Printed-circuit board connector - MC 1,5/ 2-STF-3,5 - 1847055

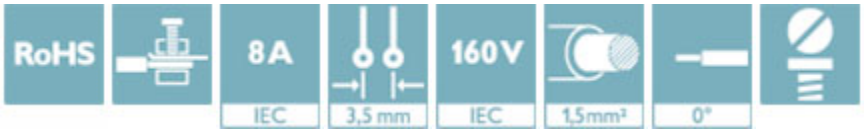
Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

PCB connector, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 3.5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

The figure shows a 10-position version of the product

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- Screwable flange for superior mechanical stability



Key Commercial Data

Packing unit	1 pc
GTIN	4 017918 113445
GTIN	4017918113445
Weight per Piece (excluding packing)	2.580 g
Custom tariff number	85366990
Country of origin	United States

Technical data

Item properties

Brief article description	Printed-circuit board connector
Plug-in system	MINI COMBICON
Type of contact	Female connector
Range of articles	MC 1,5/..-STF
Pitch	3.5 mm

Printed-circuit board connector - MC 1,5/ 2-STF-3,5 - 1847055

Technical data

Item properties

Number of positions	2
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M2
Locking	Screw flange
Number of levels	1
Number of connections	2
Number of potentials	2

Electrical parameters

Rated current	8 A
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

Connection capacity

Conductor cross section solid	0.14 mm² ... 1.5 mm²
Conductor cross section flexible	0.14 mm² ... 1.5 mm²
Conductor cross section AWG / kcmil	28 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 1.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 0.5 mm²
2 conductors with same cross section, solid	0.08 mm² ... 0.5 mm²
2 conductors with same cross section, flexible	0.08 mm² ... 0.75 mm²
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm² ... 0.34 mm²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm² ... 0.5 mm²
Cylindrical gauge a x b / diameter	2.4 mm x 1.5 mm / 1.6 mm
Stripping length	7 mm
Torque	0.22 Nm ... 0.25 Nm

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

Insulating material	PA

Printed-circuit board connector - MC 1,5/ 2-STF-3,5 - 1847055

Technical data

Material data - housing

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]	16.1 mm
Width [w]	17.3 mm
Height [h]	11.1 mm
Pitch	3.5 mm
Height (without solder pin)	11.1 mm
Dimension a	3.5 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	250
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

Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed
Conductor cross section / conductor type / tensile force	0.14 mm² / solid / > 10 N
	0.14 mm² / flexible / > 10 N
	1.5 mm² / solid / > 40 N
	1.5 mm² / flexible / > 40 N

Mechanical tests according to standard

Visual examination	Test passed IEC 60512-1-1:2002-02
Dimensional test	Test passed IEC 60512-1-2:2002-02
Resistance of marking	Test passed IEC 60068-2-70:1995-12

Printed-circuit board connector - MC 1,5/ 2-STF-3,5 - 1847055

Technical data

Mechanical tests according to standard

Result	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	6 N
Withdraw strength per pos. approx.	4 N
Polarization and coding	Test passed IEC 60512-13-5:2006-02
Result	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	24.5 N

Air clearances and creepage distances

Insulating material group	I
Voltage	160 V
Rated insulation voltage (III/3)	160 V
Rated insulation voltage (III/2)	160 V
Rated insulation voltage (II/2)	320 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

Current carrying capacity / derating curves

Mechanical tests (A)

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 60512-9-1:2010-03
Contact resistance R_1	1.3 mΩ
Insertion/withdrawal cycles	25
Contact resistance R_2	1.4 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV
Insulation resistance, neighboring positions	1.6 TΩ

Climatic tests (D)

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

Printed-circuit board connector - MC 1,5/ 2-STF-3,5 - 1847055

Technical data

Climatic tests (D)

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

Environmental and durability tests (E)

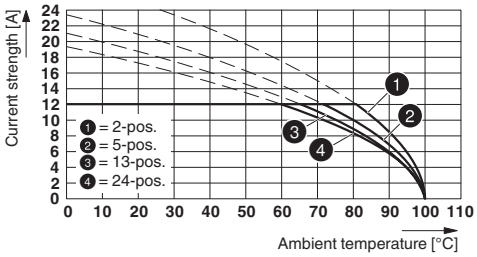
Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

Environmental Product Compliance

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

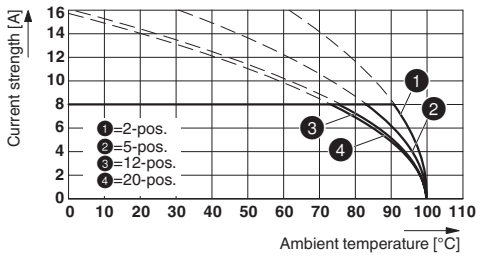
Drawings

Diagram



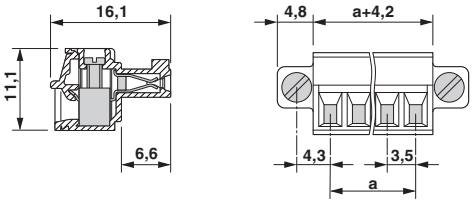
Type: MC 1,5/...-ST(F)-3,5 with MC 1,5/...-G(F)-3,5 P... THR

