

Printed-circuit board connector - MCVW 1,5/11-STF-3,5 - 1863097

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>)



The figure shows a 10-position version of the product


PCB connector, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 11, pitch: 3.5 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

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
Minimum order quantity	50 pc
GTIN	 4 017918 120900
GTIN	4017918120900
Weight per Piece (excluding packing)	9.640 g
Custom tariff number	85366990
Country of origin	Germany

Technical data

Item properties

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

Printed-circuit board connector - MCVW 1,5/11-STF-3,5 - 1863097

Technical data

Item properties

Pitch	3.5 mm
Number of positions	11
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	11
Number of potentials	11

Electrical parameters

Nominal current	8 A
Nom. voltage	160 V
Rated voltage	160 V
Rated voltage (III/2)	160 V
Rated 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

Connection capacity

Connection method	Screw connection with tension sleeve
pluggable	Yes
Conductor cross section solid	0.14 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section AWG / kcmil	28 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 0.5 mm ²
2 conductors with same cross section, solid	0.08 mm ² ... 0.5 mm ²
2 conductors with same cross section, flexible	0.08 mm ² ... 0.75 mm ²
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm ² ... 0.34 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm ² ... 0.5 mm ²
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

Type of locking	Screw locking
-----------------	---------------

Printed-circuit board connector - MCVW 1,5/11-STF-3,5 - 1863097

Technical data

Mounting flange	Screw flange
-----------------	--------------

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

Housing color	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Dimensions for the product

Length [l]	10.4 mm
Width [w]	48.9 mm
Height [h]	19.1 mm
Pitch	3.5 mm
Height (without solder pin)	19.1 mm
Dimension a	35 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
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)

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

Printed-circuit board connector - MCVW 1,5/11-STF-3,5 - 1863097

Technical data

Pull-out test

Conductor cross section / conductor type / tensile force	0.14 mm ² / solid / > 10 N
	0.14 mm ² / flexible / > 10 N
	1.5 mm ² / solid / > 40 N
	1.5 mm ² / 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
Result	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	7 N
Withdraw strength per pos. approx.	8 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.	23 N

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 mm
Minimum creepage distance value (III/2)	1.5 mm
Minimum creepage distance value (II/2)	1.6 mm

Mechanical tests (A)

Insertion strength per pos. approx.	7 N
Withdraw strength per pos. approx.	8 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	3.5 mΩ
Insertion/withdrawal cycles	25

Printed-circuit board connector - MCVW 1,5/11-STF-3,5 - 1863097

Technical data

Durability tests (B)

Contact resistance R ₂	3.6 mΩ
Impulse withstand voltage at sea level	2.95 kV
Power-frequency withstand voltage	1.39 kV
Insulation resistance, neighboring positions	> 0.2 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	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

