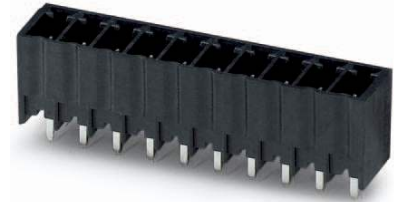


Order No.: 1779365

Type: MCV 1,5/ 2-G-3,5 P26 THR

Header



The figure shows a 10-position version of the product

1 Main features



- | | | | |
|-------------------------|---------------------|------------------------|---------------------|
| • Number of positions | 2 | • Nominal current | 8 A |
| • Nominal cross section | 1.5 mm ² | • Nominal voltage | 160 V |
| • Color | black | • Connection direction | 90 ° |
| • Pitch | 3.5 mm | • Type of packaging | packed in cardboard |

2 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



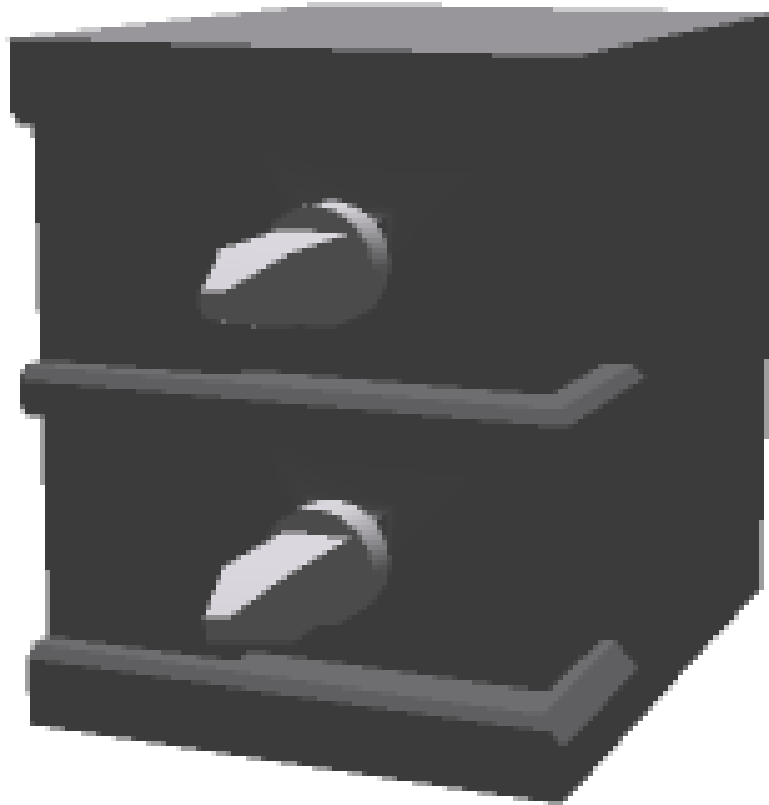
Make sure you always use the latest documentation.
It can be downloaded at: phoenixcontact.net/product/1779365

1779365 MCV 1,5/ 2-G-3,5 P26 THR**3 Table of contents**

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1779365 MCV 1,5/ 2-G-3,5 P26 THR

4 3D model in PDF can be activated (Acrobat Reader only)



1779365 MCV 1,5/ 2-G-3,5 P26 THR**5 Item properties**

Order No.	1779365
Type	MCV 1,5/ 2-G-3,5 P26 THR
Type of contact	Male connector
Range of articles	MCV 1,5/...-G-THR
Pitch	3.5 mm
Number of positions	2
Locking	without
Mounting type	THR soldering
Pin layout	Linear pinning
Product note	User information and design recommendations for through hole reflow technology can be found under "Downloads"

