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PCB terminal block, nominal current: 41 A, rated voltage (III/2): 1000 V, Nominal cross section: 6 mm², pitch: 7.5 mm, number of positions: 12, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: green, Pin layout: Zigzag pinning W, Solder pin [P]: 4.6 mm

The figure shows a 5-pos. version of the product

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
- ☑ Unrestricted 600-V-UL approval thanks to compact zig-zag pinning
- ✓ Vertical connection enables multi-row arrangement on the PCB













Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	4 046356 141512
GTIN	4046356141512
Weight per Piece (excluding packing)	41.600 g
Custom tariff number	85369010
Country of origin	Germany

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	SPT 5/V
Pitch	7.5 mm

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Technical data

Item properties

Number of positions	12
Connection method	Push-in spring connection
Mounting type	Wave soldering
Pin layout	Zigzag pinning W
Number of levels	1
Number of connections	12
Number of potentials	12

Connection capacity

Conductor cross section solid	0.2 mm² 10 mm²
Conductor cross section flexible	0.2 mm² 6 mm²
Conductor cross section AWG / kcmil	24 8
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 6 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 6 mm²
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.25 mm² 1.5 mm²
Stripping length	15 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	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	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 [1]	18.5 mm
Width [w]	91.8 mm
Height [h]	19 mm
Pitch	7.5 mm

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Technical data

Dimensions for the product

Height (without solder pin)	14.4 mm
Solder pin [P]	4.6 mm
Pin spacing	14 mm
Pin dimensions	1.7 x 0.8 mm
Dimension a	82.5 mm

Dimensions for PCB design

Hole diameter	2.1 mm
Pin spacing	14 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 mm ² / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	10 mm² / solid / > 90 N
	6 mm² / flexible / > 80 N

Electrical tests

Rated current	41 A
Conductor cross section	6 mm ²
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

Air clearances and creepage distances

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Technical data

Air clearances and creepage distances

Specification	IEC 60664-1:1992-10 + A1:2000-02 + A2:2002-05
Rated insulation voltage (III/3)	800 V
Rated insulation voltage (III/2)	1000 V
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (III/3)	8 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (II/2)	6 kV
Minimum clearance - inhomogeneous field (III/3)	8 mm
Minimum clearance - inhomogeneous field (III/2)	8 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	10 mm
Minimum creepage distance value (III/2)	8 mm
Minimum creepage distance value (II/2)	5.5 mm

Current carrying capacity / derating curves

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
	CUL
Flammability rating according to UL 94	V0

Environmental Product Compliance

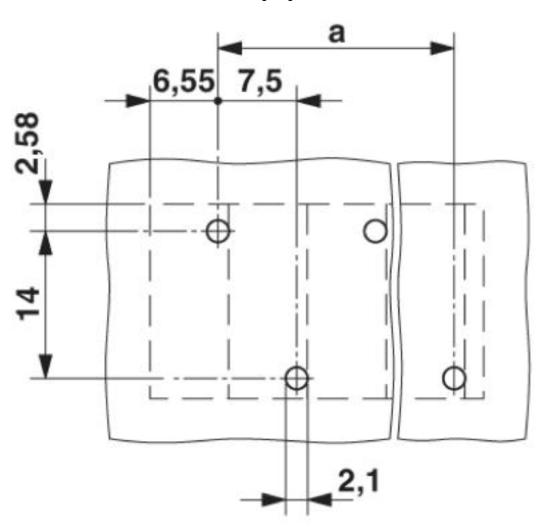
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

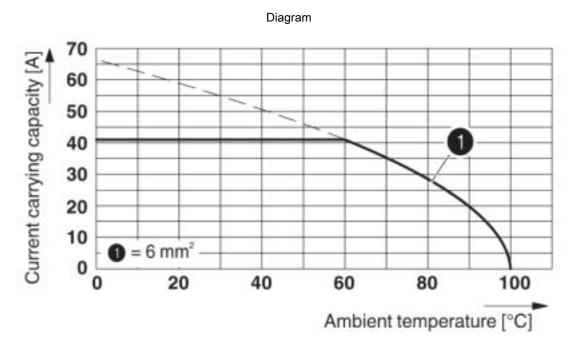
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Drilling diagram







Type: SPT 5/...-V-7,5-ZB Test based on DIN EN 60512-5-2:2003-01 Reduction factor = 1

Dimensional drawing 18,5 4+7,5 1,8 4-7,5 1,8 6,55 7,5



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
eCI@ss 8.0	27440401
eCI@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
UNSPSC 12.01	39121432
UNSPSC 13.2	39121432

Approvals

Approvals

Approvals

CCA / IECEE CB Scheme / SEV / EAC / cULus Recognized

Ex Approvals

Approval details

CCA	
Nominal voltage UN	1000 V

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Approvals

Nominal current IN	41 A
mm²/AWG/kcmil	6

IECEE CB Scheme	CB scheme	http://www.iecee.org/	CH-7429
Nominal voltage UN		1000 V	
Nominal current IN		41 A	
mm²/AWG/kcmil		6	

SEV	SEV	https://www.electrosuisse.ch/de/meta/shop/produktezertifikate.html		IK-3150
Nominal voltage UN			1000 V	
Nominal current IN			41 A	
mm²/AWG/kcmil			6	

EAC	EAC		B.01742
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cULus Recognized	http://database.ul.com/cgi-bin/XYV/template/L	ISEXT/1FRAME/index.htm
	В	С
Nominal voltage UN	600 V	600 V
Nominal current IN	36 A	36 A
mm²/AWG/kcmil	24-8	24-8

Accessories

Accessories

Crimping tool



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 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

Labeled terminal marker

Marker card - SK 7,5/3,8:FORTL.ZAHLEN - 0804455



Marker card, Card, white, labeled, Horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: adhesive, for terminal block width: 7.5 mm, lettering field size: 7.5 x 3.8 mm

Marker card - SK 3,8 REEL P7,5 WH CUS - 0825127



Marker card, Card, can be ordered: By card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 7.5 mm, lettering field size: continuous x 3.8 mm

Pitch spacer

Pitch spacer - RZ-SPT 5-4 V - 1701535



Pitch spacer, number of positions: 1, pitch: 7.5 mm, color: green

Screwdriver tools



Accessories

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: $0.6 \times 3.5 \times 100$ mm, 2-component grip, with non-slip grip

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