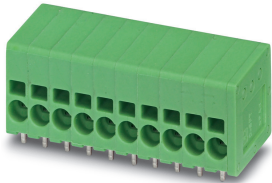


## PCB terminal block - SPT 1,5/ 3-H-3,5 - 1990740

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The figure shows a 10-position version of the product

PCB terminal block, nominal current: 17.5 A, rated voltage (III/2): 200 V, nominal cross section: 1.5 mm<sup>2</sup>, number of potentials: 3, Number of rows: 1, Number of positions per row: 3, product range: SPT 1,5/..-H, pitch: 3.5 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear double pinning, Solder pin [P]: 2.5 mm, type of packaging: packed in cardboard

### Your advantages

- ✓ Time saving push-in connection, tools not required
- ✓ Defined contact force ensures that contact remains stable over the long term
- ✓ Clamping space opened by means of fixed screwdriver enables convenient conductor connection
- ✓ 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	1 pc
Minimum order quantity	100 pc
GTIN	
GTIN	4046356104395
Weight per Piece (excluding packing)	3.150 g
Custom tariff number	85369010
Country of origin	Poland

### Technical data

#### Item properties

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

## PCB terminal block - SPT 1,5/ 3-H-3,5 - 1990740

### Technical data

#### Item properties

Pitch	3.5 mm
Number of positions	3
Mounting type	Wave soldering
Pin layout	Linear double pinning
Number of rows	1
Number of connections	3
Number of potentials	3

#### Electrical parameters

Nominal current	17.5 A
Nom. voltage	200 V
Rated voltage (III/3)	160 V
Rated voltage (III/2)	200 V
Rated voltage (II/2)	400 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	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	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Stripping length 8 mm)
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> (Stripping length 8 mm)
Stripping length	10 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	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600

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## Technical data

### Material data - housing

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

### Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [ l ]	14.4 mm
Width [ w ]	11.9 mm
Height [ h ]	16 mm
Pitch	3.5 mm
Height (without solder pin)	13.5 mm
Solder pin [P]	2.5 mm
Pin spacing	8.2 mm
Pin dimensions	0.8 x 0.8 mm

### Dimensions for PCB design

Hole diameter	1.1 mm
Pin spacing	8.2 mm

### Packaging information

Type of packaging	packed in cardboard
Pieces per package	100
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 (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
Conductor cross section / conductor type / tensile force	0.2 mm <sup>2</sup> / solid / > 10 N

## PCB terminal block - SPT 1,5/ 3-H-3,5 - 1990740

### Technical data

#### Pull-out test

	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

#### Mechanical tests according to standard

Test specification	IEC 60998-2-2 (in parts)
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#### Electrical tests

Rated current	17.5 A
Conductor cross section	1.5 mm <sup>2</sup>
Rated voltage (III/2)	200 V
Rated surge voltage (III/2)	2.5 kV

#### 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 mm
Minimum creepage distance value (II/2)	2 mm

#### Temperature-rise test

Specification	IEC 60998-2-1:2002-12
Requirement temperature-rise test	Increase in temperature ≤ 45 K

#### Current carrying capacity / derating curves

Caption	Type: SPT 1,5/5-3,5-H Test following DIN EN 60512-5-2:2003-01 Reduction factor = 1 No. of positions: 5
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#### Vibration test

Specification	IEC 60068-2-6:1995-03
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5g (60.1 - 150 Hz)
Test duration per axis	2.5 h

#### Insulation resistance

# PCB terminal block - SPT 1,5/ 3-H-3,5 - 1990740

## Technical data

### Insulation resistance

Specification	IEC 60998-1:2002-12
Result	Test passed
Insulation resistance, neighboring positions	$10^9 \Omega$

### Glow-wire test

Specification	IEC 60998-1:2002-12
Temperature	850 °C
Time of exposure	5 s

### Mechanical strength/tumbling barrel test

Specification	IEC 60998-1:2002-12
Number of drop cycles	50

### Standards and Regulations

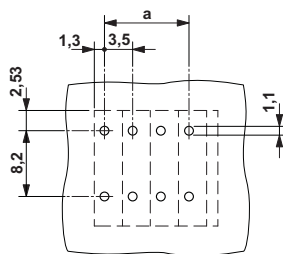
Connection in acc. with standard	EN-VDE
	CUL
Flammability rating according to UL 94	V0

### Environmental Product Compliance

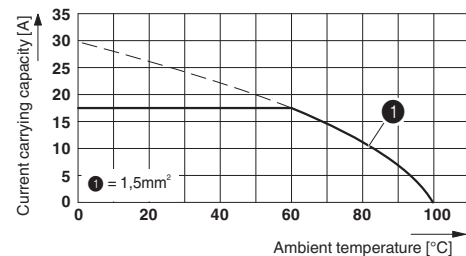
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Drilling diagram



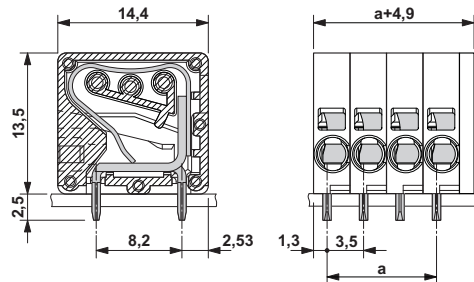
Diagram



Type: SPT 1,5/5-3,5-H  
 Test following DIN EN 60512-5-2:2003-01  
 Reduction factor = 1  
 No. of positions: 5

# PCB terminal block - SPT 1,5/ 3-H-3,5 - 1990740

Dimensional drawing



## Classifications

### eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 11.0	27460101
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 9.0	27440401

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

### UNSPSC

UNSPSC 6.01	30211801
UNSPSC 7.0901	39121432
UNSPSC 11	39121432
UNSPSC 12.01	39121432
UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

# PCB terminal block - SPT 1,5/ 3-H-3,5 - 1990740

## Approvals


### Approvals


#### Approvals


IECEE CB Scheme / SEV / EAC / cULus Recognized


#### Ex Approvals

### Approval details

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	CH-10802
Nominal voltage UN	200 V		
Nominal current IN	17.5 A		
mm <sup>2</sup> /AWG/kcmil	0.2-1.5		

SEV		<a href="https://www.eurofins.ch/de/">https://www.eurofins.ch/de/</a>	IK-4498
Nominal voltage UN	200 V		
Nominal current IN	17.5 A		
mm <sup>2</sup> /AWG/kcmil	0.2-1.5		

EAC			B.01687
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cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-20061129
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm <sup>2</sup> /AWG/kcmil	24-16	24-16	

## PCB terminal block - SPT 1,5/ 3-H-3,5 - 1990740

### Accessories

#### Accessories

#### Crimping tool

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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#### Pitch spacer

Pitch spacer - RZ-SPT 2,5-2,5 - 1772595



Pitch spacer, number of positions: 1, pitch: 2.5 mm, color: green

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Pitch spacer - RZ-SPT 2,5-5,0 - 1772605



Pitch spacer, number of positions: 1, pitch: 5 mm, color: green

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#### Screwdriver tools

Screwdriver - SZF 0-0,4X2,5 - 1204504



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip