

# PTSPLO-6/1-2X2 2,9 R32 - PCB terminal block



1705085

<https://www.phoenixcontact.com/us/products/1705085>

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PCB terminal block for tin-plated flexible cables, e.g., type PV 1-F, nominal current: 41 A, number of positions: 1, connection method: spring-cage connection, mounting: THT/THR, for user information for through-hole reflow technology, go to: [combicon.com](http://combicon.com)

## Your advantages

- Able to perform without insulating elements: ideal for easy integration into the SMT soldering process
- Tool-free spring principle enables time-saving connection of conductors with ferrules and tinned conductors
- Defined contact force ensures that contact remains stable over the long term

## Commercial data

Item number	1705085
Packing unit	220 pc
Minimum order quantity	220 pc
Sales key	AA14
Product key	AANCBA
Catalog page	Page 475 (C-1-2013)
GTIN	4046356752824
Weight per piece (including packing)	3.36 g
Weight per piece (excluding packing)	1.849 g
Customs tariff number	85369010
Country of origin	DE

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## Technical data

### Product properties

Product type	Printed circuit board terminal
Product family	PTSPL 6/..
Product line	COMBICON Terminals L
Type	Circular conductor connection, single-pos.
Number of positions	1
Pitch	0 mm
Number of connections	1
Number of rows	1
Number of potentials	1
Pin layout	Linear pinning
Solder pins per potential	4

### Electrical properties

Nominal current $I_N$	41 A
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### Connection data

#### Connection technology

Type	Circular conductor connection, single-pos.
Nominal cross section	6 mm <sup>2</sup>

#### Conductor connection

Connection method	Push-in spring connection
Conductor cross section flexible	2.5 mm <sup>2</sup> ... 6 mm <sup>2</sup> (Conductors with tin-plated litz wires are to be used, for example type PV1-F.)
Conductor cross section flexible, with ferrule without plastic sleeve	2.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Stripping length	12 mm ... 15 mm

### Mounting

Mounting type	THR soldering / wave soldering
Pin layout	Linear pinning

### Material specifications

#### 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)

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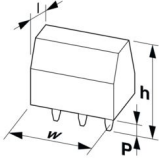
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## Material data - housing

Color (Housing)	Copper ()
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## Dimensions

Dimensional drawing	
Pitch	0 mm
Width [w]	8.7 mm
Height [h]	12.9 mm
Length [l]	14.95 mm
Installed height	10.8 mm
Solder pin length [P]	2.9 mm
Pin dimensions	0.6 x 1 mm

## PCB design

Hole diameter	1.3 mm
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## Mechanical tests

### Conductor connection

Specification	IEC 60999-1:1999-11
Result	Test passed

### Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
Result	Test passed

### Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	2.5 mm <sup>2</sup> / stranded PV1-F / > 50 N
	6 mm <sup>2</sup> / stranded PV1-F / > 80 N

## Electrical tests

### Temperature-rise test

Specification	60947-7-4/FDIS © IEC 2012
Requirement temperature-rise test	Increase in temperature ≤ 45 K

### Temperature cycles

Specification	IEC 60999-1:1999-11
Result	Test passed

## Environmental and real-life conditions

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## Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

## Shocks

Specification	IEC 60068-2-27:2008-02
Pulse shape	Semi-sinusoidal
Acceleration	30g
Shock duration	18 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)

