PCB terminal block - SPT 2,5/ 2-V-5,0 BK - 1703595

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The figure shows a 10-position version of the product

PCB terminal block, nominal current: 24 A, rated voltage (III/2): 400 V, nominal cross section: 2.5 mm², pitch: 5 mm, number of positions: 2, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: black, Pin layout: Linear double pinning, Solder pin [P]: 2.5 mm

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	50 pc
GTIN	4 046356 659062
GTIN	4046356659062

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	SPT 2,5/..-V
Pitch	5 mm
Number of positions	2
Connection method	Push-in spring connection
Mounting type	Wave soldering
Pin layout	Linear double pinning
Number of levels	1
Number of connections	2
Number of potentials	2

PCB terminal block - SPT 2,5/ 2-V-5,0 BK - 1703595

Technical data

Electrical parameters

Nominal current	24 A
Nom. voltage	400 V
Rated voltage	250 V
Rated voltage (III/2)	400 V
Rated voltage (II/2)	630 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 mm² ... 4 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section AWG / kcmil	24 ... 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 2.5 mm² (Stripping length 8 mm)
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 1.5 mm² (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	black (9005)
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

Dimensions for the product

Length [l]	13.5 mm
Width [w]	11.4 mm
Height [h]	16.9 mm
Pitch	5 mm
Height (without solder pin)	14.4 mm
Solder pin [P]	2.5 mm

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Dimensions for the product

Pin spacing	8.2 mm
Pin dimensions	0.8 x 0.8 mm
Dimension a	5 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	50
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
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	4 mm² / solid / > 60 N
	2.5 mm² / flexible / > 50 N

Electrical tests

Rated current	24 A
Conductor cross section	2.5 mm²
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 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)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm

PCB terminal block - SPT 2,5/ 2-V-5,0 BK - 1703595

Technical data

Air clearances and creepage distances

Minimum creepage distance value (III/3)	3.2 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm

Temperature-rise test

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

Vibration test

Specification	IEC 60068-2-6:1995-03
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

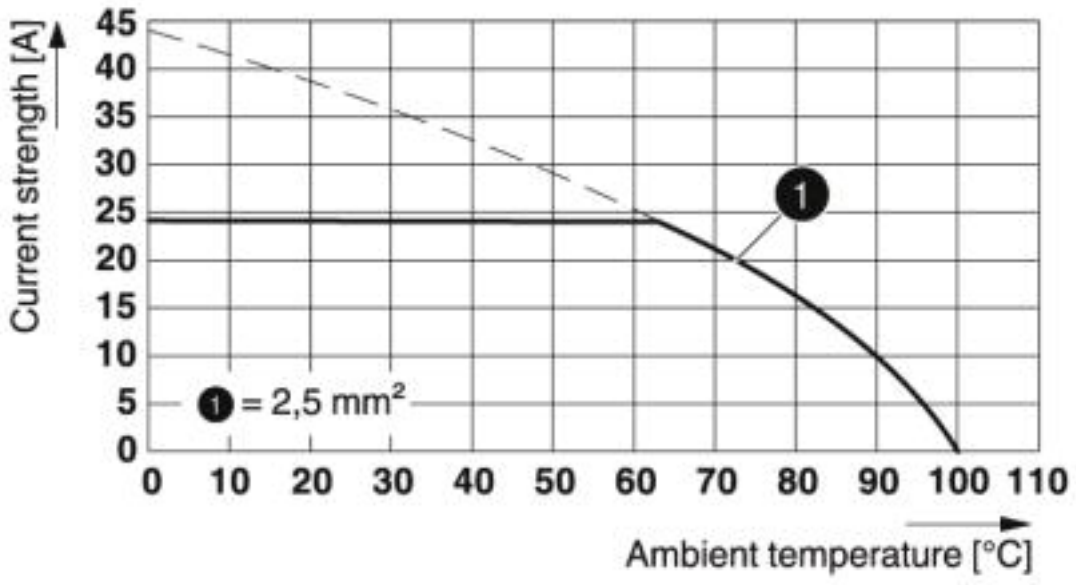
Environmental Product Compliance

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

Drawings

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Diagram



Type: SPT 2,5/ 5-V-5,0
Tested according to DIN EN 60512-5-2:2003-01
Reduction factor = 1
Number of positions: 5

Classifications

eCl@ss

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 8.0	27440401
eCl@ss 9.0	27440401

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002643
ETIM 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

UNSPSC

UNSPSC 6.01	30211801
UNSPSC 7.0901	39121432
UNSPSC 11	39121432

PCB terminal block - SPT 2,5/ 2-V-5,0 BK - 1703595

Classifications

UNSPSC

UNSPSC 12.01	39121432
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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IECEE CB Scheme / SEV / EAC / cULus Recognized

Ex Approvals

Approval details

IECEE CB Scheme	CB scheme	http://www.iecee.org/	CH-7429

Nominal voltage UN	250 V
Nominal current IN	24 A
mm²/AWG/kcmil	2.5

SEV	SEV	https://www.eurofins.ch/de/	IK-3150

Nominal voltage UN	250 V
Nominal current IN	24 A
mm²/AWG/kcmil	2.5

EAC	EAC	B.01687

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Approvals

cULus Recognized  http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-20061129

	B	D
Nominal voltage UN	300 V	150 V
Nominal current IN	20 A	15 A
mm²/AWG/kcmil	24-12	24-12

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