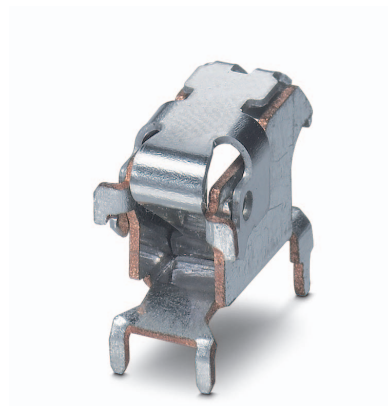


Data sheet

Order No.: 1704836

Type: PTSPL-6/1-2X2 2,1 R32

PCB terminal block, Push-in spring connection



1 Main features



- | | | | |
|---------------------------|---------------------------|------------------------|-----------------|
| • No. of pos. | 1 | • Nominal current | 41 A |
| • Conductor cross section | 6 mm ² | • Nominal voltage | |
| • Color | | • Connection direction | 0 ° |
| • Pitch | 0 mm | • Type of packaging | 32 mm wide tape |
| • Connection method | Push-in spring connection | | |

2 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



Make sure you always use the latest documentation.

It can be downloaded at: phoenixcontact.net/product/1704836

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4 3D model in PDF can be activated (Acrobat Reader only)



1704836 PTSPL-6/1-2X2 2,1 R32**5 General Technical Data****5.1 item properties**

Order No.	1704836
Type	PTSPL-6/1-2X2 2,1 R32
Product type	PCB terminal block
Range of articles	PTSPL 6/..
Pitch	
Range of positions	1...1
Number of positions	1
Number of levels	1
Number of connections	1
Number of potentials	1
Connection method	Push-in spring connection
Mounting type	THR soldering / wave soldering
Connection direction of the conductor to the PCB	0°
Pin layout	Linear double pinning
Solder pins per potential	4
Product note	User information and design recommendations for through hole reflow technology can be found under "Downloads"
Type	Circular conductor connection, single-pos.

5.2 Mounting**5.3 Connection capacity**

Conductor cross section, flexible	2.5 mm ² ... 6 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve	2.5 mm ² ... 6 mm ²
Stripping length	12 mm ... 15 mm

6 Material properties**6.1 Material of metal parts**

Note	WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Terminal point surface	Tin (4 - 8 µm Sn)
Soldering area surface	Tin (4 - 8 µm Sn)
Surface characteristics	hot-dip tin-plated

6.2 Material Kunststoffteile

	Housing
Color	
Insulating material	

1704836 PT SPL-6/1-2X2 2,1 R32

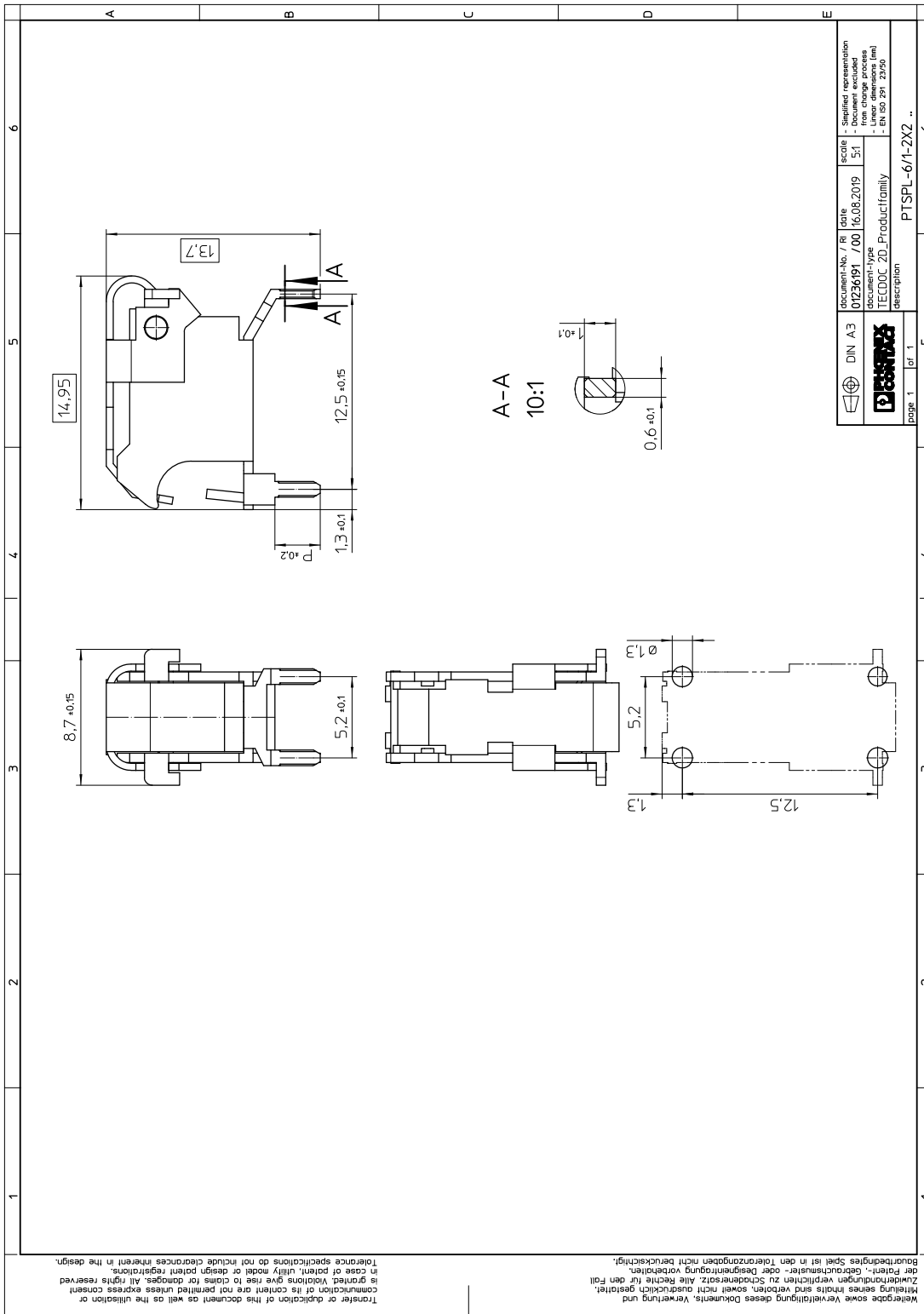
	Housing
Insulating material group	
CTI according to IEC 60112	
Flammability rating according to UL 94	

