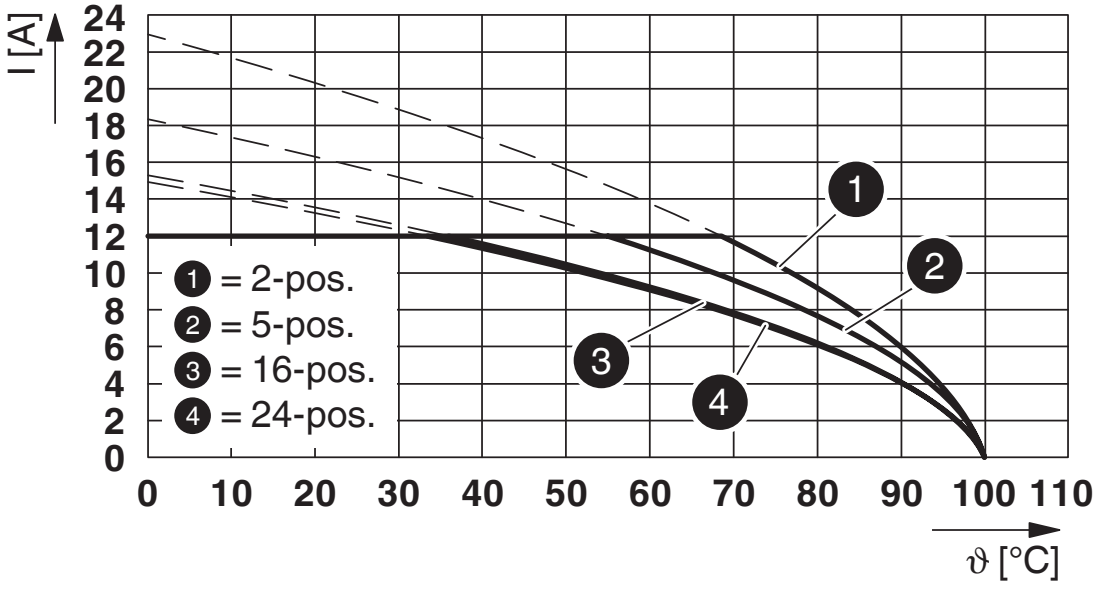
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Diagram



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

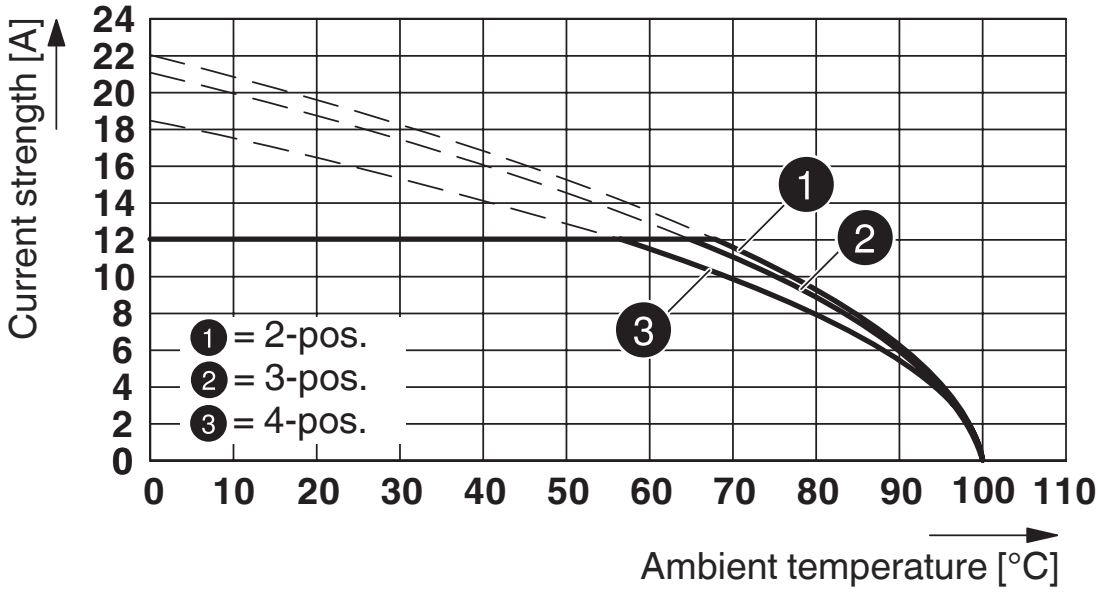
Diagram



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

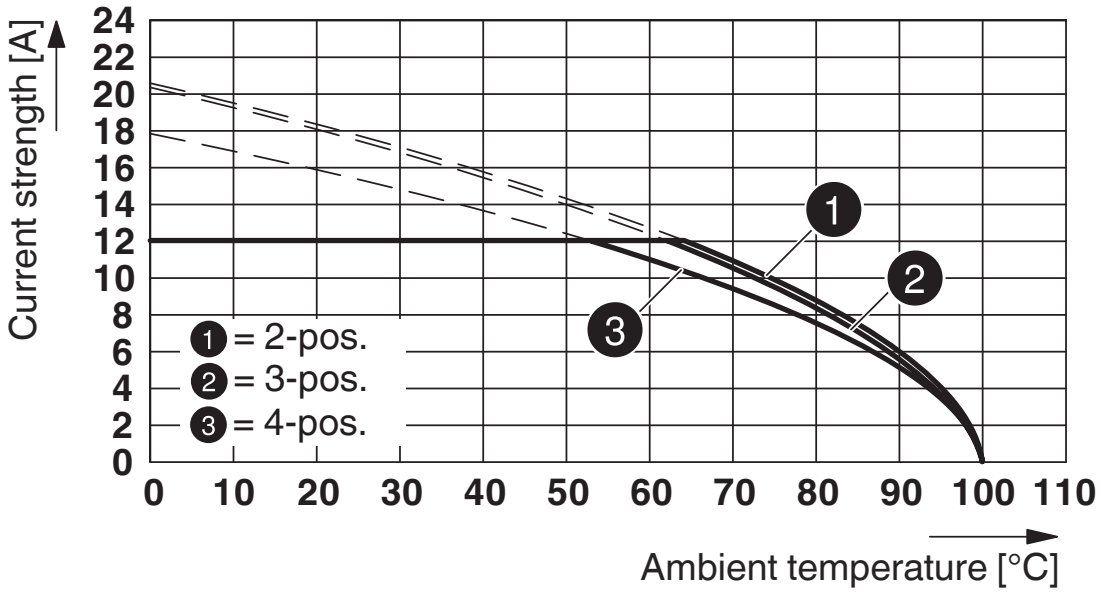
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Diagram



