

Feed-through header - MCV 1,5/ 7-G-3,5 BK - 1800314

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: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 7, pitch: 3.5 mm, color: black, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm




The figure shows a 10-position version of the product

Your advantages

- Well-known mounting principle allows worldwide use
- 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



Key Commercial Data

Packing unit	100 pc
GTIN	 4 055626 330389
GTIN	4055626330389

Technical data

Item properties

Brief article description	Feed-through header
Plug-in system	MINI COMBICON
Type of contact	Male connector
Range of articles	MCV 1,5/...-G
Pitch	3.5 mm
Number of positions	7
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1
Number of connections	7
Number of potentials	7

Electrical parameters

Feed-through header - MCV 1,5/ 7-G-3,5 BK - 1800314

Technical data

Electrical parameters

Nominal current	8 A
Nom. voltage	160 V
Rated voltage	160 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	250 V
Rated surge voltage (III/3)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 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 µm Ni),
Metal surface soldering area (top layer)	Tin (3 - 5 µm Sn)
Metal surface soldering area (middle layer)	Nickel (1 - 3 µm Ni)

Material data - housing

Housing color	black (9005)
Insulating material	PBT
Insulating material group	IIIa
CTI according to IEC 60112	225
Flammability rating according to UL 94	V0

Dimensions for the product

Length [l]	7.25 mm
Width [w]	21 mm
Height [h]	12.6 mm
Pitch	3.5 mm
Height (without solder pin)	9.2 mm
Solder pin [P]	3.4 mm
Pin dimensions	0.8 x 0.8 mm

Dimensions for PCB design

Hole diameter	1.2 mm
---------------	--------

Packaging information

Type of packaging	packed in cardboard
Pieces per package	100
Denomination packing units	Pcs.

Ambient conditions

Feed-through header - MCV 1,5/ 7-G-3,5 BK - 1800314

Technical data

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)	1.5 mm
Minimum clearance - inhomogeneous field (III/2)	1.5 mm
Minimum clearance - inhomogeneous field (II/2)	1.5 mm
Minimum creepage distance value (III/3)	2.5 mm
Minimum creepage distance value (III/2)	1.6 mm
Minimum creepage distance value (II/2)	2.5 mm

Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	6 N
Withdraw strength per pos. approx.	4 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-5:1992-08
Contact resistance R ₁	1.8 mΩ
Insertion/withdrawal cycles	25
Contact resistance R ₂	2.2 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV

Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	20
Conductor cross section	1.5 mm ²
Test current	8 A DC
Upper limiting temperature requirements <100 °C	Test passed

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	2.95 kV
Power-frequency withstand voltage	1.39 kV

Feed-through header - MCV 1,5/ 7-G-3,5 BK - 1800314

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

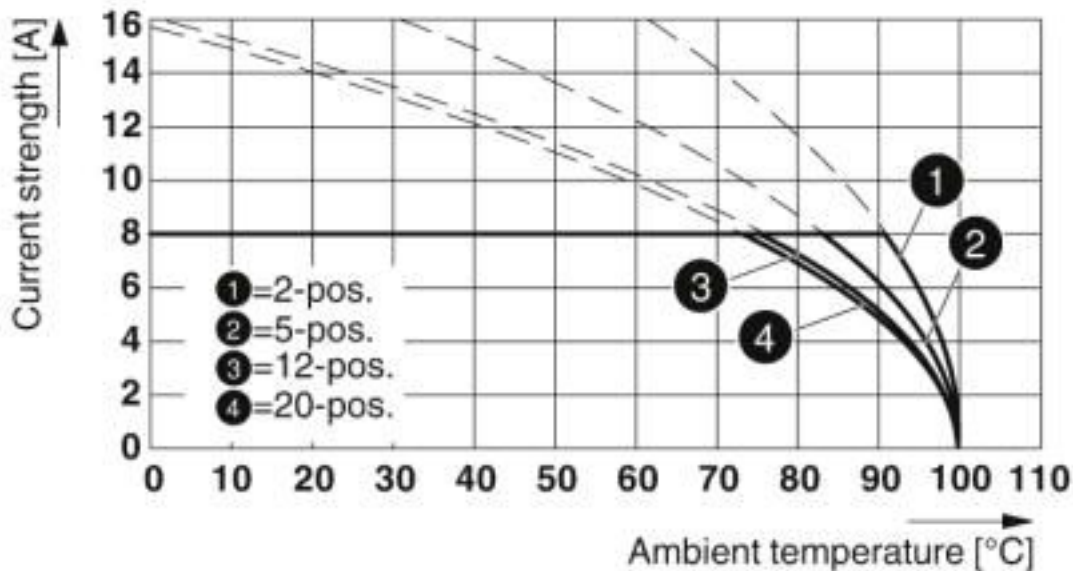
Flammability rating according to UL 94	V0
--	----

