

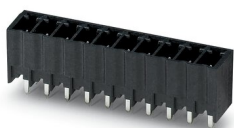
PCB header - MCV 1,5/ 5-G-3,5 P26 THR



1779420

<https://www.phoenixcontact.com/us/products/1779420>

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 headers, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: MCV 1,5/-G-THR, pitch: 3.5 mm, pin layout: Linear pinning, solder pin [P]: 2.6 mm, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, Pin connector pattern alignment: Standard, locking: without, mounting: without, type of packaging: packed in cardboard, User information and design recommendations for through hole reflow technology can be found under: Downloads

Your advantages

- Designed for integration into the SMT soldering process
- Vertical connection enables multi-row arrangement on the PCB
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies

PCB header - MCV 1,5/ 5-G-3,5 P26 THR



1779420

<https://www.phoenixcontact.com/us/products/1779420>

Commercial Data

Item number	1779420
Packing unit	1 pc
Minimum order quantity	50 pc
Sales Key	A01
Product Key	AABTAF
Catalog Page	Page 217 (C-1-2013)
GTIN	4046356531771
Weight per Piece (including packing)	1.364 g
Weight per Piece (excluding packing)	1.364 g
Customs tariff number	85366930
Country of origin	DE

PCB header - MCV 1,5/ 5-G-3,5 P26 THR



1779420

<https://www.phoenixcontact.com/us/products/1779420>

Technical Data

Product properties

Type	Component suitable for through hole reflow
Product line	COMBICON Connectors S
Product type	PCB headers
Number of positions	5
Pitch	3.5 mm
Number of connections	5
Number of rows	1
Mounting flange	without
Number of potentials	5
Pin layout	Linear pinning

Electrical properties

Nominal current I_N	8 A
Nominal voltage U_N	160 V
Pollution degree	3
Contact resistance	1.6 mΩ
Rated voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

Mounting

Mounting type THR soldering	THR soldering
Mounting type	THR soldering

Processing notes

Process	Reflow/wave soldering
Moisture Sensitive Level	MSL 1
Classification temperature T_c	260 °C
Solder cycles in the reflow	3

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	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)

PCB header - MCV 1,5/ 5-G-3,5 P26 THR

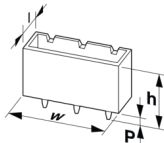
1779420

<https://www.phoenixcontact.com/us/products/1779420>

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

Dimensional drawing	
Pitch	3.5 mm
Width [w]	18.9 mm
Height [h]	11.8 mm
Length [l]	6.9 mm
Installed height	9.2 mm
Solder pin length [P]	2.6 mm

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 ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	1.5 mm ² / solid / > 40 N
	1.5 mm ² / flexible / > 40 N

Insertion and withdrawal forces

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	9 N
Withdraw strength per pos. approx.	7 N

Contact holder in insert

Specification	IEC 60512-15-1:2008-05
---------------	------------------------

PCB header - MCV 1,5/ 5-G-3,5 P26 THR



1779420

<https://www.phoenixcontact.com/us/products/1779420>

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	
Specification	IEC 60512-1-2:2002-02
Result	Test passed

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	20

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	IIIa
Comparative tracking index (IEC 60112)	CTI 175
Rated insulation voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	2.5 mm
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	1.6 mm
Rated insulation voltage (II/2)	250 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm

PCB header - MCV 1,5/ 5-G-3,5 P26 THR



1779420

<https://www.phoenixcontact.com/us/products/1779420>

minimum creepage distance (II/2)	2.5 mm
----------------------------------	--------

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

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R ₁	1.6 mΩ
Contact resistance R ₂	1.7 mΩ
Insertion/withdrawal cycles	25

