

PCB terminal block - PTSM 0,5/ 7-2,5-V THR WH R44



1814618

<https://www.phoenixcontact.com/pc/products/1814618>

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PCB terminal block, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of potentials: 7, number of rows: 1, number of positions per row: 7, product range: PTSM 0,5/..-V-THR WH, pitch: 2.5 mm, connection method: Push-in spring connection, mounting: THR soldering, conductor/PCB connection direction: 90 °, color: signal white, Pin layout: Linear pinning, Solder pin [P]: 2.1 mm, number of solder pins per potential: 2, type of packaging: 44 mm wide tape

Your advantages

- White design: Stable color when welding and during use
- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- High current carrying capacity of 6 A in very compact dimensions
- Designed for integration into the SMT soldering process
- Vertical connection enables multi-row arrangement on the PCB

Commercial Data

Item number	1814618
Packing unit	310 pc
Minimum order quantity	310 pc
Product Key	AAKCAD
Catalog Page	Page 391 (C-1-2013)
GTIN	4046356760362
Weight per Piece (including packing)	3.42 g
Weight per Piece (excluding packing)	3.2 g
Customs tariff number	85369010
Country of origin	IN

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Technical Data

Product properties

Type	Component suitable for through hole reflow
Product line	COMBICON Terminals XS
Product type	Printed circuit board terminal
Number of positions	7
Pitch	2.5 mm
Number of connections	7
Number of rows	1
Number of potentials	7
Pin layout	Linear pinning
Solder pins per potential	2

Electrical properties

Nominal current I_N	6 A
Nominal voltage U_N	160 V
Degree of pollution	3
Rated voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

Connection data

Connection technology

Type	Component suitable for through hole reflow
Nominal cross section	0.5 mm ²

Conductor connection

Connection method	Push-in spring connection
Conductor cross section solid	0.14 mm ² ... 0.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 0.5 mm ² (up to 0.75 mm ² supported, with a stripping length of 7.5 mm and a rated insulation voltage of 32 V at III/2)
Conductor cross section AWG	26 ... 20
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 0.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 0.34 mm ²
Stripping length	6 mm

Mounting

Mounting type	THR soldering
Pin layout	Linear pinning

Processing notes

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Process	Reflow/wave soldering
Moisture Sensitive Level	MSL 1
Classification temperature T_c	260 °C
Solder cycles in the reflow	3

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)

Material data - housing

Color (Housing)	signal white (9003)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

Material data – actuating element

Color ()	()
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Notes

Note on application	Pick and place pads may protrude beyond the components. The PCB layout must ensure that collisions are avoided when components are assembled.
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Dimensions

Dimensional drawing	
Pitch	2.5 mm
Width [w]	18 mm
Height [h]	12.1 mm
Length [l]	5 mm
Installed height	10 mm
Solder pin length [P]	2.1 mm

PCB design

Pin spacing	2.5 mm
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Electrical tests

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Air clearances and creepage distances |

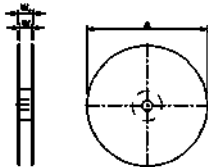
Insulating material group	I
Rated insulation voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated insulation voltage (II/2)	400 V
Rated surge voltage (II/2)	2.5 kV

Environmental and real-life conditions

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

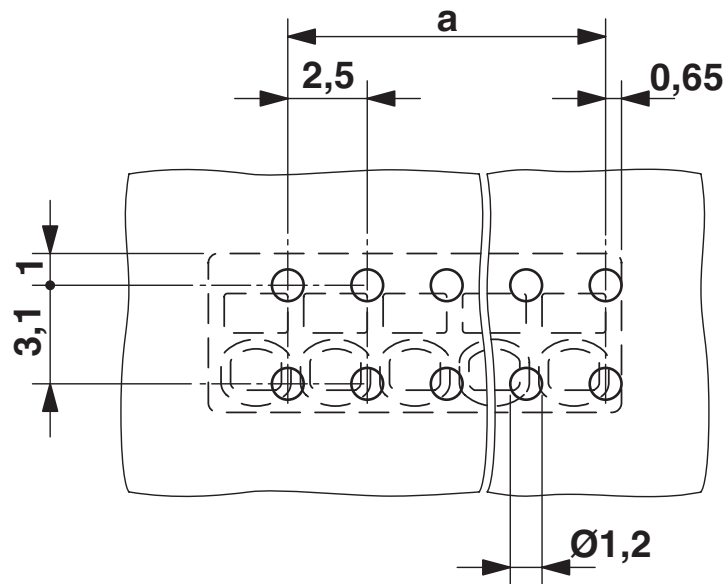
Dimensional drawing	
Type of packaging	44 mm wide tape
[W] tape width	44 mm
[W2] coil overall dimension	50.4 mm
[A] coil diameter	330 mm
Outer packaging type	Transparent-Bag
ESD level	(D) electrostatically conductive
Specification	DIN EN 61340-5-1 (VDE 0300-5-1): 2008-07

