

## Sample set - SAMPLE SPT-THR 1,5/12-H-5,0 - 1843359

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PCB terminal block, nominal current: 13.5 A, rated voltage (III/2): 320 V, nominal cross section: 1.5 mm<sup>2</sup>, pitch: 5 mm, number of positions: 12, 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 set with 5 items in belt section. When used as part of soldering process, please use items without SAMPLE marking


The figure shows the 10-position version

### 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	5 pc
Minimum order quantity	5 pc
GTIN	 4 046356 951814
GTIN	4046356951814
Weight per Piece (excluding packing)	7.400 g
Custom tariff number	85369010
Country of origin	Germany
Note	Made to Order (non-returnable)

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	SPT 1,5/..-H-THR
Pitch	5 mm

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### Technical data

#### Item properties

Number of positions	12
Connection method	Push-in spring connection
Mounting type	THR soldering
Pin layout	Linear double pinning
Number of levels	1
Number of connections	12
Number of potentials	12

#### Electrical parameters

Nominal current	13.5 A
Nom. voltage	320 V
Rated voltage	250 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	500 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV

#### Connection capacity

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

Housing color	black (9005)
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
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## Technical data

### Dimensions for the product

Width [ w ]	59 mm
Height [ h ]	9.7 mm
Pitch	5 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	55 mm

### Dimensions for PCB design

Hole diameter	1.1 mm
Pin spacing	7 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	5
Denomination packing units	Pcs.

### 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 <sup>2</sup> / solid / > 10 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	1.5 mm <sup>2</sup> / solid / > 40 N
	1.5 mm <sup>2</sup> / flexible / > 40 N

### Electrical tests

Rated current	13.5 A
Conductor cross section	1.5 mm <sup>2</sup>

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#### Electrical tests

Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV

#### Air clearances and creepage distances

Clearances and creepage distances	IEC 60947-7-4:2013-08
Specification	IEC 60947-7-4:2013-08
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	4 mm
Minimum creepage distance value (III/2)	3.2 mm
Minimum creepage distance value (II/2)	5 mm