Type: MVSTB(R/W) 2,5/...-ST with MSTBO 2,5/...-G1R

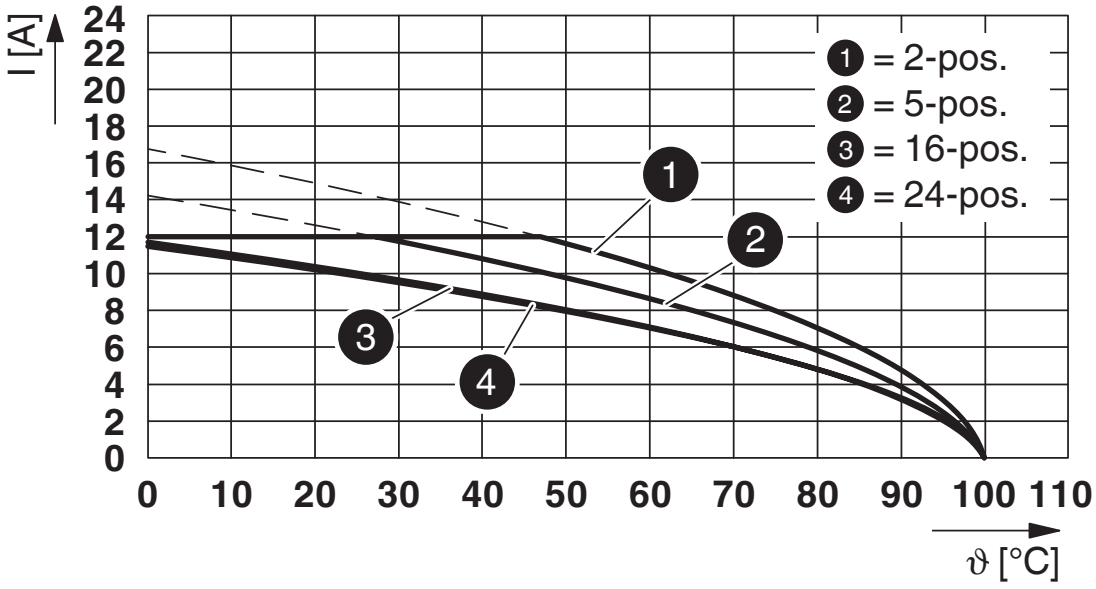
Diagram



Type: MVSTB(R/W) 2,5/...-ST with MSTBO 2,5/...-G1L

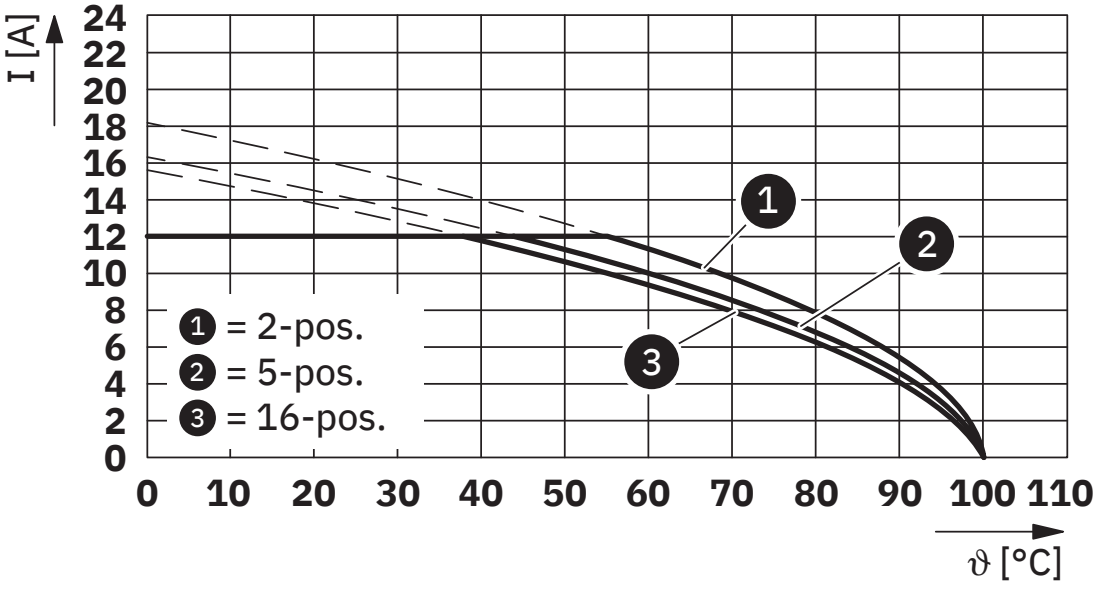
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Diagram



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

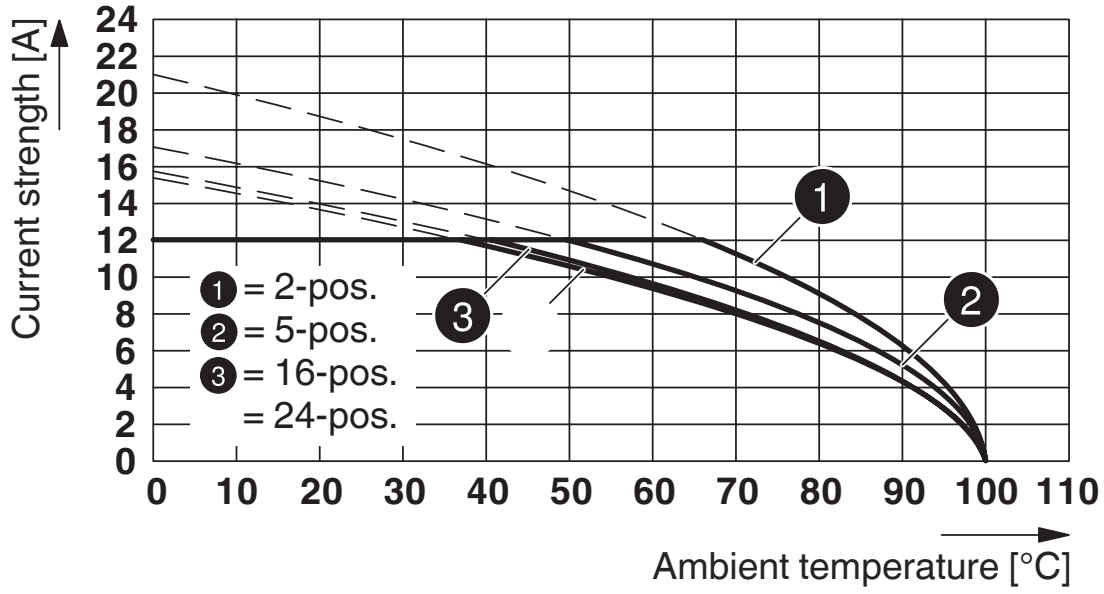
Diagram



Type: MVSTBR 2,5/...-ST(-5,08) with DFK-MSTB 2,5/...-G(-5,08)

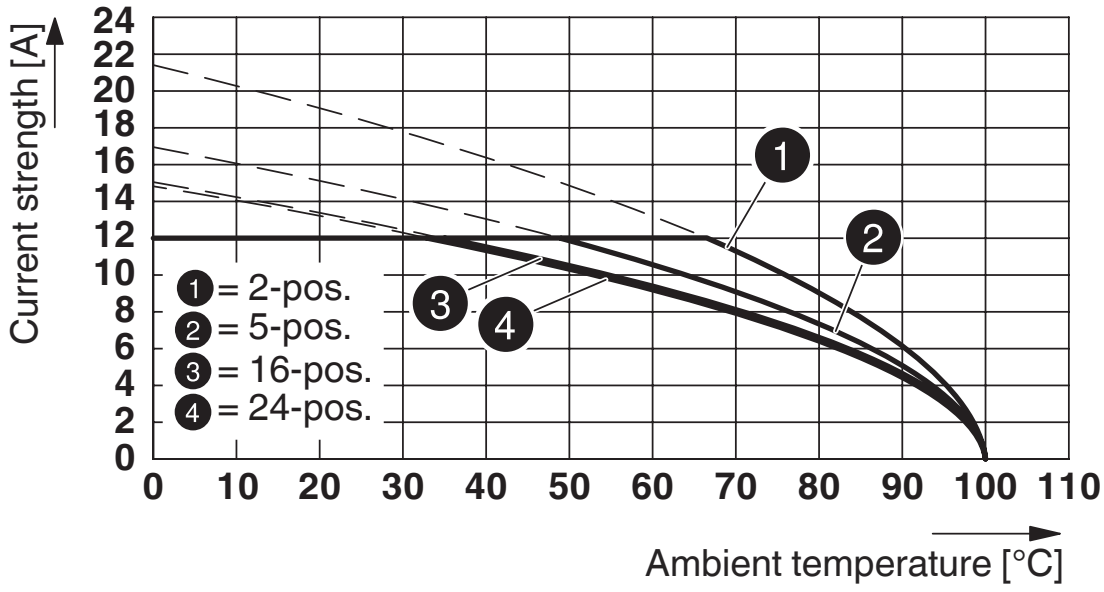
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Diagram