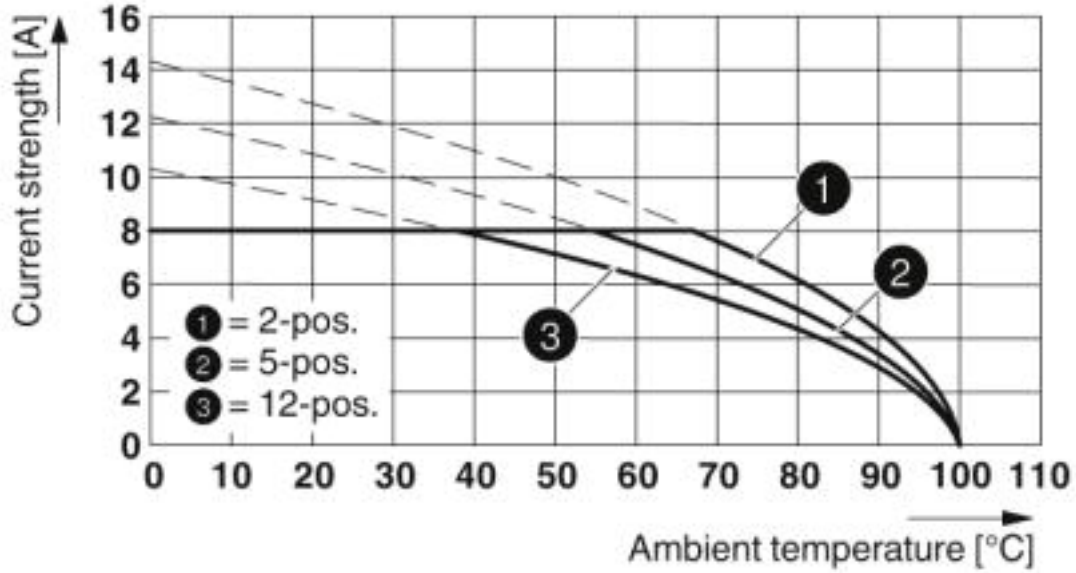
Environmental Product Compliance

	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

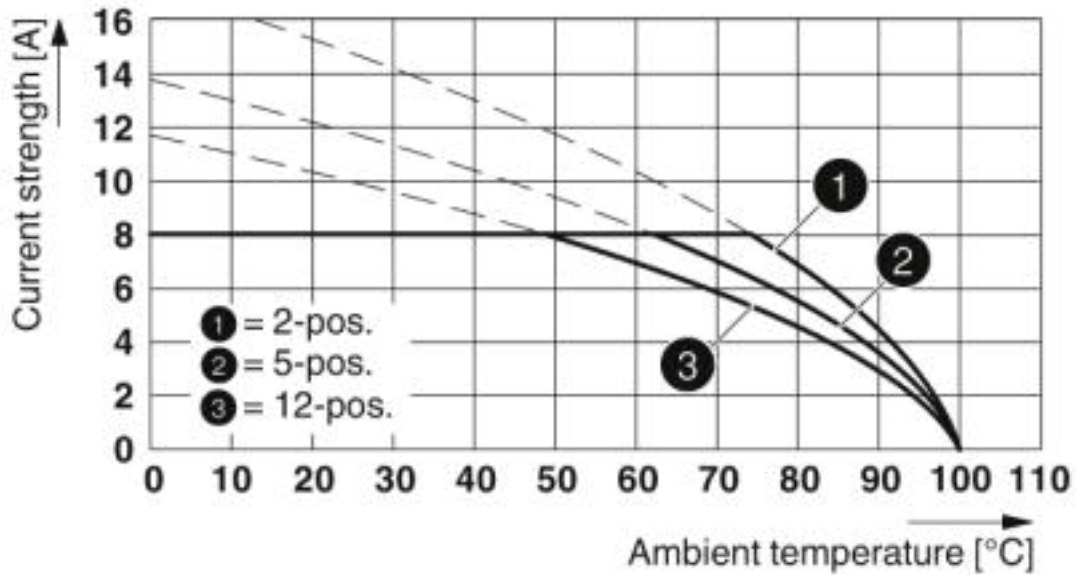
Printed-circuit board connector - MCVW 1,5/11-STF-3,5 - 1863097

