

PCB terminal block - SPT-THR 1,5/ 8-H-3,81 P20 R44 - 1823803

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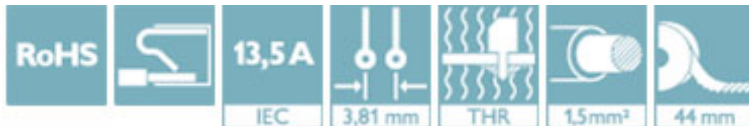


The figure shows the 10-position version

PCB terminal block, nominal current: 13.5 A, rated voltage (III/2): 160 V, Nominal cross section: 1.5 mm², pitch: 3.81 mm, number of positions: 8, connection method: Push-in spring connection, mounting: THR soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Linear double pinning, Solder pin [P]: 2 mm. Sample values available under SAMPLE SPT...

Your advantages

- ✓ Time saving push-in connection, tools not required
- ✓ Defined contact force ensures that contact remains stable over the long term
- ✓ Intuitive use through colour coded actuation lever
- ✓ Designed for integration into the SMT soldering process
- ✓ Quick and convenient testing using integrated test option
- ✓ Operation and conductor connection from one direction enable integration into front of device
- ✓ Two solder pins reduce the mechanical strain on the soldering spots



Key Commercial Data

Packing unit	250 pc
Minimum order quantity	250 pc
GTIN	
GTIN	4046356814454

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	SPT 1,5/..-H-THR
Pitch	3.81 mm
Number of positions	8
Connection method	Push-in spring connection
Mounting type	THR soldering
Pin layout	Linear double pinning

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Technical data

Item properties

Number of levels	1
Number of connections	8
Number of potentials	8

Electrical parameters

Nom. voltage	160 V
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Connection capacity

Connection method	Push-in spring connection
Conductor cross section solid	0.2 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section AWG / kcmil	24 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.2 mm ² ... 1.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.2 mm ² ... 0.75 mm ²
Stripping length	8 mm

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 soldering area (top layer)	Tin (4 - 8 µm Sn)

Material data - housing

Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

Dimensions for the product

Length [l]	13.6 mm
Width [w]	30.67 mm
Height [h]	9.7 mm
Pitch	3.81 mm
Height (without solder pin)	7.7 mm
Solder pin [P]	2 mm
Pin spacing	7 mm
Pin dimensions	0.7 x 0.3 mm
Dimension a	26.67 mm

Dimensions for PCB design

Hole diameter	1.1 mm
Pin spacing	7 mm

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Technical data

Packaging information

Type of packaging	44 mm wide tape
Pieces per package	250
Denomination packing units	Pcs.
[W] tape width	44 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	50.4 mm
Outer packaging type	Transparent-Bag

General product information

Type of note	Assembly instruction:
Note	This item is not suitable for PCB cleaning with liquids.

Ambient conditions

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

Termination and connection method

Connection test	IEC 60998-2-2:2002-12
Test result	Test passed
Test for conductor damage and slackening	IEC 60998-2-2:2002-12
	Test passed

Pull-out test

Pull-out test	IEC 60998-2-2:2002-12
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	1.5 mm ² / solid / > 40 N
	1.5 mm ² / flexible / > 40 N

Electrical tests

Rated current	13.5 A
Conductor cross section	1.5 mm ²
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

Air clearances and creepage distances

Clearances and creepage distances	IEC 60947-7-4:2013-08
Specification	IEC 60947-7-4:2013-08
Rated insulation voltage (III/3)	160 V
Rated insulation voltage (III/2)	160 V
Rated insulation voltage (II/2)	320 V

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Technical data

Air clearances and creepage distances

Rated surge voltage (III/3)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 kV
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)	3.2 mm

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

Resistance to ageing, humidity and penetration of solids

Dry heat	168 h/100°C
Humid heat	48 h/30 °C/92 %

Standards and Regulations

Connection in acc. with standard	EN-VDE
Flammability rating according to UL 94	V0