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	1.39 kV

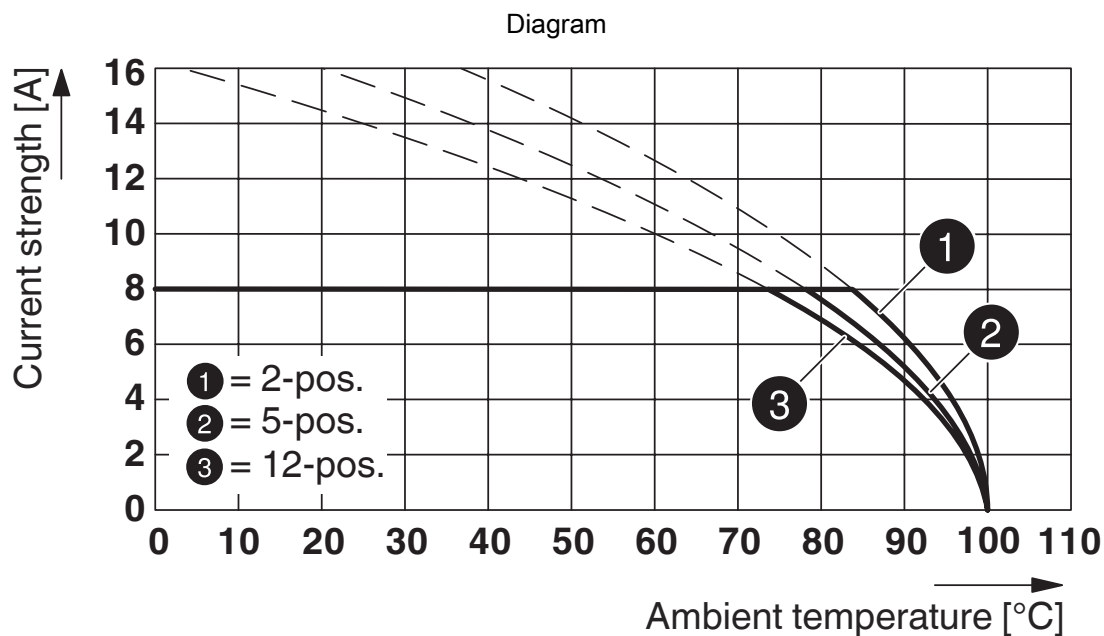
Ambient conditions

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

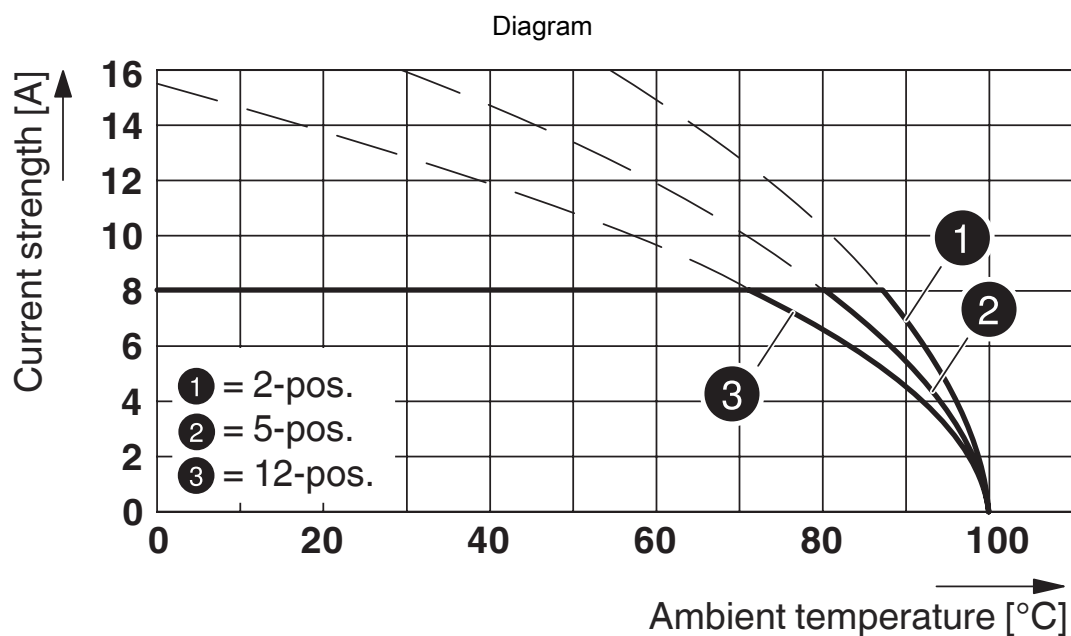