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

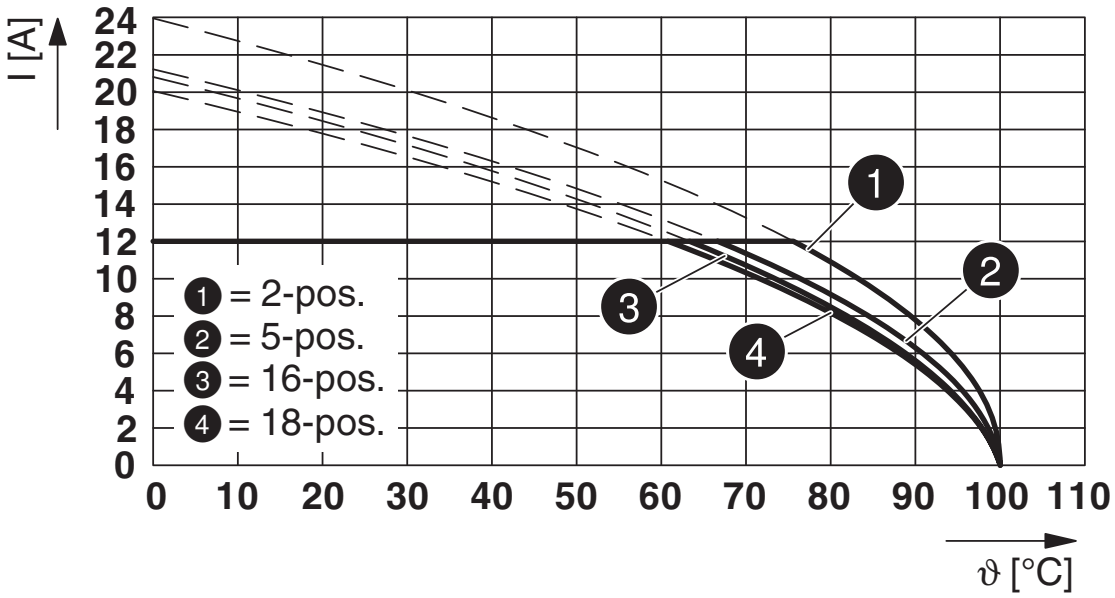
Diagram



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

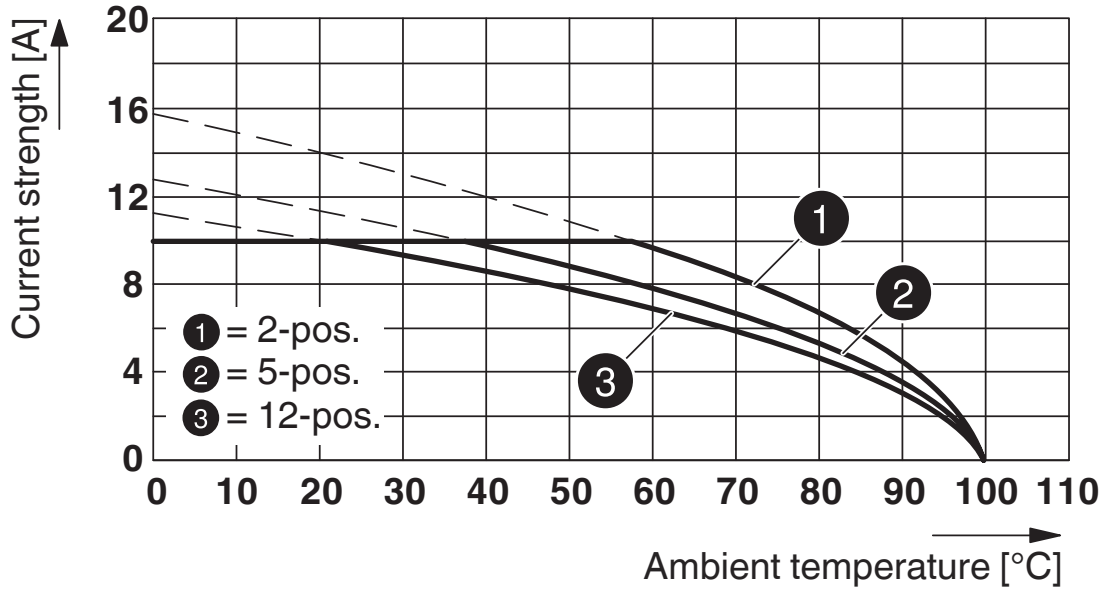
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Diagram