Environmental Product Compliance

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

Drawings

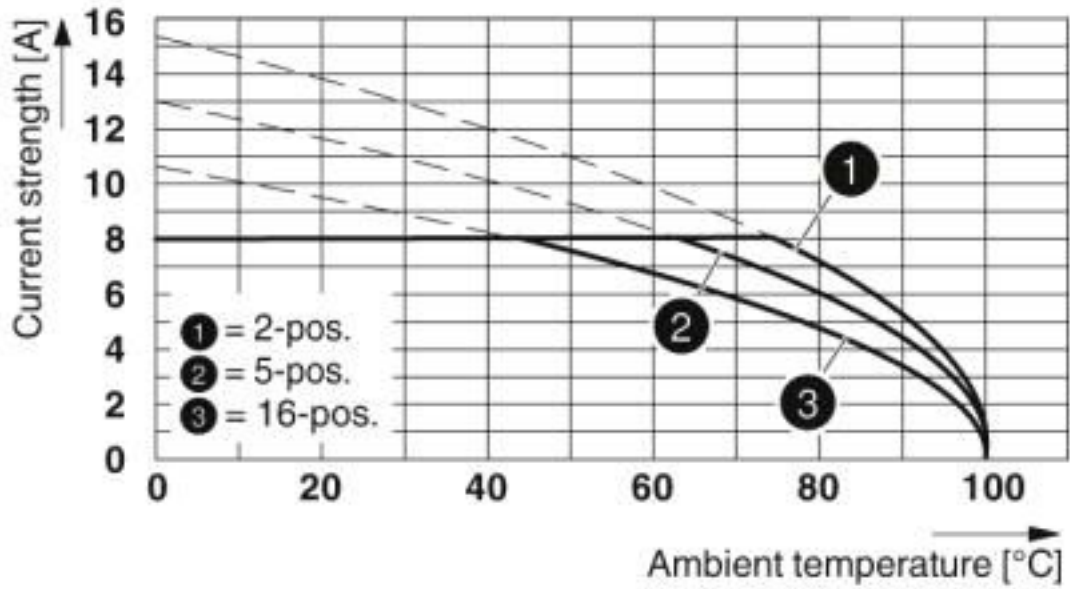
Diagram



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

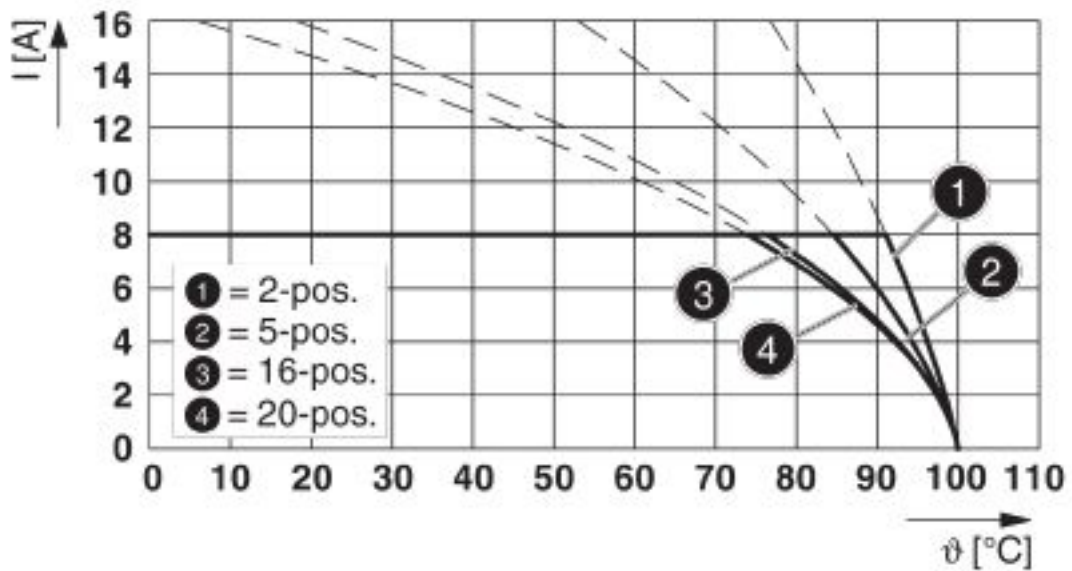
Feed-through header - MCV 1,5/ 7-G-3,5 BK - 1800314

Diagram



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

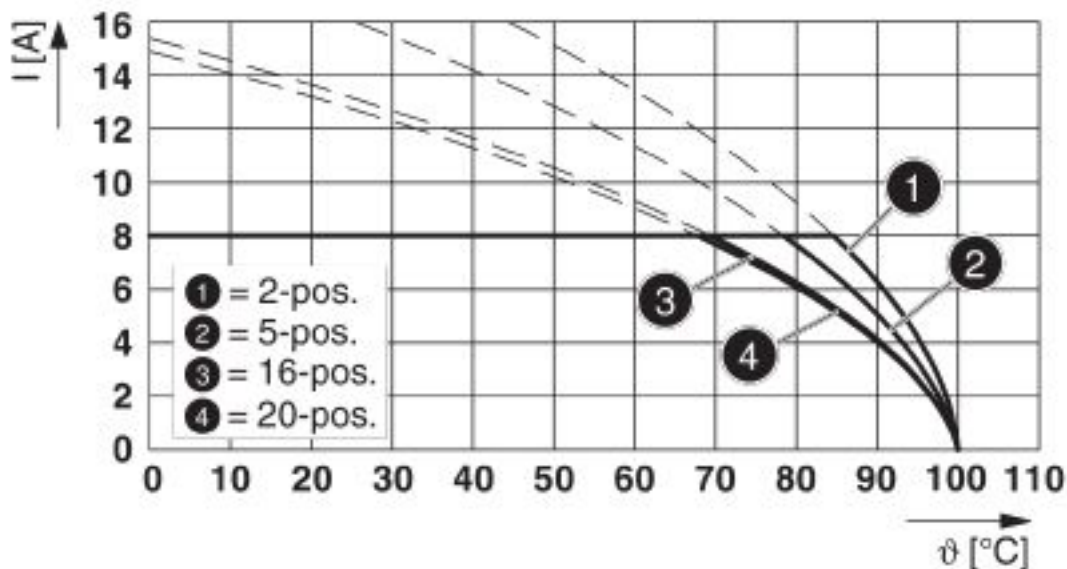
Diagram



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

Feed-through header - MCV 1,5/ 7-G-3,5 BK - 1800314

Diagram



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

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 5.0	EC002637
ETIM 6.0	EC002637
ETIM 7.0	EC002637

Approvals

Approvals

Approvals

EAC

Feed-through header - MCV 1,5/ 7-G-3,5 BK - 1800314

Approvals

Ex Approvals

Approval details

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



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>

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[1800314](#)