

Data sheet

Order No.: 1017517

Type: TDPT 4/ 5-SC-6,35-ZB

PCB terminal block, Screw connection with tension sleeve



1 Main features



• No. of pos.	5	• Nominal current	41 A
• Conductor cross section	4 mm ²	• Nominal voltage	1000 V
• Color	green	• Connection direction	0°
• Pitch	6.35 mm	• Type of packaging	packed in cardboard
• Connection method	Screw connection with tension sleeve		

2 Your advantages

- ✓ Easy to adapt, thanks to their identical size and the same pinning for Push-in spring connections as for screw connections
- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force



Make sure you always use the latest documentation.

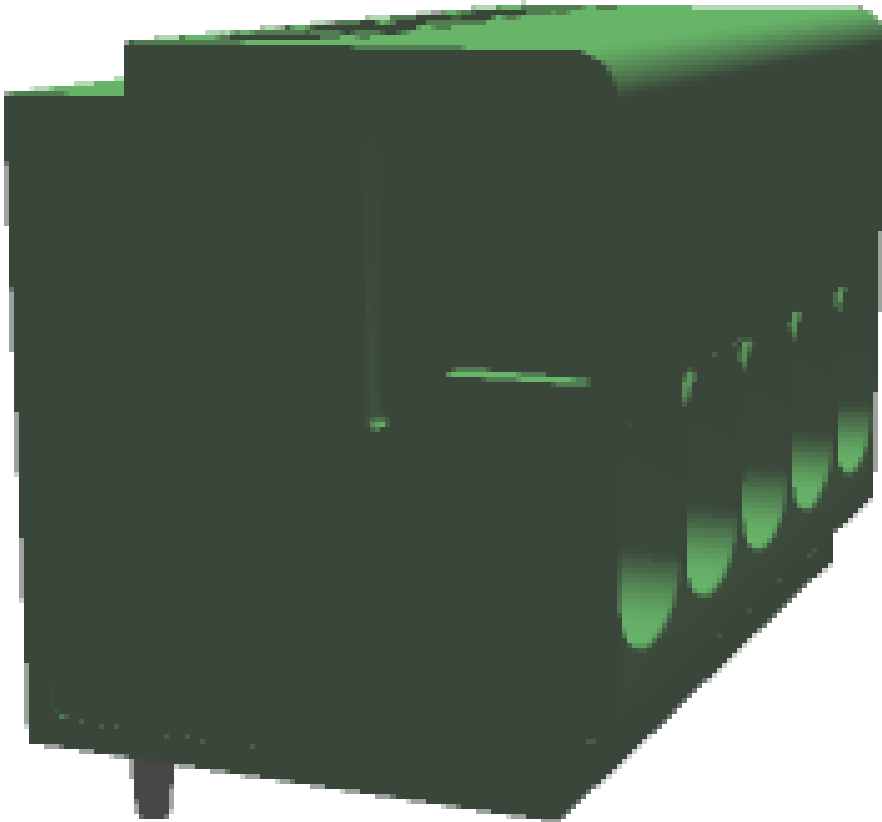
It can be downloaded at: phoenixcontact.net/product/1017517

3 Table of contents

1	Main features.....	1
2	Your advantages	1
3	Table of contents	2
4	3D model in PDF can be activated (Acrobat Reader only).....	3
5	item properties.....	4
	5.1 Connection capacity	4
	5.2 Material data	4
6	Dimensions.....	4
	6.1 Dimensions for the product	4
	6.2 Dimensions for PCB design.....	5
7	Series drawing.....	6
8	Packaging information	7
9	Application.....	7
	9.1 Temperature limit values	7
	9.2 Termination and connection method.....	7
	9.3 Pull-out test	7
10	Electrical tests	8
	10.1 Electrical data	8
	10.2 Short-time withstand current test	8
	10.3 Aging test (climatic impact and corrosion testing).....	8
	10.4 Insulation resistance	8
	10.5 Mechanical connection test for the PCB terminal block	8
	10.6 Temperature-rise test	8
11	Current carrying capacity/derating curves	9
12	Environmental and durability tests	10
	12.1 Assessment of fire risk (glow wire test).....	10
	12.2 Vibration test	10
13	Approvals	10
14	Commercial Data.....	11
15	Accessories.....	11

1017517 TDPT 4/ 5-SC-6,35-ZB

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



1017517 TDPT 4/ 5-SC-6,35-ZB**5 item properties**

Order No.	1017517
Type	TDPT 4/ 5-SC-6,35-ZB
Range of articles	TDPT 4/..-SC
Pitch	6.35 mm
Number of positions	5
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M3
Tightening torque	0.6 Nm ... 0.8 Nm
Mounting type	Wave soldering