Type: MVSTB(R/W) 2,5/...-ST with FKIC 2,5/...-ST

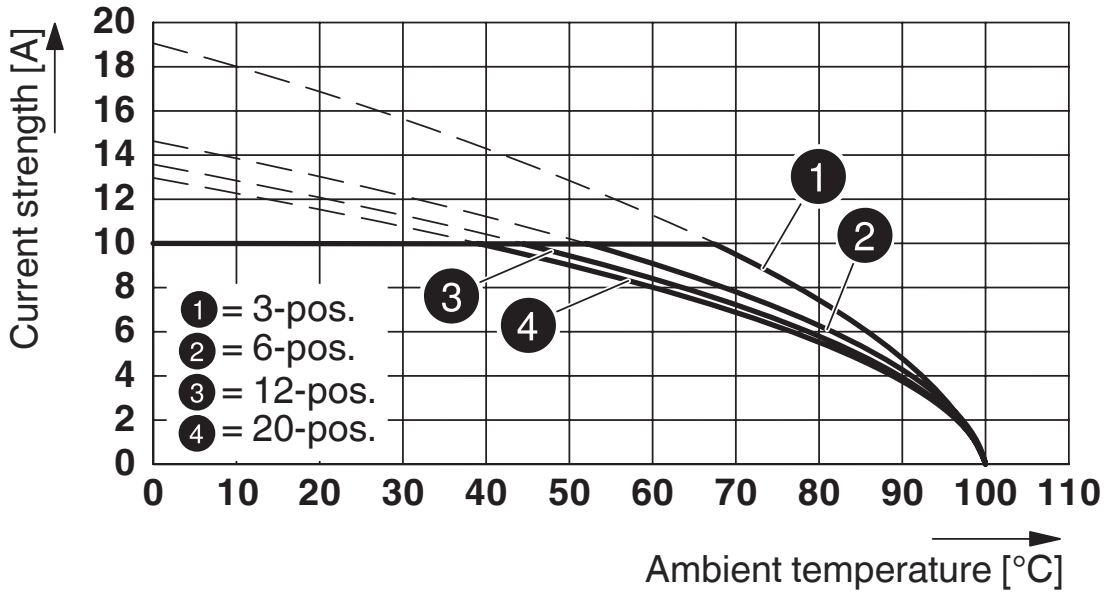
Diagram



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

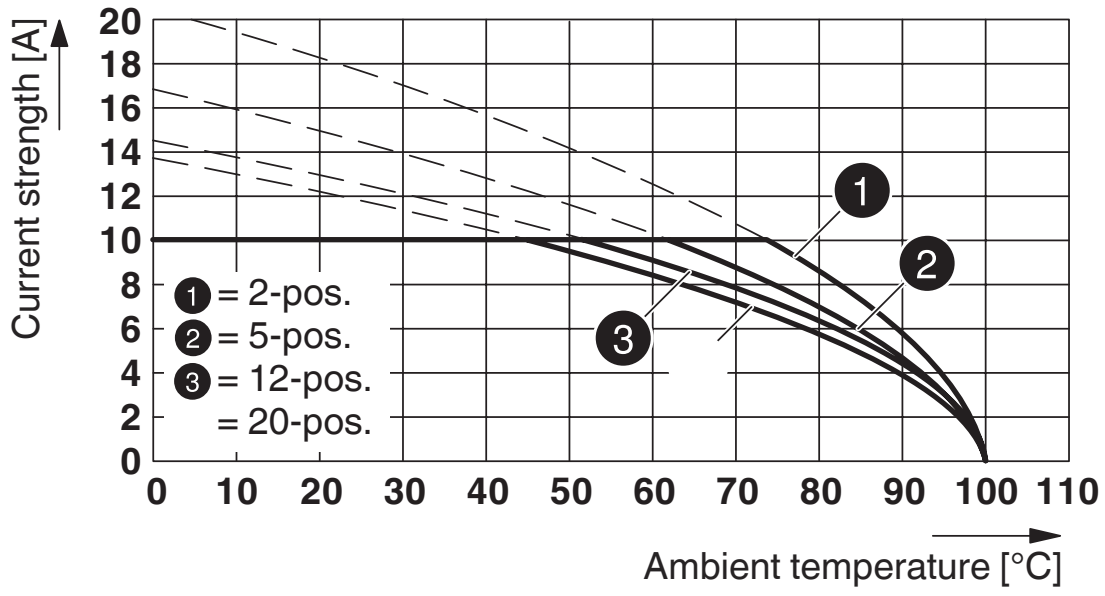
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Diagram



Type: MVSTB(R/W) 2,5/...-ST with MDSTB 2,5/...-G1

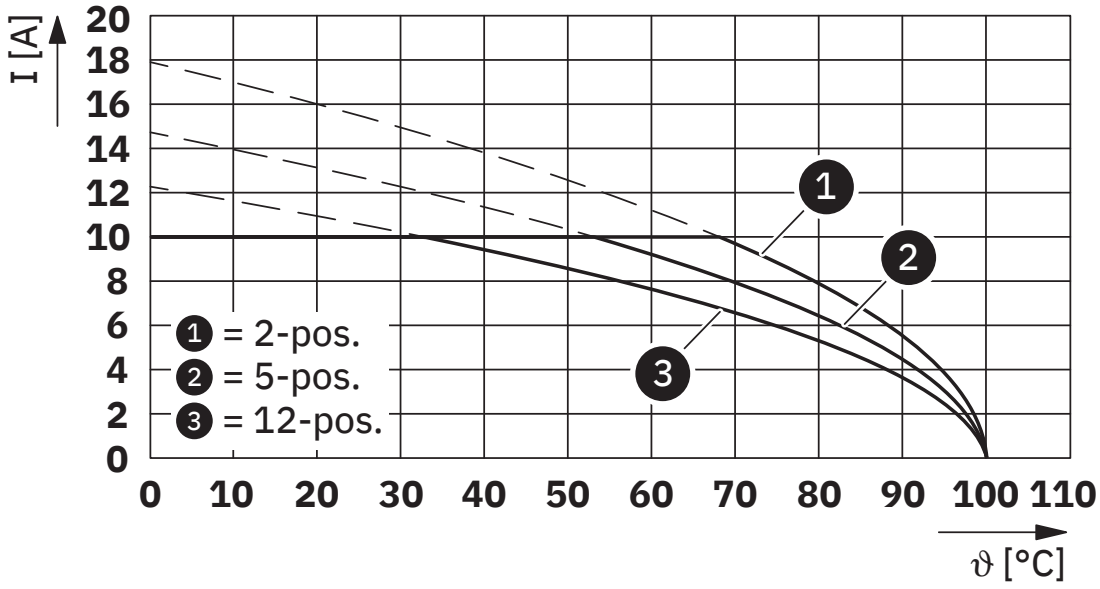
Diagram



Type: MVSTB(R/W) 2,5/...-ST with MDSTBV 2,5/...-G1

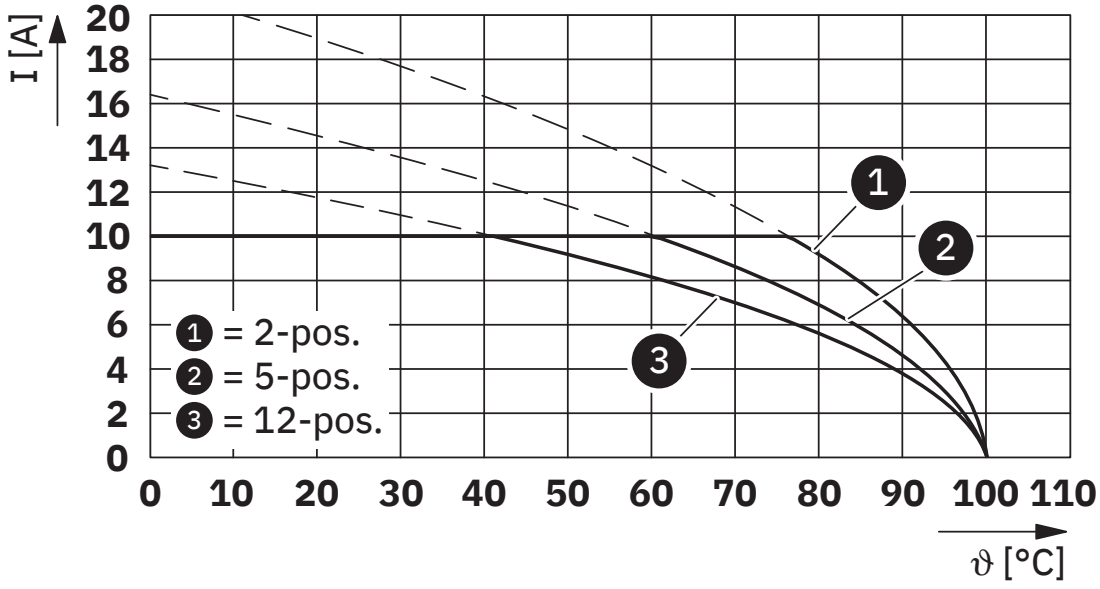
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Diagram



Type: MVSTBR 2.5/...-ST with MDSTBA 2.5/...-G

Diagram



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

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Classifications

ECLASS

ECLASS-13.0	27460290
ECLASS-15.0	27460290

ETIM

ETIM 9.0	EC002943

UNSPSC

UNSPSC 21.0	39121400

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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	0.479 kg CO2e

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