5.1 Material data

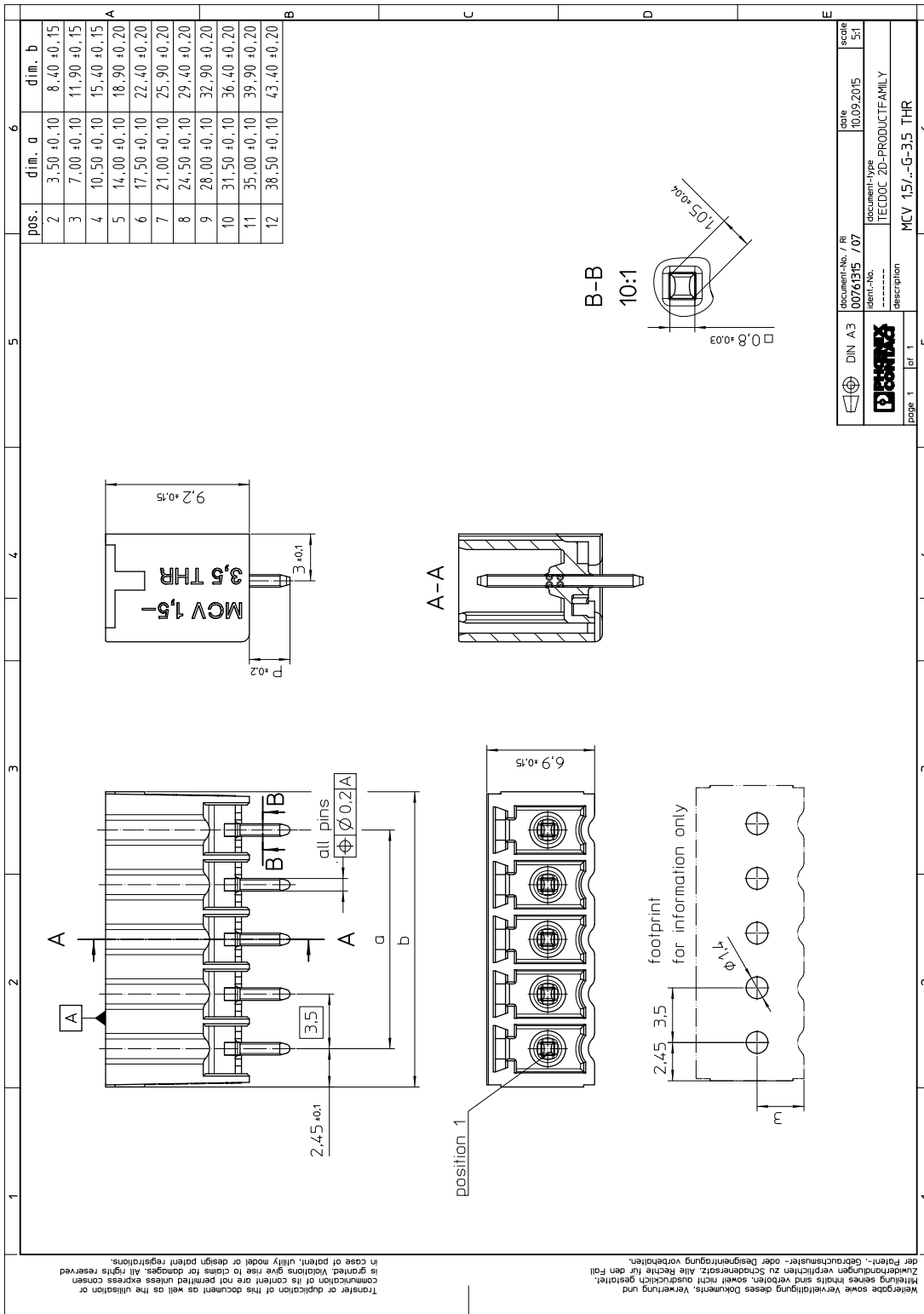
Material of metal parts	
Note	WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface contact area	Ni 2 µm ... 3 µm , Sn 5 µm ... 7 µm
Soldering area surface	Ni 2 µm ... 3 µm , Sn 5 µm ... 7 µm
Surface characteristics	Tin-plated
Insulating material data	
Insulating material	Housing
Insulating material	LCP
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Color	black (9005)

1779365 MCV 1,5/ 2-G-3,5 P26 THR**6 Dimensions**

Length	6.9 mm
Width	
Height (without solder pin)	9.2 mm
Total height	
Length of the solder pin [P]	2.6 mm
Pin dimensions	0,8 x 0,8 mm
Hole diameter	1.4 mm
Dimension a	3.5 mm

1779365 MCV 1,5/ 2-G-3,5 P26 THR

7 Series drawing



1779365 MCV 1,5/ 2-G-3,5 P26 THR**8 Packaging information**

Type of packaging	packed in cardboard
Pieces per package	100
Outer packaging type	Carton

9 Application**9.1 Temperature limit values**

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... X °C (dependent on the derating curve)

1779365 MCV 1,5/ 2-G-3,5 P26 THR**10 Mechanical tests**

Mechanical test group A	
Specification	IEC 61984:2008-10
Visual test	Test passed
Specification	IEC 60512-1-1:2002-02
Dimensional test	Test passed
Specification	IEC 60512-1-2:2002-02
Resistance of marking	Test passed
Specification	IEC 60068-2-70:1995-12
Insertion and withdrawal force	Test passed
Specification	IEC 60512-13-2:2006-02
No. of cycles	25
Insertion strength per pos. approx.	9 N
Withdraw strength per pos. approx.	7 N
Polarization and coding	Test passed
Specification	IEC 60512-13-5:2006-02
Test force	20 N
Contact retention in insert	Test passed
Specification	IEC 60512-15-1:2008-05
Test force per pos.	27 N

1779365 MCV 1,5/ 2-G-3,5 P26 THR**11 Electrical tests****11.1 Electrical data**

Rated current / conductor cross section	8 A / 1.5 mm ²
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Contact resistance	1.6 mΩ
Degree of pollution	2

11.2 Air and creepage distances

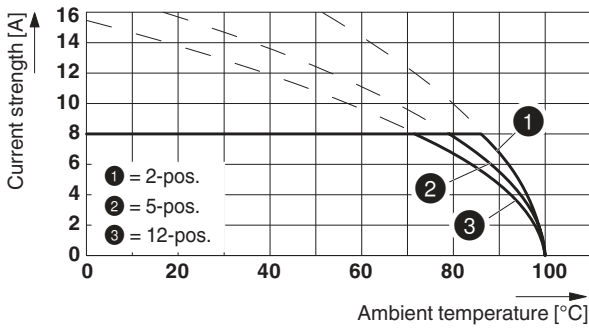
Component	Header		
Specification	IEC 60664-1:2007-04		
Mains type	unearthed mains		
Insulating material group	IIIa		
Comparative tracking index (IEC 60112:2003-01)	CTI 225		
Rated insulation voltage	160 V	160 V	250 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV
Degree of pollution	3	2	2
Overvoltage category	III	III	II
Minimum clearance case A (inhomogeneous field)	1.5 mm	1.5 mm	1.5 mm
Minimum value of the creepage path requirement in acc. with table	2.5 mm	1.6 mm	3.2 mm

1779365 MCV 1,5/ 2-G-3,5 P26 THR

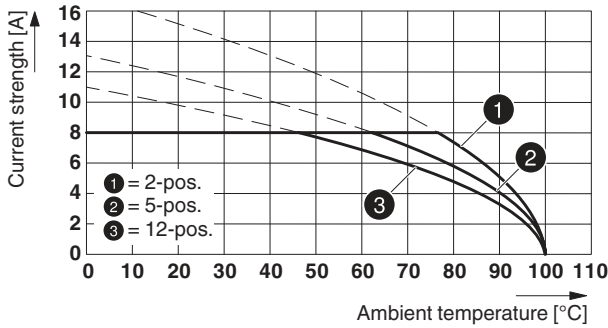
12 Current carrying capacity/derating curves

Specification	IEC 61984:2008-10
Note	Representation based on IEC 60512-5-2:2002-02
Reduction factor	0.8
Number of positions	See diagram
Conductor cross section	1.5 mm ²
Note	

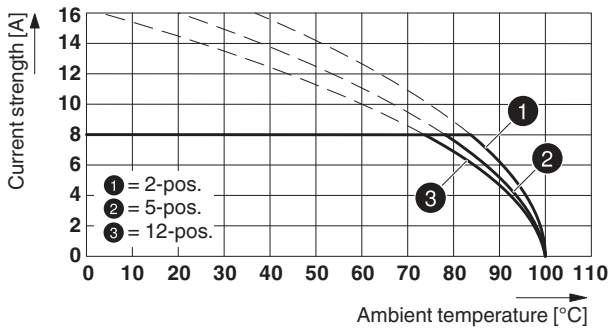
Type: FMC 1,5/...-ST-3,5 with MCV 1,5/...-G-3,5 P26 THR