5.1 Connection capacity

Conductor cross section, solid	0.2 mm ² to 6 mm ²
Conductor cross section, flexible	0.2 mm ² to 6 mm ²
Conductor cross section AWG/kcmil	24 to 10
2 conductors with same cross section, solid	0.2 mm ² to 1.5 mm ²
2 conductors with same cross section, stranded	0.2 mm ² to 1.5 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve	0.2 mm ² to 4 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve	0.2 mm ² to 4 mm ²
Stripping length	10 mm

5.2 Material data

Material of metal parts		
Note	WEEE/RoHS-compliant, whisker-free acc. to IEC 60068-2-82/JEDEC JESD 201	
Contact material	Cu alloy	
Surface characteristics	hot-dip tin-plated	
Insulating material data		
Insulating material	Housing	Housing
Insulating material	PA	
CTI according to IEC 60112	600	
Flammability rating according to UL 94	V0	
Color	green (6021)	
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	

6 Dimensions**6.1 Dimensions for the product**

Length	20.75 mm
Width	32.55 mm
Height (without solder pin)	23.4 mm
Total height	26.9 mm
Solder pin [P]	3.5 mm
Dimension a	25.4 mm

1017517 TDPT 4/ 5-SC-6,35-ZB

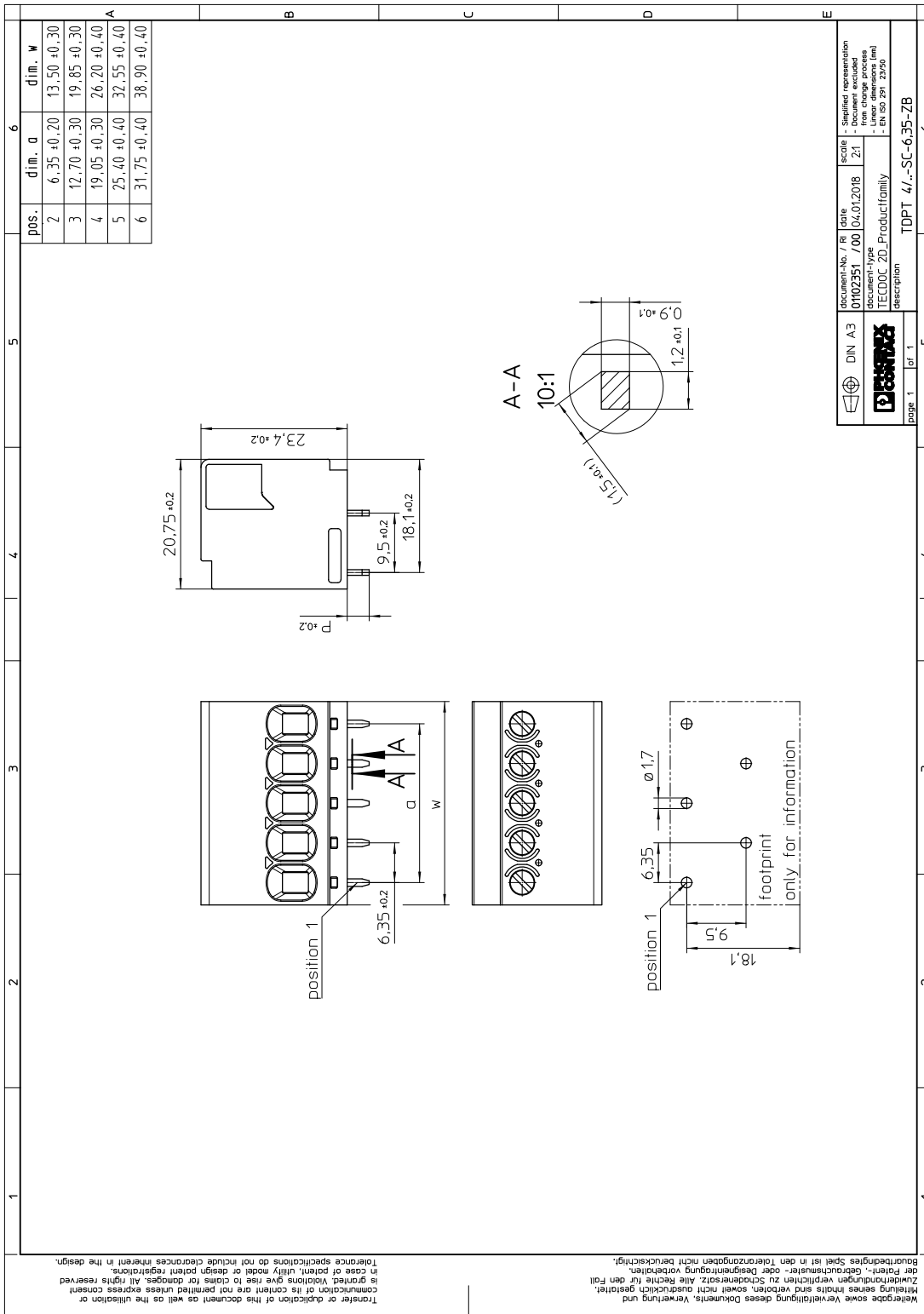
6.2 Dimensions for PCB design

Hole diameter

1.7 mm

1017517 TDPT 4/ 5-SC-6,35-ZB

7 Series drawing



1017517 TDPT 4/ 5-SC-6,35-ZB**8 Packaging information**

Type of packaging	packed in cardboard
Pieces per package	50

9 Application**9.1 Temperature limit values**

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C (dependent on the derating curve)

9.2 Termination and connection method

Specification	IEC 60999-1:1999-11
Check for damage to conductor or loosening	Test passed

9.3 Pull-out test

Termination and connection method: pull-out test

Specification	IEC 60999-1:1999-11
Result	Test passed
Conductor cross section/conductor type/tractive force actual value	0.2 mm ² / stranded / > 10 N
Conductor cross section/conductor type/tractive force actual value	0.2 mm ² / solid / > 10 N
Conductor cross section/conductor type/tractive force actual value	6 mm ² / stranded / > 80 N
Conductor cross section/conductor type/tractive force actual value	6 mm ² / solid / > 80 N
Conductor cross section/conductor type/tractive force actual value	4 mm ² / stranded with ferrule / > 60 N