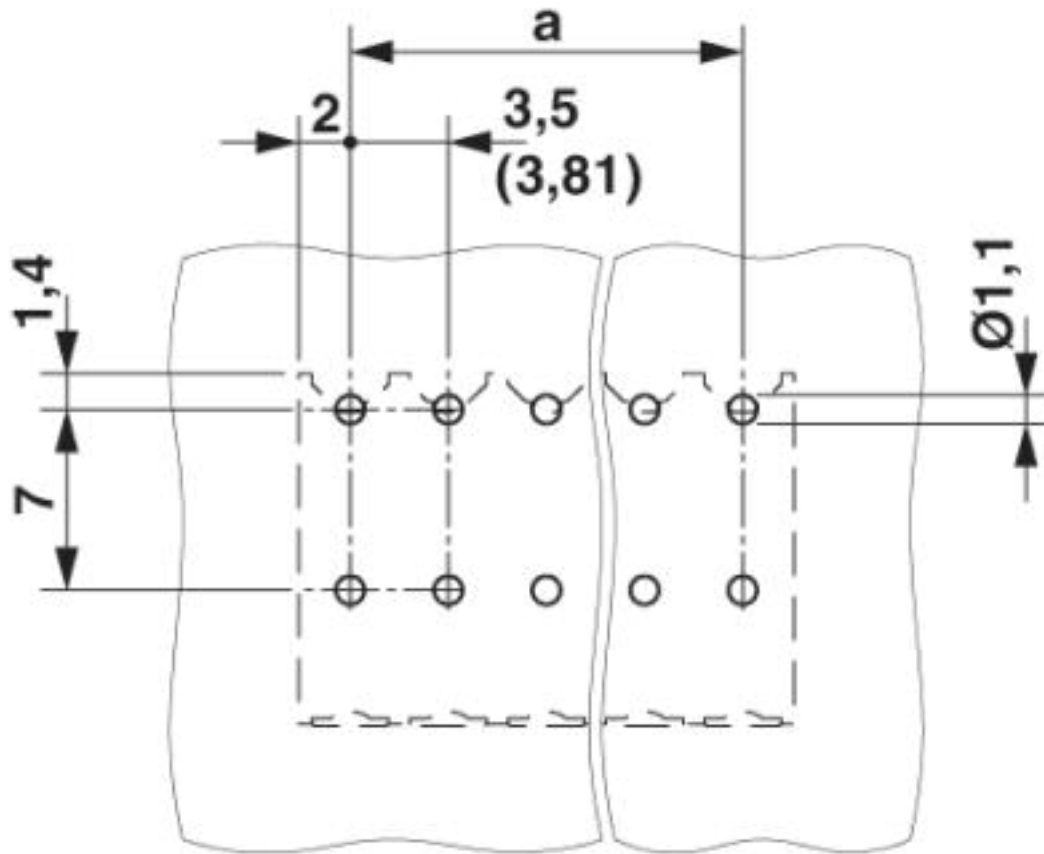
Environmental Product Compliance

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

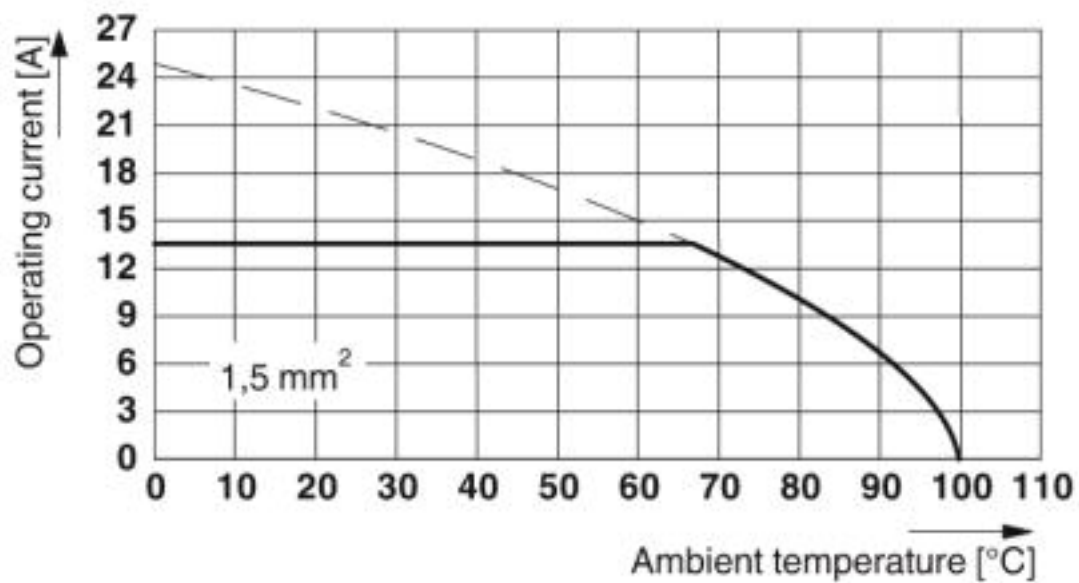
Drawings

PCB terminal block - SPT-THR 1,5/ 8-H-3,81 P20 R44 - 1823803

Drilling diagram



Diagram



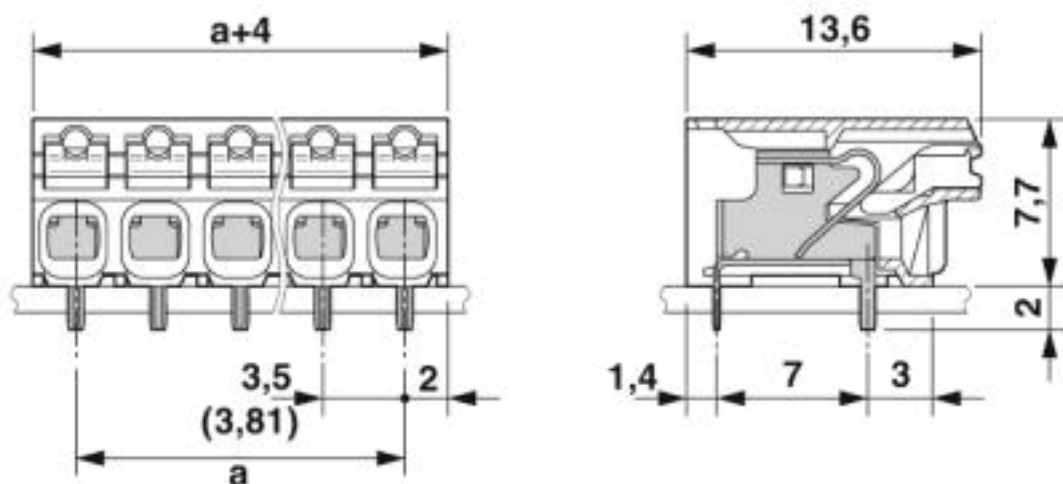
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Tested according to DIN EN 60512-5-2:2003-01

Reduction factor = 1

Number of positions: 5

Dimensional drawing



Approvals

Approvals

Approvals

IECEE CB Scheme / VDE Zeichengenehmigung / EAC / cULus Recognized

Ex Approvals

Approval details

IECEE CB Scheme	CB scheme	http://www.iecee.org/	DE1-60621
Nominal voltage UN	160 V		
Nominal current IN	13.5 A		
mm²/AWG/kcmil	0.2-1.5		

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40046113
Nominal voltage UN	160 V		
Nominal current IN	13.5 A		

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Approvals

mm ² /AWG/kcmil	0.2-1.5

EAC		B.01742
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cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20061129
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm ² /AWG/kcmil	24-16	24-16	

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