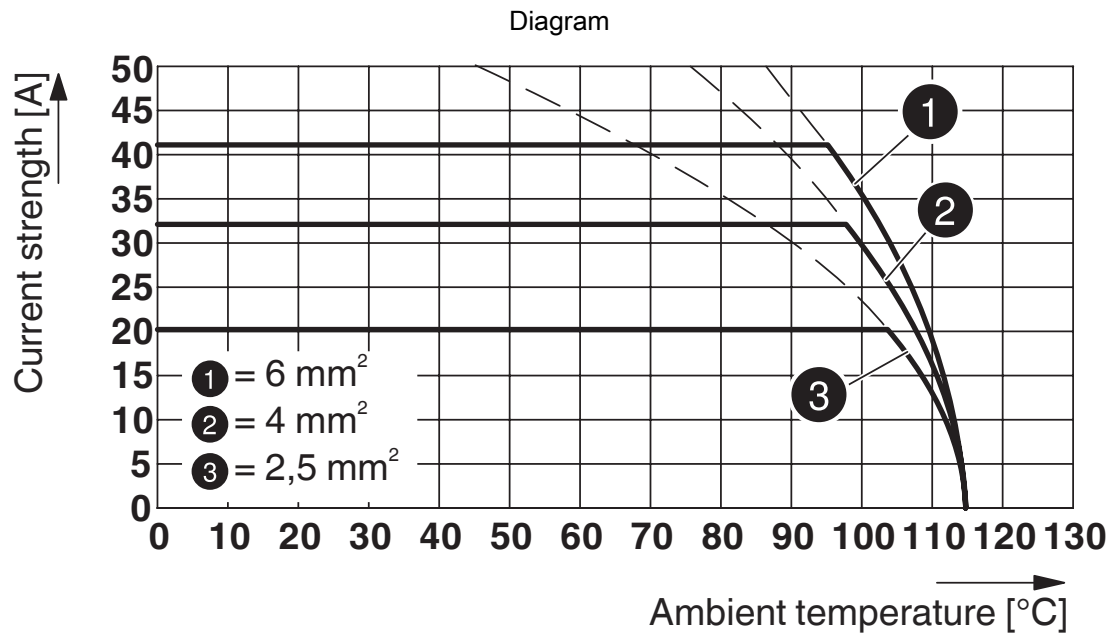
## Ambient conditions

Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

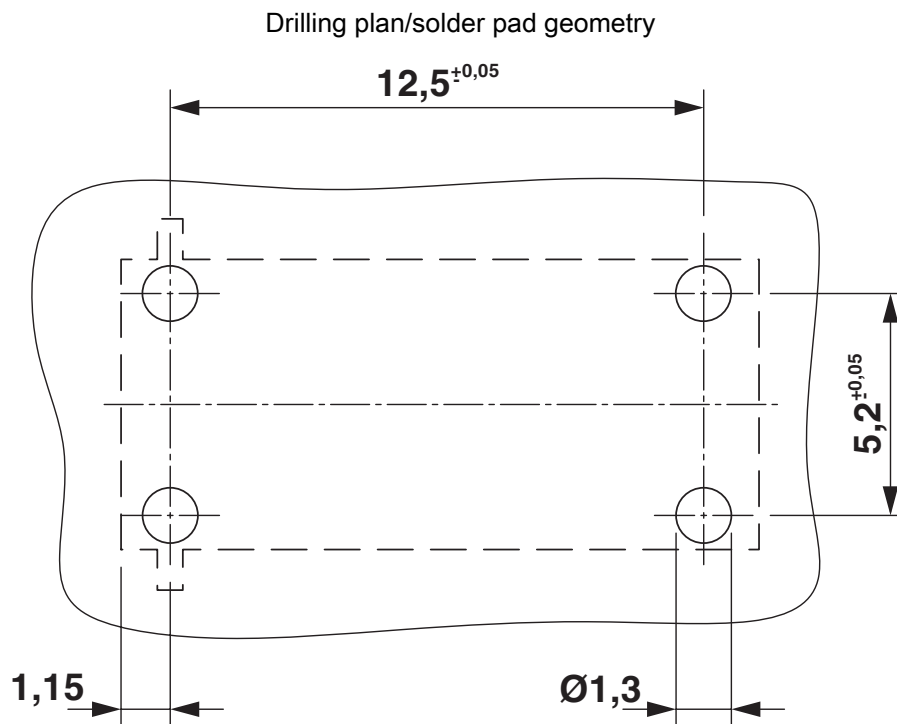
## Packaging specifications

Dimensional drawing	
Type of packaging	32 mm wide tape
[W] tape width	32 mm
[W2] coil overall dimension	38.4 mm
[A] coil diameter	330 mm
Outer packaging type	Transparent-Bag
ESD level	(D) electrostatically conductive
Specification	DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07

Drawings



Type: PTSPL(O)-6/1-2X2 ... R32



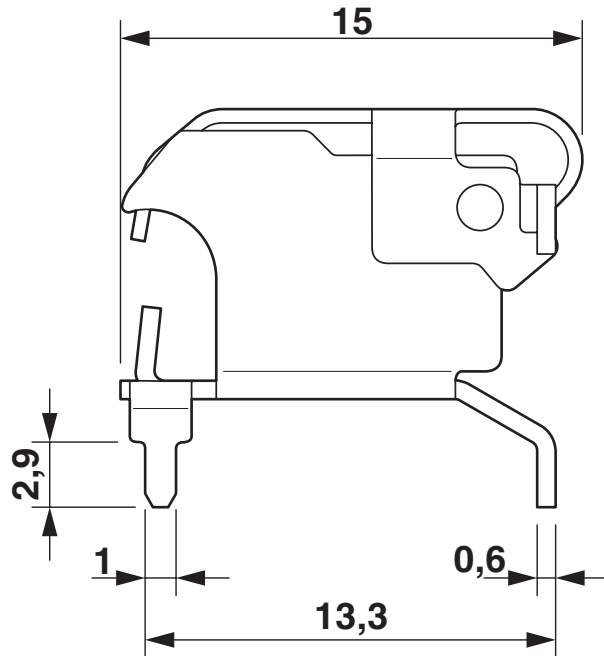
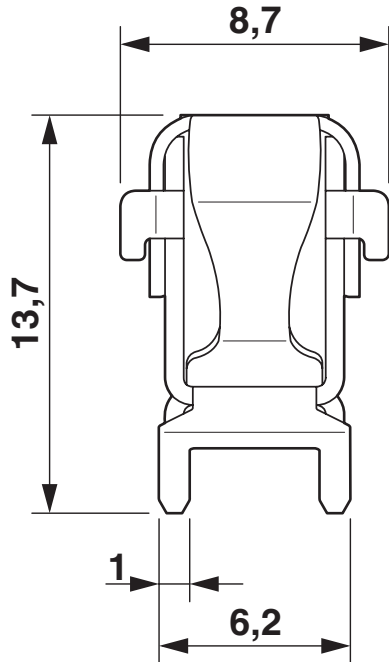
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Dimensional drawing



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## Approvals

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 <b>cULus Recognized</b> Approval ID: E365246-20141111				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	-	30 A	14 - 10	-

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## Classifications

### ECLASS

ECLASS-11.0	27460101
ECLASS-12.0	27460101
ECLASS-13.0	27460101

### ETIM

ETIM 9.0	EC002643
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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## Accessories

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

1204517

<https://www.phoenixcontact.com/us/products/1204517>



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

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### CRIMPFOX 6 - Crimping pliers

1212034

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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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