1017517 TDPT 4/ 5-SC-6,35-ZB**10 Electrical tests****10.1 Electrical data**

Rated current / conductor cross section	41 A / 4 mm ²
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
Contact resistance	0.39 mΩ
Degree of pollution	2

10.2 Short-time withstand current test

Specification	IEC 60947-7-4:2013-08
Result	Test passed
Conductor cross section/short-time current	6 mm ² / 130 A AC

10.3 Aging test (climatic impact and corrosion testing)

Specification	IEC 60947-7-4:2013-08
Result	Test passed
Contact resistance R ₁	0.39 mΩ / 6 mm ²
Test sequence 1: low temperature storage	-40 °C / 2 h
Test sequence 2: heat storage	168 h/105 °C
Test sequence 3: noxious gas storage (ISO 6988)	KFW 0.2 S/1 cycle
Contact resistance R ₂	0.42 mΩ / 6 mm ²
Rated impulse voltage at sea level Voltage waveform ≥ (1.2/50 μs)	9.8 kV
Power-frequency withstand voltage Voltage waveform ≥ (50/60 Hz)	4.2 kV

10.4 Insulation resistance

Specification	IEC 60512-3-1:2002-02
Result	Test passed

10.5 Mechanical connection test for the PCB terminal block

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

10.6 Temperature-rise test

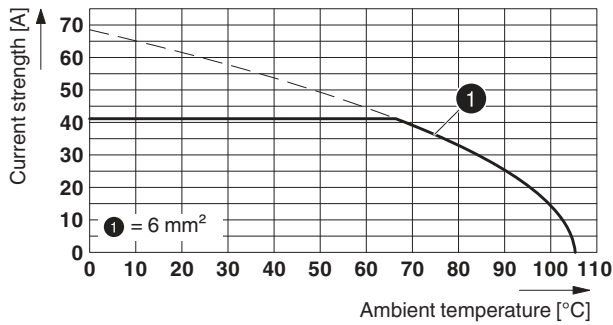
Specification	IEC 60947-7-4:2013-08
Result	Test passed

1017517 TDPT 4/ 5-SC-6,35-ZB

11 Current carrying capacity/derating curves

Specification	IEC 60512-5-2:2002-02
Reduction factor	1
Number of positions	4

Type: TDPT 4/...-SC-6,35-ZB




1017517 TDPT 4/ 5-SC-6,35-ZB**12 Environmental and durability tests****12.1 Assessment of fire risk (glow wire test)**

Specification	IEC 60695-2-10:2013-04		
Result	Test passed		
Temperature	850 °C		
Time of exposure	5 s		

12.2 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
Contact interruption	

13 Approvals

cULus Recognized 				
Use group	B	C	D	
mm ² /AWG/kcmil	24-10	24-10	24-10	
Voltage	600 V	600 V	300 V	
Current	30 A	30 A	10 A	

1017517 TDPT 4/ 5-SC-6,35-ZB**14 Commercial Data**

Order No.	1017517
Type	TDPT 4/ 5-SC-6,35-ZB
Pieces per package	50
Net weight	18.512 g
GTIN	4055626501512
	Information that applies locally, see link on page 1
Country of origin	Information that applies locally, see link on page 1

15 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