1704836 PTSPL-6/1-2X2 2,1 R32**7 Dimensions****7.1 Dimensions for the product**

Length	14.95 mm
Width	0 mm
Height (without solder pin)	10.8 mm
Total height	1.9 mm
Solder pin [P]	2.1 mm
Dimension a	

1704836 PTSPL-6/1-2X2 2,1 R32

8 Series drawing



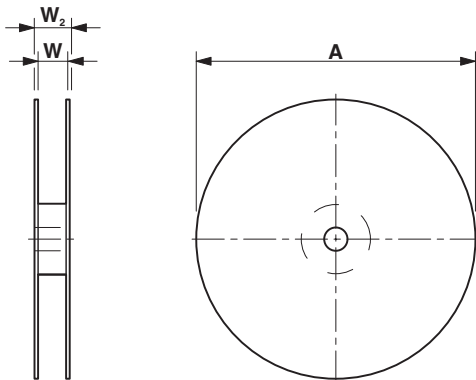
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1704836 PTSPL-6/1-2X2 2,1 R32**8.1 Dimensions for PCB design**

Hole diameter	1.3 mm
Pin dimensions	0.6 x 1 mm

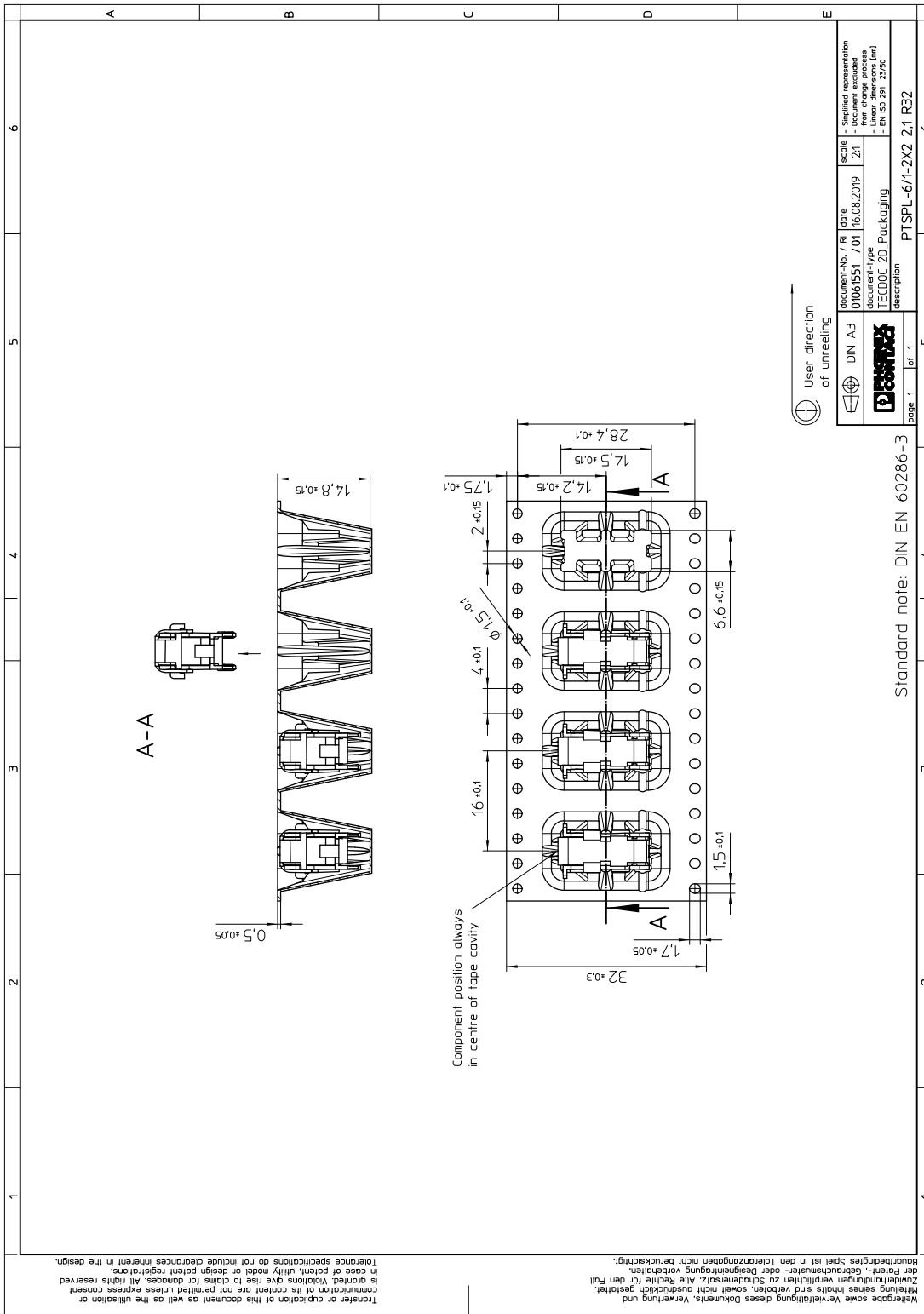
9 Application**10 Packaging information**