#### Temperature-rise test

Result	Test passed
Specification	IEC 60998-2-1:2002-12

#### 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

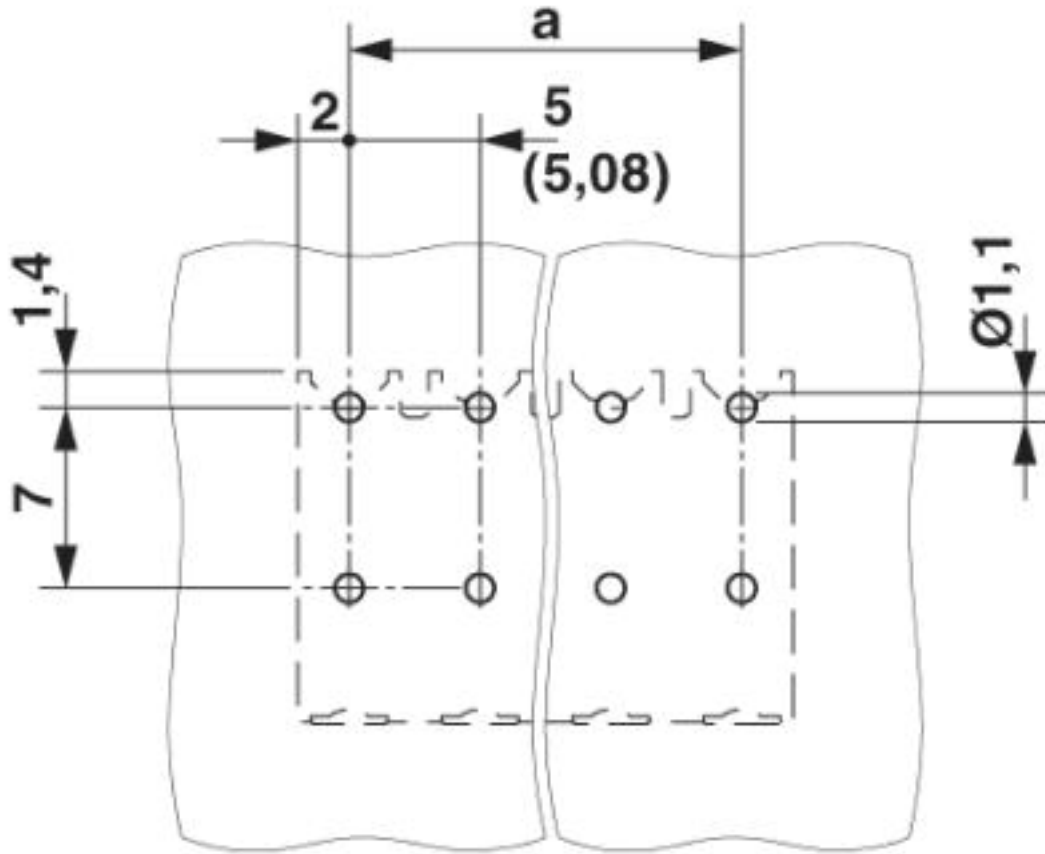
#### Environmental Product Compliance

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

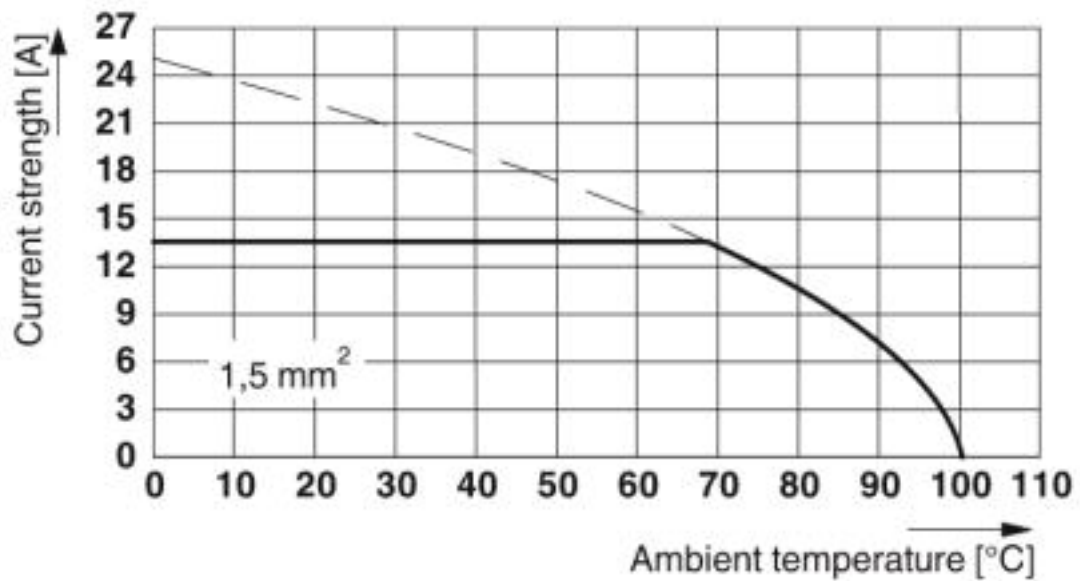
### Drawings

# Sample set - SAMPLE SPT-THR 1,5/12-H-5,0 - 1843359

Drilling diagram



Diagram



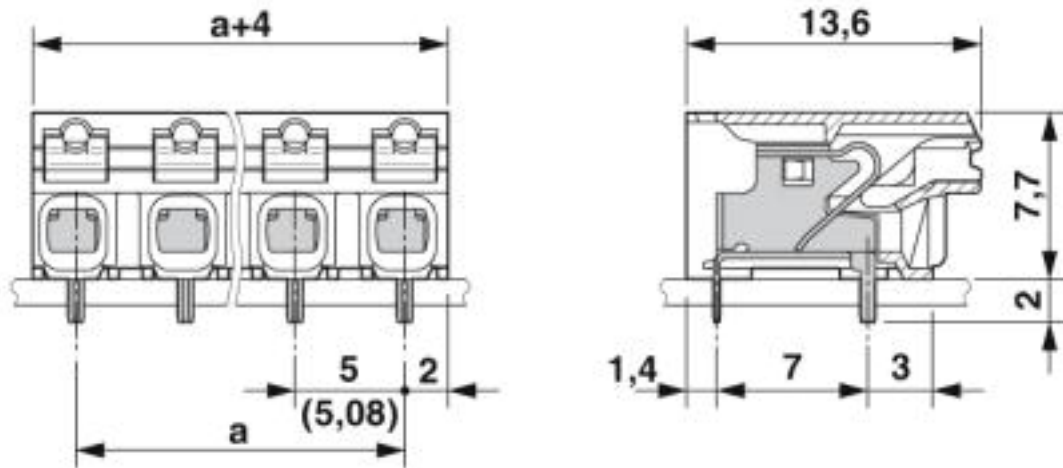
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Tested according to DIN EN 60512-5-2:2003-01

Reduction factor = 1

Number of positions: 5

Dimensional drawing



## Classifications

eCl@ss

eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 8.0	27440401
eCl@ss 9.0	27440401

ETIM

ETIM 4.0	EC002643
ETIM 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

UNSPSC

UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

## Approvals

Approvals

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### Approvals

Approvals

EAC

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Ex Approvals

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### Approval details

EAC		B.01742
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### Accessories

Accessories

Cable end sleeve

Ferrule - A 0,5 - 8 - 3202481



Ferrule, length: 8 mm, color: silver

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Ferrule - A 0,75- 8 - 3202504



Ferrule, length: 8 mm, color: silver

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Ferrule - A 1 - 8 - 3202517



Ferrule, length: 8 mm, color: silver

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## Sample set - SAMPLE SPT-THR 1,5/12-H-5,0 - 1843359

### Accessories

Ferrule - AI 0,25- 8 YE - 3203037



Ferrule, sleeve length: 8 mm, length: 12.5 mm, color: yellow

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Ferrule - AI 0,5 - 8 WH - 3200014



Ferrule, sleeve length: 8 mm, length: 14 mm, color: white

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Ferrule - AI 0,5 - 8 WH -1000 - 3200881



Ferrule, sleeve length: 8 mm, length: 14 mm, color: white

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Ferrule - AI 0,75- 8 GY - 3200519



Ferrule, sleeve length: 8 mm, length: 14 mm, color: gray

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Ferrule - AI 0,75- 8 GY -1000 - 3200894



Ferrule, sleeve length: 8 mm, length: 14 mm, color: gray

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### Crimping tool



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### Accessories

Crimping pliers - CRIMPFOX 6 - 1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>, lateral entry, trapezoidal crimp

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### 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