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



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



1779365 MCV 1,5/ 2-G-3,5 P26 THR**13 Environmental and durability tests****13.1 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
Test directions	X-, Y- and Z-axis

14 Classification for connectors

Specification	IEC 61984:2008-10
Main features	Connectors without switching capacity (COC)
Construction form	Fixed connectors
Strain relief elements	without strain relief
Protection against electric shock	Not encapsulated - touch-proof when inserted
Protection class	
Protective conductor	without PE
Lock	no
Connection method	Screwless terminal points

15 Approvals**VDE Gutachten mit Fertigungsüberwachung **mm²/AWG/kcmil

Voltage	160 V			
Current	8 A			

cULus Recognized 

Use group	B	D		
mm ² /AWG/kcmil				
Voltage	300 V	300 V		
Current	8 A	8 A		

IECEE CB Scheme mm²/AWG/kcmil

Voltage	160 V			
Current	8 A			

EAC **16 Commercial data**

1779365 MCV 1,5/ 2-G-3,5 P26 THR

Order No.	1779365
Type	MCV 1,5/ 2-G-3,5 P26 THR
Pieces per package	100
Net weight	0.61 g
GTIN	4046356531641
Customs tariff number	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1

17 Corresponding plugs

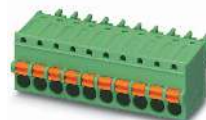
Order No.	Type

18 Accessories

Description	Order No.	Type

1779365 MCV 1,5/ 2-G-3,5 P26 THR

19 Combination tests

**MCV 1,5/..-G-THR****FMC 1,5/..-ST****MCVR 1,5/..-ST****FK-MCP 1,5/..-ST**

Specification

IEC 61984

IEC 61984

IEC 61984

Mechanical tests (A)

Insertion/withdrawal force per position

approx. 9 N / 7 N

approx. 8 N / 6 N

approx. 12 N / 8 N

Polarization when inserted
Requirement > 20 N

Test passed

Test passed

Test passed

Contact holder in insert
Requirements > 20 N

Test passed

Test passed

Test passed

Endurance tests (B)Contact resistance R_1 1.6 m Ω 3.3 m Ω 1.4 m Ω

Insertion/withdrawal cycles

25

25

25

Contact resistance R_2 1.7 m Ω 3.4 m Ω 1.5 m Ω Rated impulse voltage at sea level
Voltage waveform \geq (1.2/50 μ s)

2.95 kV

2.95 kV

2.95 kV

Power-frequency withstand voltage
Voltage waveform \geq (50/60 Hz)

1.39 kV

1.39 kV

1.39 kV

Insulation resistance
Requirements > 5 M Ω 22 T Ω > 0.1 T Ω > 0.1 T Ω **Thermal tests (C)**

Tested number of positions

12

12

12

Tested conductor cross section

1.5 mm²1.5 mm²1.5 mm²

Test current

8 A

8 A

8 A

Upper limiting temperature
Requirements < 100°C

Test passed

Test passed

Test passed

Climatic tests (D)

Test sequence 1: low temperature storage

-40 °C/2 h

-40 °C/2 h

-40 °C/2 h

Test sequence 2: heat storage

100 °C/168 h

100 °C/168 h

100 °C/168 h

Test sequence 3: noxious gas storage
(ISO 6988)0.2 dm³ SO₂ on 300 dm³/
40 °C/1 cycle0.2 dm³ SO₂ on 300 dm³/
40 °C/1 cycle0.2 dm³ SO₂ on 300 dm³/
40 °C/1 cycleRated impulse voltage at sea level
Voltage waveform \geq (1.2/50 μ s)

2.95 kV

2.95 kV

2.95 kV

Power-frequency withstand voltage
Voltage waveform \geq (50/60 Hz)

1.39 kV

1.39 kV

1.39 kV

Environmental and endurance tests (E)

Specification

IEC 61984:2008-10

IEC 61984:2008-10

IEC 61984:2008-10

Degree of protection

Finger safety with IP20
test fingerFinger safety with IP20
test fingerFinger safety with IP20
test finger