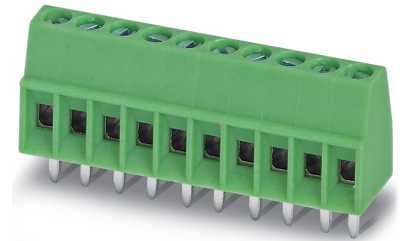


Data sheet

Order No.: 1725711

Type: MPT 0,5/ 8-2,54

PCB terminal block, Screw connection with tension sleeve



The figure shows a 10-position version of the product

1 Main features



• No. of pos.	8	• Nominal current	6 A
• Conductor cross section	0.5 mm ²	• Nominal voltage	160 V
• Color	green (6021)	• Connection direction	0 °
• Pitch	2.54 mm	• Type of packaging	packed in cardboard
• Connection method	Screw connection with tension sleeve		

2 Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ Extremely small design for the respective conductor cross section



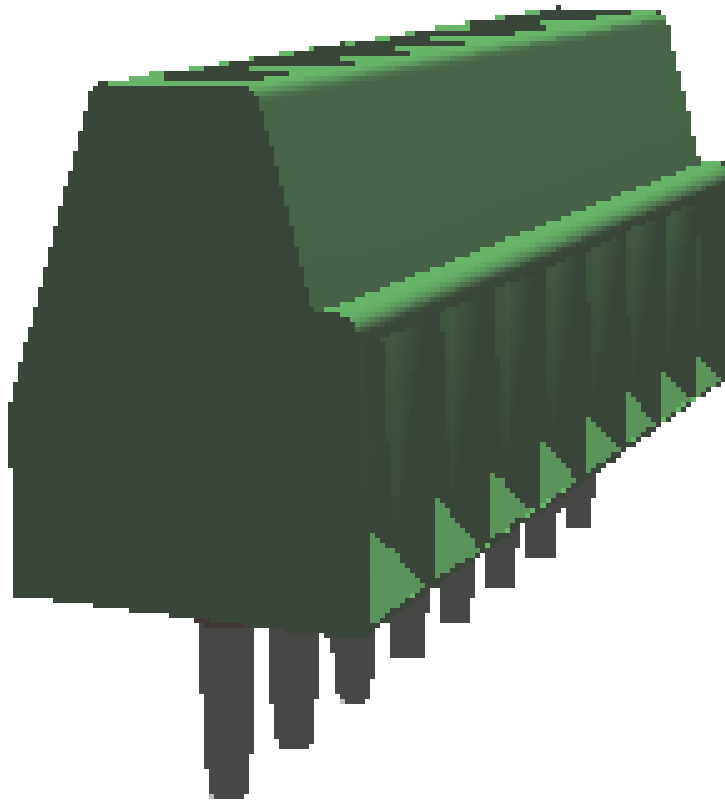
Make sure you always use the latest documentation.
It can be downloaded at: phoenixcontact.net/product/1725711

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1725711 MPT 0,5/ 8-2,54

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



1725711 MPT 0,5/ 8-2,54**5 General Technical Data****5.1 item properties**

Order No.	1725711
Type	MPT 0,5/ 8-2,54
Product type	PCB terminal block
Range of articles	MPT 0,5
Pitch	2.54 mm
Range of positions	2...12
Number of positions	8
Number of levels	1
Number of connections	8
Number of potentials	8
Connection method	Screw connection with tension sleeve
Screw thread	M1,6
Drive form screw head	Slotted (L)
Mounting type	Wave soldering
Connection direction of the conductor to the PCB	0 °
Pin layout	Linear pinning
Solder pins per potential	1
Type	PC termination block

5.2 Connection capacity

Conductor cross section, solid	0.14 mm ² ... 0.5 mm ²
Conductor cross section, flexible	0.14 mm ² ... 0.5 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 0.34 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve	0.25 mm ² ... 0.34 mm ²
2 conductors with same cross section, solid	0.14 mm ² ... 0.34 mm ²
2 conductors with same cross section, stranded	0.14 mm ² ... 0.34 mm ²
2 conductors with same cross section, stranded, with ferrule without plastic sleeve	-
2 conductors with the same cross section flexible with TWIN ferrule and plastic sleeve	-
Stripping length	4.5 mm
Tightening torque	0.12 Nm ... 0.15 Nm

5.3 Connection capacity AWG

Conductor cross section AWG	26 ... 20
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6 Material properties**6.1 Material of metal parts**

Note	WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy

1725711 MPT 0,5/ 8-2,54

Terminal point surface	Nickel (2 - 3 µm Ni) , Tin (5 - 7 µm Sn)
Soldering area surface	Nickel (2 - 3 µm Ni) , Tin (5 - 7 µm Sn)
Surface characteristics	Tin-plated

6.2 Material of plastic parts

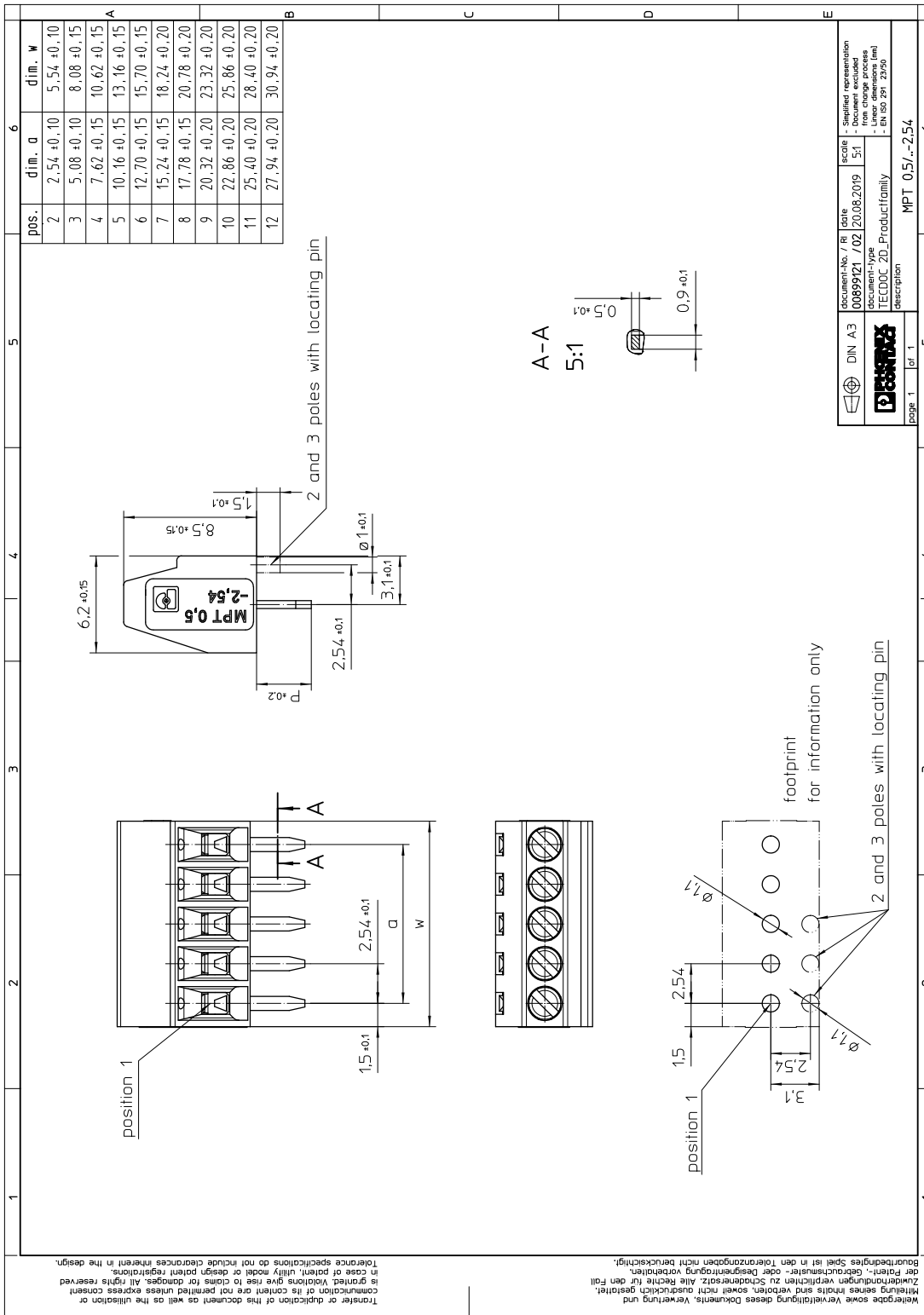
	Housing
Color	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

1725711 MPT 0,5/ 8-2,54**7 Dimensions****7.1 Dimensions for the product**

Length	6.2 mm
Width	20.78 mm
Height (without solder pin)	8.5 mm
Total height	12 mm
Solder pin [P]	3.5 mm
Dimension a	17.78 mm

1725711 MPT 0,5/ 8-2,54

8 Series drawing



1725711 MPT 0,5/ 8-2,54**8.1 Dimensions for PCB design**

Hole diameter	1.1 mm
Pin dimensions	0.5 x 0.9 mm

9 Application**9.1 General information**

Note on application	For safe conductor connection, always adhere to a defined tightening torque. Particularly in the case of PCB terminal blocks with two or three positions, the individual solder pin for each contact point cannot compensate for this. That is why the terminal blocks must be supported during conductor connection (held with one hand, support on the housing).
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10 Packaging information

Type of packaging	packed in cardboard
Pieces per package	100

10.1 Temperature limit values

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C (Depending on the current carrying capacity/derating curve)

1725711 MPT 0,5/ 8-2,54**11 Mechanical tests****11.1 Pull-out test**

Specification	IEC 60999-1:1990-05
Result	Test passed
Conductor cross section/conductor type/tractive force actual value	0.14 mm ² / solid / > 10 N
Conductor cross section/conductor type/tractive force actual value	0.14 mm ² / flexible / > 10 N
Conductor cross section/conductor type/tractive force actual value	0.5 mm ² / solid / > 30 N
Conductor cross section/conductor type/tractive force actual value	0.5 mm ² / flexible / > 30 N

11.2 Check for damage to conductor or loosening

Specification	IEC 60999-1:1990-05
Result	Test passed

1725711 MPT 0,5/ 8-2,54**12 Electrical tests****12.1 Electrical data**

Rated current / conductor cross section	6 A / 0.5 mm ²
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Contact resistance	
Degree of pollution	2

12.2 Air and creepage distances

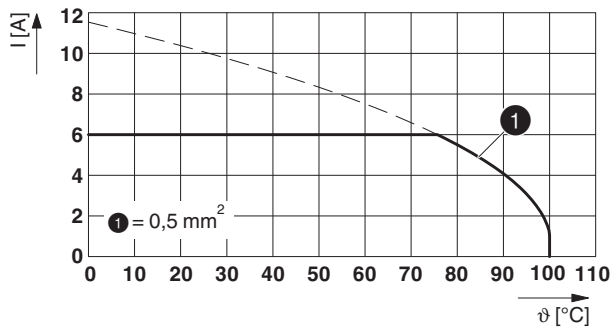
Component	PCB terminal block		
Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09		
Mains type	unearthed mains		
Insulating material group	I		
Comparative tracking index (IEC 60112:2003-01)	CTI 600		
Rated insulation voltage	63 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV
Degree of 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	1.6 mm	1.5 mm	1.6 mm

12.3 Temperature rise test

Specification	DIN VDE 0627:1993-05
Result	Test passed
Requirement temperature-rise test	
Conductor cross section/test current/temperature rise	0.5 mm ² / 6 A / 29 K

1725711 MPT 0,5/ 8-2,54**13 Current carrying capacity/derating curves**

Specification	Following IEC 60512-5-2:2002-02
Reduction factor	1
Number of positions	5
Conductor cross section	0.5 mm ²

Type: MPT 0,5/ 5-2,54**Test following DIN EN 60512-5-2:2003-01****Reduction factor = 1****No. of positions: 5****13.1 Vibration test**

Specification	IEC 60068-2-6:1982 + AMD 2:1985
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
Note	

13.2 Shock protection




Specification	DIN VDE 0106-100:1983-03
Back of the hand protection (Ball \varnothing 50)	guaranteed
Finger protection (movable test finger)	guaranteed
Note	unenclosed basic insulation - protected against finger contact with IP20 test finger in acc. with IEC 60529 when connected, above the PCB

13.3 Testing in a saturated atmosphere in the presence of sulfur dioxide

Specification	DIN 50018:1988-06
Result	Test passed
Corrosive stress	KFW 0.2 S/1 cycle
Conductor cross section	to 0.5 mm ²

1725711 MPT 0,5/ 8-2,54

14 Approvals / Certificates

CSA 	Voltage [V]	Current [A]	Cross section [AWG]	Cross section [mm ²]
Usegroup B				
	125 V	6 A	28 - 20	-
EAC 				
cULus Recognized 	Voltage [V]	Current [A]	Cross section [AWG]	Cross section [mm ²]
Usegroup B				
	125 V	6 A	30 - 20	-

1725711 MPT 0,5/ 8-2,54**15 Commercial Data**

Order No.	1725711
Type	MPT 0,5/ 8-2,54
Pieces per package	100
Net weight	2.2 g
GTIN	4017918116316
	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1

16 Accessories

Description	Order No.	Type
Micro screwdriver, bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip and twist cap	1205202	SZS 0,4X2,0
	0804853	SK 2,54/2,8:FORTL.ZAHLEN
	0803883	SK U/2,8 WH:UNBEDRUCKT
	0804879	SK 2,54/2,8:SO
Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm	1051993	B-STIFT