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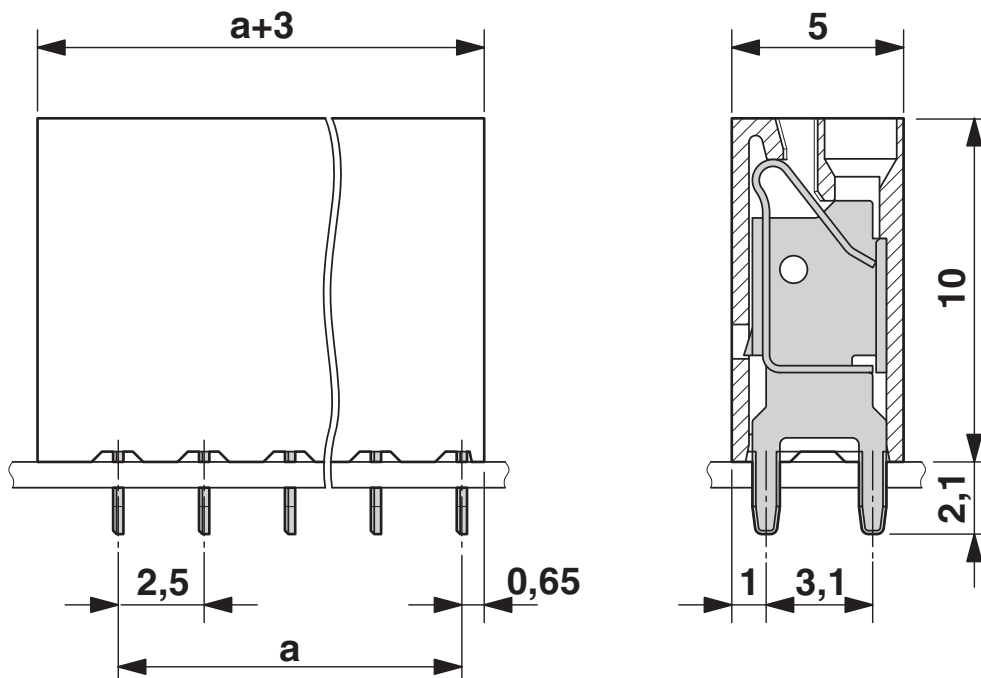
<https://www.phoenixcontact.com/pc/products/1814618>

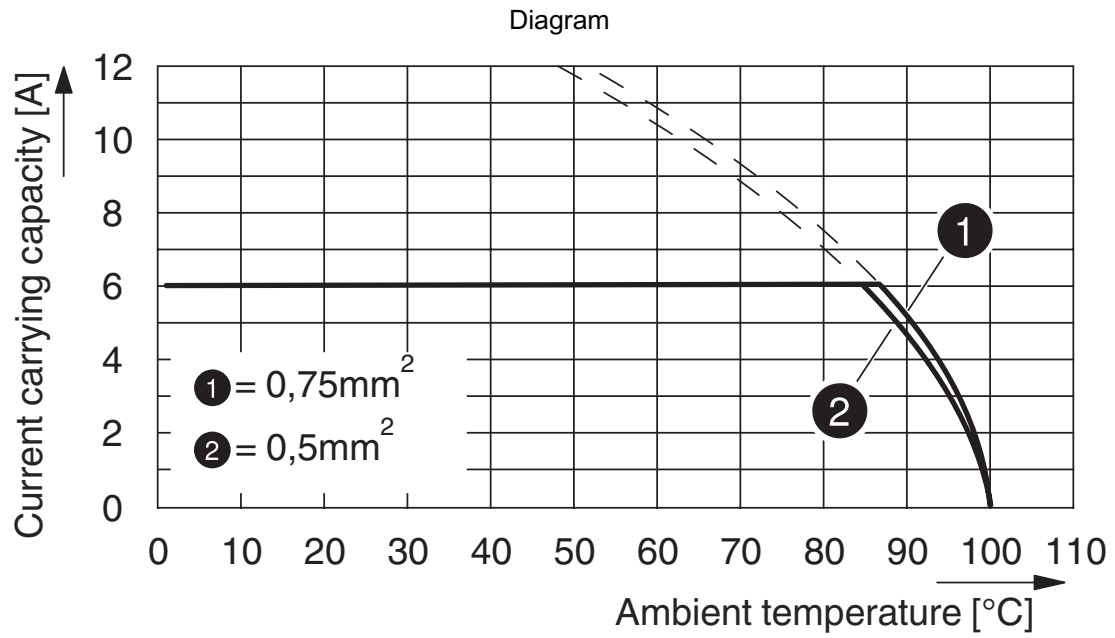
Drawings

Drilling plan/solder pad geometry



Dimensional drawing






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Approvals

 UL Recognized Approval ID: E118976-20130619				
	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	150 V	5 A	26 - 18	-

 EAC Approval ID: B.01687				
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 cULus Recognized Approval ID: E60425-20030527				
	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	150 V	5 A	26 - 20	-

 VDE Zeichengenehmigung Approval ID: 40048725				
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Classifications

ECLASS

ECLASS-9.0	27440401
ECLASS-10.0.1	27440401
ECLASS-11.0	27460101

ETIM

ETIM 8.0	EC002643
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UNSPSC

UNSPSC 21.0	39121400
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Environmental Product Compliance

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

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Accessories

Screwdriver

Screwdriver - SZS 0,4X2,0 - 1205202

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Micro screwdriver, bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip and twist cap

Ferrule

Ferrule - AI 0,25- 6 BU - 3203040

<https://www.phoenixcontact.com/pc/products/3203040>



Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: blue

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Ferrule

Ferrule - AI 0,25- 6 YE - 3203024

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Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: yellow

Ferrule

Ferrule - AI 0,34- 6 TQ - 3203053

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Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: turquoise

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PCB terminal block

PCB terminal block - SAMPLE PTSM 0,5/ 7-2,5-V-THR - 1701106

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