Diagram

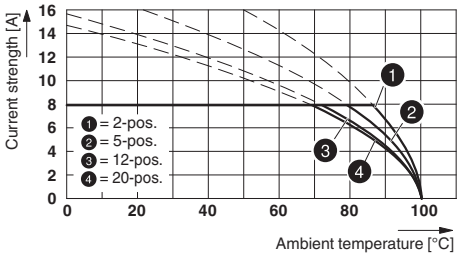


Type: MC 1,5/...-STF-3,5 with MCV 1,5/...-GF-3,5

Dimensional drawing



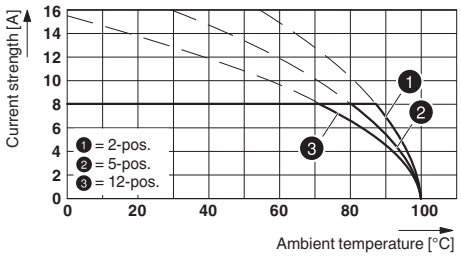
Diagram



Type: MC 1,5/...-STF-3,5 with MC 1,5/...-GF-3,5

Printed-circuit board connector - MC 1,5/ 2-STF-3,5 - 1847055

Diagram



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

Classifications

eCl@ss

eCl@ss 4.0	272607xx
eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440309
eCl@ss 8.0	27440309
eCl@ss 9.0	27440309

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002638
ETIM 5.0	EC002638
ETIM 6.0	EC002638

UNSPSC

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

Approvals

Approvals

Printed-circuit board connector - MC 1,5/ 2-STF-3,5 - 1847055

Approvals

Approvals

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

Ex Approvals

Approval details

CSA		http://www.csagroup.org/services-industries/product-listing/	13631

	D	B
Nominal voltage UN	300 V	300 V
Nominal current IN	8 A	8 A
mm²/AWG/kcmil	28-16	28-16

IECEE CB Scheme		http://www.iecee.org/	DE1-60987-B1B2

Nominal voltage UN	160 V
Nominal current IN	8 A
mm²/AWG/kcmil	0.2-1.5

VDE Gutachten mit Fertigungsüberwachung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40011723

Nominal voltage UN	160 V
Nominal current IN	8 A
mm²/AWG/kcmil	0.2-1.5

EAC		B.01742

Printed-circuit board connector - MC 1,5/ 2-STF-3,5 - 1847055

Approvals

cULus Recognized	c UL us	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20110128

	D	B
Nominal voltage UN	300 V	300 V
Nominal current IN	8 A	8 A
mm²/AWG/kcmil	30-14	30-14

Accessories

Accessories

Cable housing

Cable housing - KGG-MC 1,5/ 2 - 1834343

Cable housing, pitch: 3.81 mm, number of positions: 2, dimension a: 10.01 mm, color: green

Labeled terminal marker

Marker card - SK 3,5/2,8:FORTL.ZAHLEN - 0804073

Marker card, Card, white, labeled, Horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 99, mounting type: adhesive, for terminal block width: 3.5 mm, lettering field size: 3.5 x 2.8 mm

Screwdriver tools

Screwdriver - SZS 0,4X2,5 VDE - 1205037

Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

Terminal marking

Printed-circuit board connector - MC 1,5/ 2-STF-3,5 - 1847055

Accessories

Marker card - SK U/2,8 WH:UNBEDRUCKT - 0803883

Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm

Additional products

Printed-circuit board connector - MCV 1,5/ 2-GF-3,5 P20 THRR32 - 1780668

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 3.5 mm, color: black, contact surface: Tin, mounting: THR soldering, User information and design recommendations for through hole reflow technology can be found under “Downloads”

Printed-circuit board connector - MC 1,5/ 2-GF-3,5 P26 THR - 1789164

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 3.5 mm, color: black, contact surface: Tin, mounting: THR soldering

Printed-circuit board connector - MC 1,5/ 2-GF-3,5 P26 THRR32 - 1789177

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 3.5 mm, color: black, contact surface: Tin, mounting: THR soldering

Printed-circuit board connector - MC 1,5/ 2-GF-3,5 P20 THRR32 - 1789397

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 3.5 mm, color: black, contact surface: Tin, mounting: THR soldering

Printed-circuit board connector - MC 1,5/ 2-STF-3,5 - 1847055

Accessories

Printed-circuit board connector - MC 1,5/ 2-GF-3,5 P14 THR - 1789601

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 3.5 mm, color: black, contact surface: Tin, mounting: THR soldering

---

Printed-circuit board connector - MC 1,5/ 2-GF-3,5 P14 THRR32 - 1789614

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 3.5 mm, color: black, contact surface: Tin, mounting: THR soldering

---

Feed-through header - MCV 1,5/ 2-GF-3,5 - 1843224

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 3.5 mm, color: green, contact surface: Tin, mounting: Wave soldering

---

Feed-through header - MC 1,5/ 2-GF-3,5 - 1843790

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 3.5 mm, color: green, contact surface: Tin, mounting: Wave soldering

---

Feed-through header - EMC 1,5/ 2-GF-3,5 - 1897241

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 3.5 mm, color: green, contact surface: Tin, mounting: Press-in technology

---

Printed-circuit board connector - MC 1,5/ 2-STF-3,5 - 1847055

Accessories

Feed-through header - EMCV 1,5/ 2-GF-3,5 - 1911169

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, number of positions: 2, pitch: 3.5 mm, color: green, contact surface: Tin, mounting: Press-in technology

---

Feed-through header - MC 1,5/ 2-GF-3,5 THT - 1937318

PCB headers, number of positions: 2, pitch: 3.5 mm, color: black, User information and design recommendations for through hole reflow technology can be found under “Downloads”

Feed-through header - MCV 1,5/ 2-GF-3,5 THT - 1937402

PCB headers, number of positions: 2, pitch: 3.5 mm, color: black, User information and design recommendations for through hole reflow technology can be found under “Downloads”

Feed-through header - MC 1,5/ 2-GF-3,5 THT-R32 - 1996867

PCB headers, number of positions: 2, pitch: 3.5 mm, color: black, User information and design recommendations for through hole reflow technology can be found under “Downloads”