Packaging specifications

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

Drawings



Type: FK-MCP 1,5/...-ST-3,5 with MCV 1,5/...-G-3,5 P... THR



Type: MC 1,5/...-ST(F)-3,5 with MCV 1,5/...-G(F)-3,5 P... THR

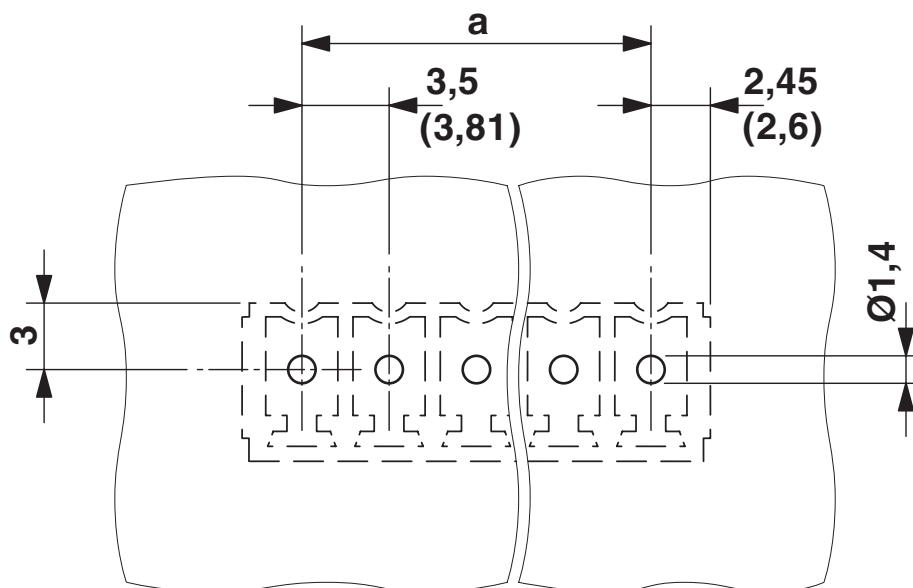
PCB header - MCV 1,5/ 5-G-3,5 P26 THR



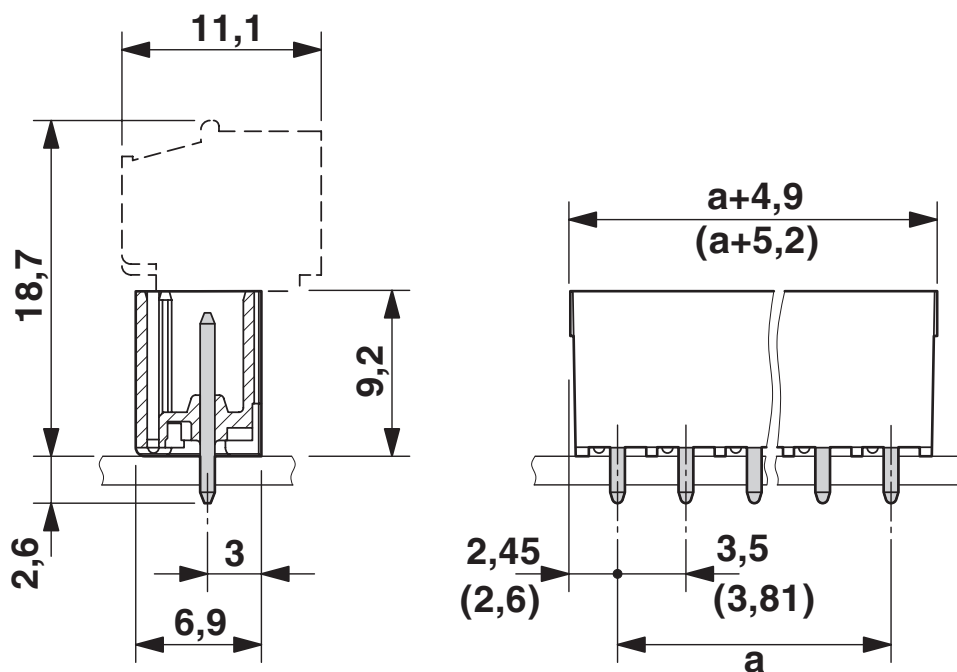
1779420

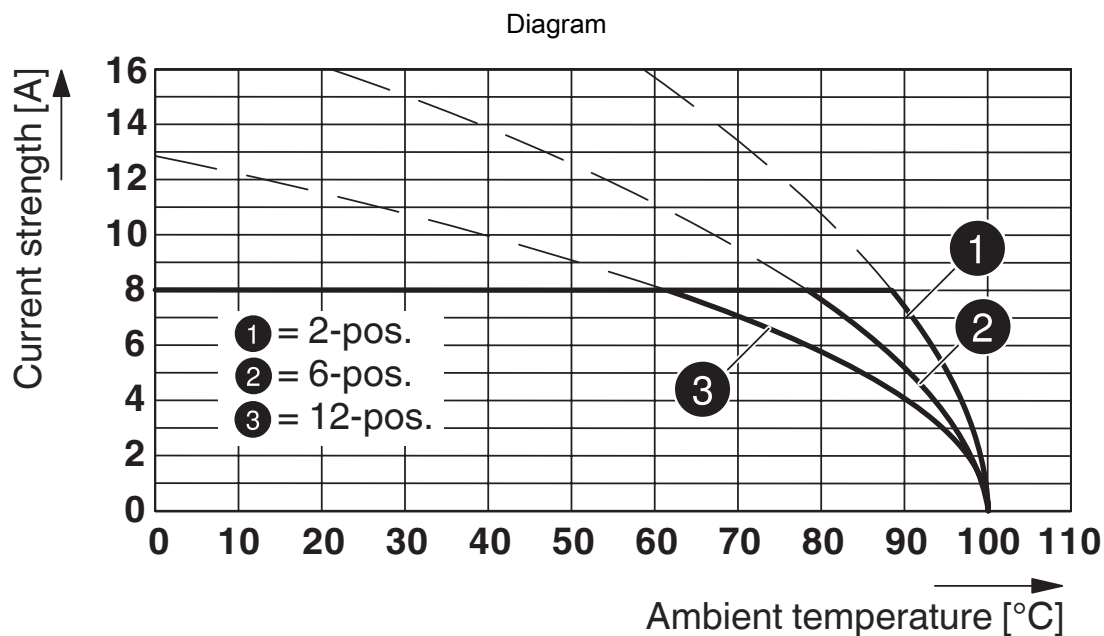
<https://www.phoenixcontact.com/us/products/1779420>