Diagram



Type: MCV(W/R) 2,5/...-STF-3,5 with MC 1,5/...-GF-3,5 P...THR

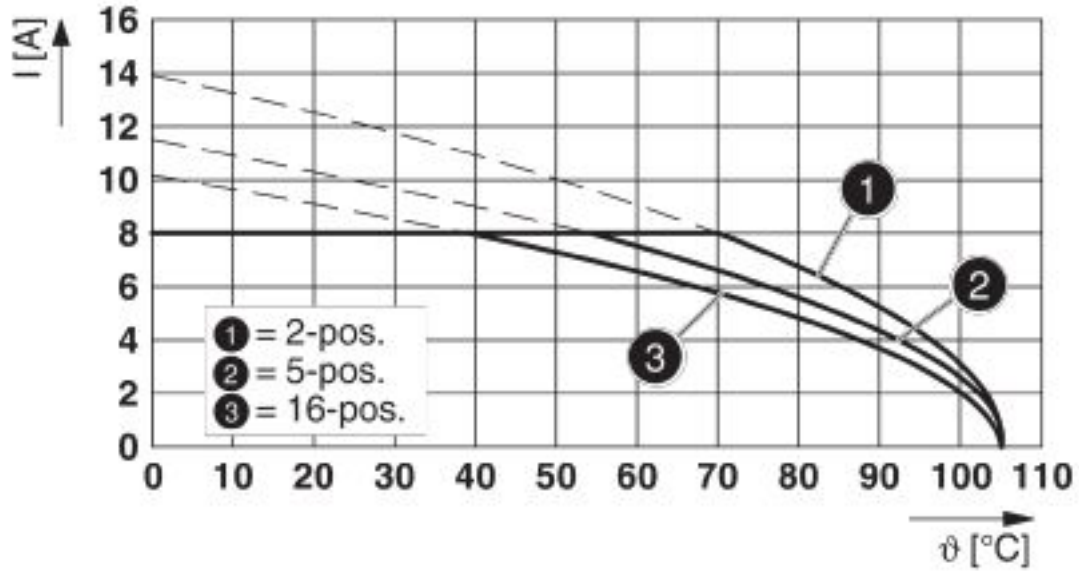
Diagram



Type: MCV(W/R) 1,5/...-STF-3,81 with MCV 1,5/...-GF-3,5 P... THR

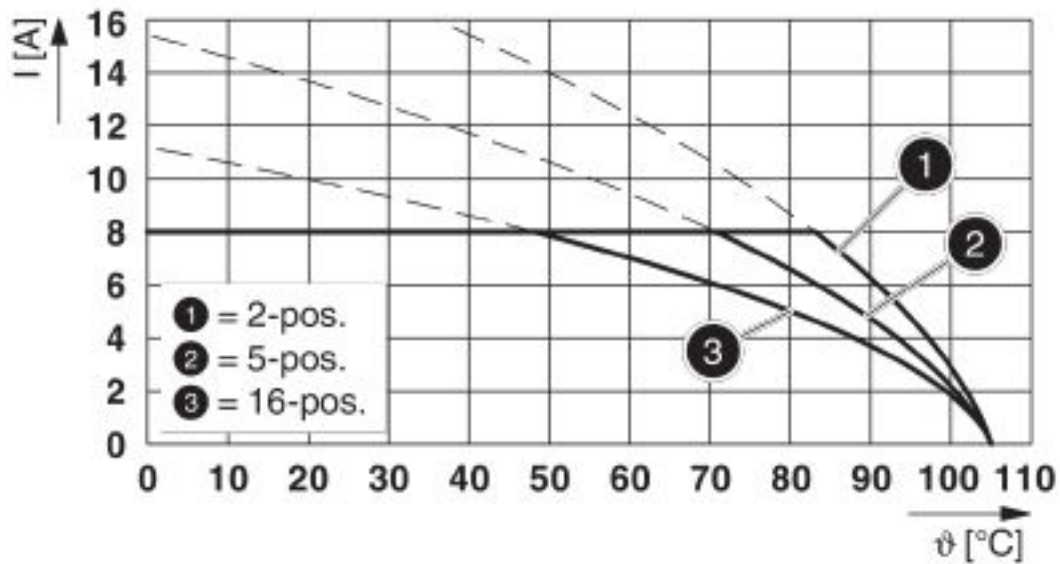
Printed-circuit board connector - MCVW 1,5/11-STF-3,5 - 1863097

Diagram



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

Diagram



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

Printed-circuit board connector - MCVW 1,5/11-STF-3,5 - 1863097

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	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
ETIM 7.0	EC002638

UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

Approvals

Approvals

Approvals


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


Ex Approvals

Printed-circuit board connector - MCVW 1,5/11-STF-3,5 - 1863097


Approvals

Approval details

IECEE CB Scheme		http://www.iecee.org/	DE1-60987-B1B2
Nominal voltage UN	160 V		
Nominal current IN	8 A		
mm ² /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		
mm ² /AWG/kcmil	0.2-1.5		

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

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20110128
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	8 A	8 A	
mm ² /AWG/kcmil	30-14	30-14	

Accessories

Accessories

Labeled terminal marker

Printed-circuit board connector - MCVW 1,5/11-STF-3,5 - 1863097

Accessories

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

Additional products

Printed-circuit board connector - MC 1,5/11-GF-3,5 P26 THR - 1789342



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 11, pitch: 3.5 mm, color: black, contact surface: Tin, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 2.6 mm

Printed-circuit board connector - MC 1,5/11-GF-3,5 P14 THR - 1789782



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 11, pitch: 3.5 mm, color: black, contact surface: Tin, mounting: THR soldering, pin layout: Linear pinning, solder pin [P]: 1.4 mm

Feed-through header - MCV 1,5/11-GF-3,5 - 1843318



PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 11, pitch: 3.5 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm

Printed-circuit board connector - MCVW 1,5/11-STF-3,5 - 1863097

Accessories

Feed-through header - MC 1,5/11-GF-3,5 - 1843884

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 11, pitch: 3.5 mm, color: green, contact surface: Tin, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 3.4 mm



Feed-through header - EMC 1,5/11-GF-3,5 - 1897335

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 11, pitch: 3.5 mm, color: green, contact surface: Tin, mounting: Press-in technology, pin layout: Linear pinning, solder pin [P]: 3.5 mm



Feed-through header - EMCV 1,5/11-GF-3,5 - 1911253

PCB headers, nominal current: 8 A, rated voltage (III/2): 160 V, nominal cross section: 1.5 mm², number of positions: 11, pitch: 3.5 mm, color: green, contact surface: Tin, mounting: Press-in technology, pin layout: Linear pinning, solder pin [P]: 3.8 mm