Type of packaging	32 mm wide tape
Pieces per package	250
Outer packaging type	Transparent-Bag
ESD level	(D) electrostatically conductive
Specification	DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07
[W] tape width	32 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	38.4 mm
Number of products per coil	250



1704836 PTSPL-6/1-2X2 2,1 R32

11 Blister drawing



1704836 PTSP-6/1-2X2 2,1 R32

11.1 Temperature limit values

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)

1704836 PTSPL-6/1-2X2 2,1 R32**12 Mechanical tests****12.1 Pull-out test**

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

12.2 Check for damage to conductor or loosening

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

1704836 PTSPL-6/1-2X2 2,1 R32**13 Electrical tests****13.1 Electrical data**

Rated current / conductor cross section	41 A / 6 mm ²
Rated insulation voltage (III/2)	
Rated surge voltage (III/2)	
Contact resistance	
Degree of pollution	2

13.2 Short-time withstand current test

Specification	IEC 60947-7-4:2013-08
Result	

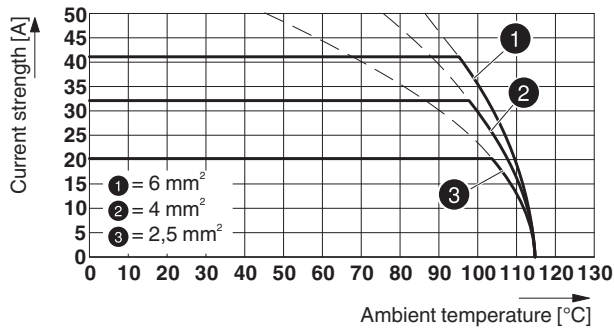
13.3 Temperature rise test

Specification	60947-7-4/FDIS © IEC 2012
Result	Test passed
Requirement temperature-rise test	Increase in temperature ≤ 45 K
Conductor cross section/test current/temperature rise	6 mm ² / 41 A / 19.6 K

1704836 PTSPL-6/1-2X2 2,1 R32

14 Current carrying capacity/derating curves

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




14.1 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
Test directions	X-, Y- and Z-axis
Note	The connected conductor loops were guided to the test sample at a distance of approx. 10 cm.

Shock	
Specification	IEC 60068-2-27:2008-02
Specification	
Result	Test passed
Pulse shape	Semi-sinusoidal
Peak acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Contact interruption	

15 Approvals

EAC EAC

cULus Recognized 

mm²/AWG/kcmil	14-10			
Current	30 A			

1704836 PTSPL-6/1-2X2 2,1 R32**16 Commercial Data**

Order No.	1704836
Type	PTSPL-6/1-2X2 2,1 R32
Pieces per package	250
Net weight	3 g
GTIN	4046356739757
	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1

17 Accessories

Description	Order No.	Type
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	1204517	SZF 1-0,6X3,5
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 ² ... 6.0 mm ² , lateral entry, trapezoidal crimp	1212034	CRIMPFOX 6