Drilling plan/solder pad geometry

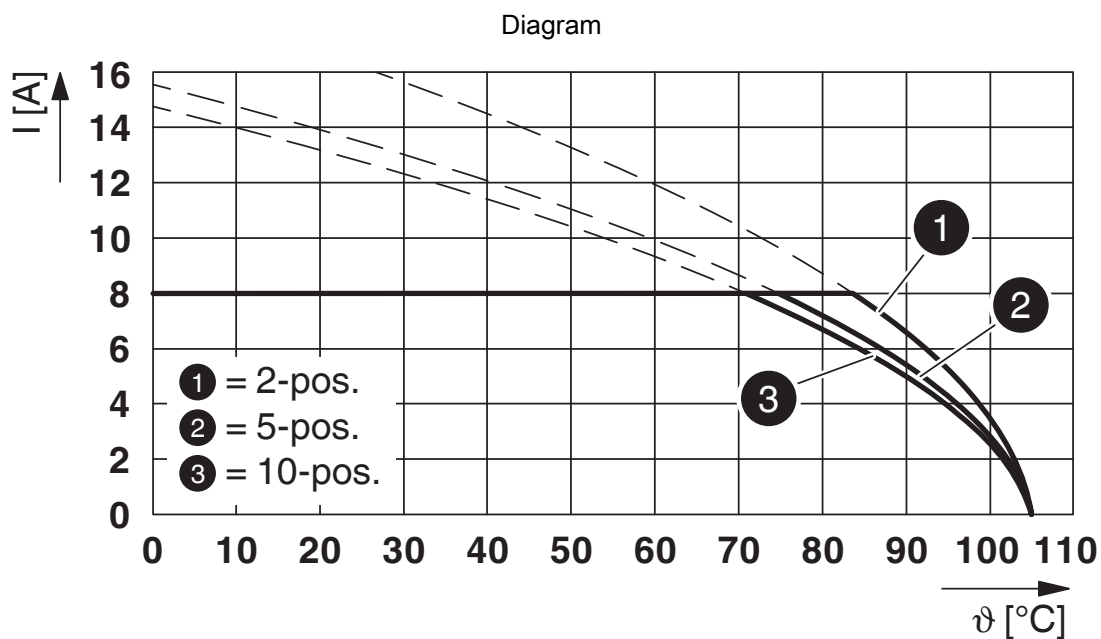


Dimensional drawing





Type: IMCV 1,5/...-G-3,5 P20 THR with MCV 1,5/...-G-3,5 P26 THR



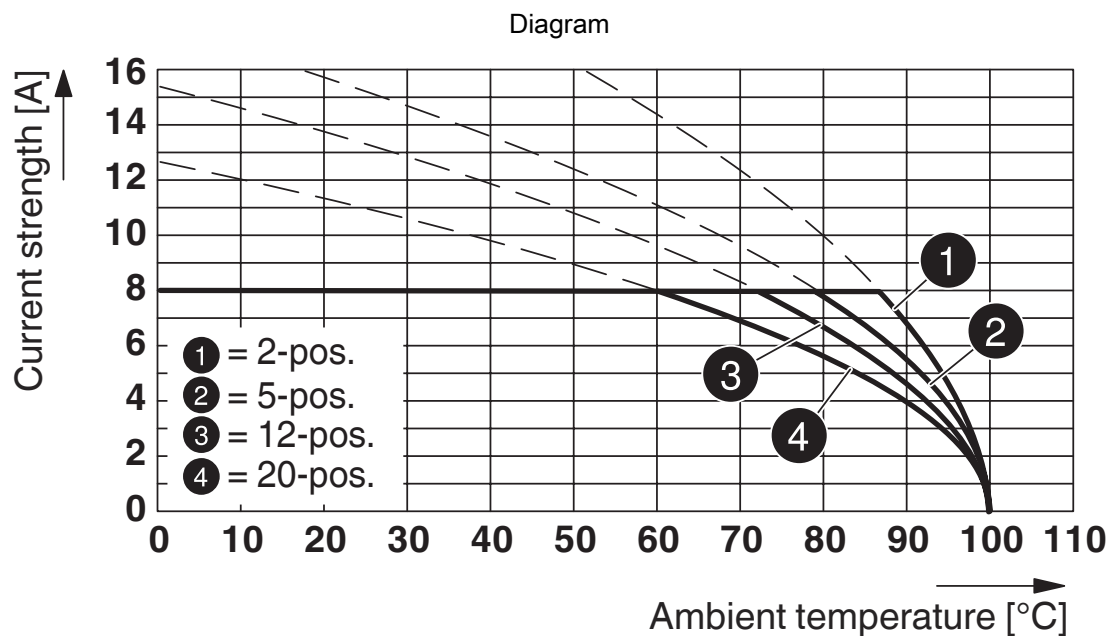
Type: TFMC 1,5/...-ST-3,5 with MCV 1,5/...-G-3,5 P... THR

PCB header - MCV 1,5/ 5-G-3,5 P26 THR

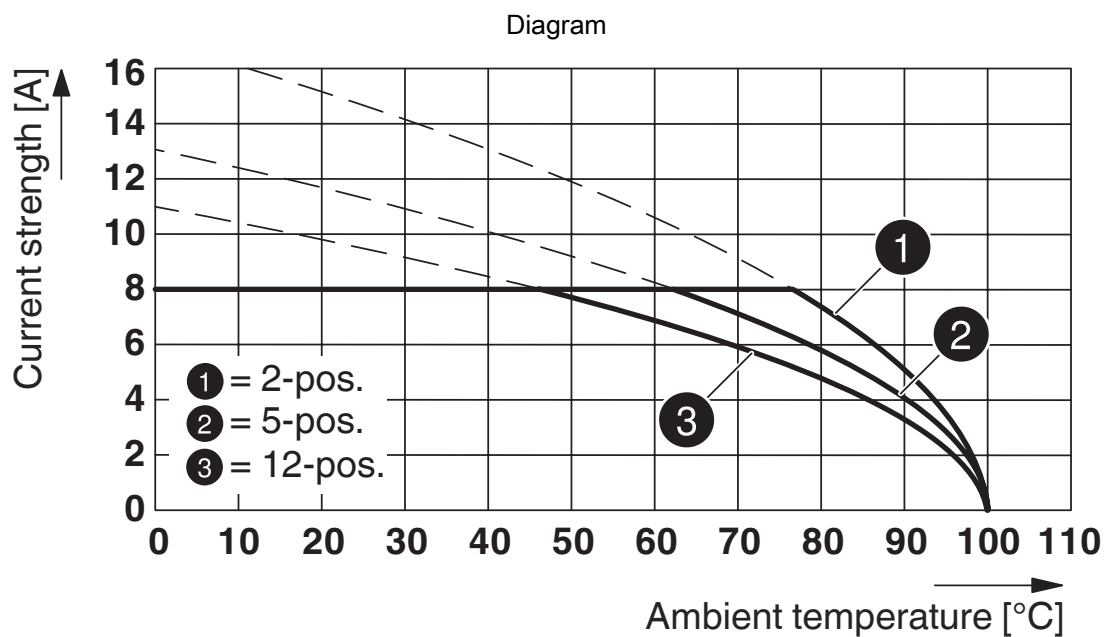


1779420

<https://www.phoenixcontact.com/us/products/1779420>



Type: FMC 1,5/...-ST-3,5 with MCV 1,5/...-G-3,5 P... THR



Type: MCVR 1,5/...-ST-3,5 with MCV 1,5/...-G-3,5 P26THR

PCB header - MCV 1,5/ 5-G-3,5 P26 THR



1779420

<https://www.phoenixcontact.com/us/products/1779420>

Approvals

	IECEE CB Scheme			
	Approval ID: DE1-60987-B1B2			
		Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG
		160 V	8 A	-
				Cross Section mm ²
				-

	EAC
	Approval ID: B.01687

	cULus Recognized			
	Approval ID: E60425-20110128			
		Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG
Use group B				Cross Section mm ²
		300 V	8 A	-
Use group D				-
		300 V	8 A	-

	VDE report with production monitoring			
	Approval ID: 40011723			
		Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG
		160 V	8 A	Cross Section mm ²
				-

PCB header - MCV 1,5/ 5-G-3,5 P26 THR



1779420

<https://www.phoenixcontact.com/us/products/1779420>

Classifications

ECLASS

ECLASS-9.0	27440402
ECLASS-10.0.1	27440402
ECLASS-11.0	27460201

ETIM

ETIM 8.0	EC002637
----------	----------

UNSPSC

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

PCB header - MCV 1,5/ 5-G-3,5 P26 THR



1779420

<https://www.phoenixcontact.com/us/products/1779420>

Environmental Product Compliance

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

Phoenix Contact 2022 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com