

# PTSM 0,5/ 7-2,5-H SMD R44 - PCB terminal block



1771075

<https://www.phoenixcontact.com/us/products/1771075>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



The figure shows the 3-pos. version

PCB terminal block, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, number of potentials: 7, number of rows: 1, number of positions per row: 7, product range: PTSM 0,5/..-H-SMD, pitch: 2.5 mm, connection method: Push-in spring connection, mounting: SMD soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Linear pad geometry, number of solder pins per potential: 1, type of packaging: 44 mm wide tape

## Your advantages

- 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
- Additional solder anchors reduce the mechanical strain on the soldering spots

## Commercial data

Item number	1771075
Packing unit	770 pc
Minimum order quantity	770 pc
Note	Made to order (non-returnable)
Sales key	AA11
Product key	AAKDAA
GTIN	4046356459723
Weight per piece (including packing)	2.249 g
Weight per piece (excluding packing)	1.666 g
Customs tariff number	85369010
Country of origin	IN

1771075

<https://www.phoenixcontact.com/us/products/1771075>

## Technical data

### Product properties

Product type	PCB terminal block
Product family	PTSM 0,5/...-H-SMD
Product line	COMBICON Terminals XS
Number of positions	7
Pitch	2.5 mm
Number of connections	7
Number of rows	1
Number of potentials	7
Pin layout	Linear pad geometry
Solder pins per potential	1

### Electrical properties

#### Properties

Nominal current $I_N$	6 A
Nominal voltage $U_N$	160 V
Rated voltage (III/3)	32 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	160 V
Rated surge voltage (II/2)	2.5 kV

### Connection data

#### Connection technology

Nominal cross section	0.5 mm <sup>2</sup>
-----------------------	---------------------

#### Conductor connection

Connection method	Push-in spring connection
Conductor cross-section rigid	0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 0.5 mm <sup>2</sup> (up to 0.75 mm <sup>2</sup> 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 <sup>2</sup> ... 0.5 mm <sup>2</sup>
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 0.34 mm <sup>2</sup> (possible from 0.14 mm <sup>2</sup> , when using ferrule AI 0.14- 6 GY in combination with crimping pliers CRIMPFOX 10T-F)
Cylindrical gauge a x b / diameter	- / 1.2 mm
Stripping length	6 mm

### Mounting

# PTSM 0,5/ 7-2,5-H SMD R44 - PCB terminal block



1771075

<https://www.phoenixcontact.com/us/products/1771075>

Mounting type	SMD soldering
Pin layout	Linear pad geometry

## Processing notes

Process	Reflow 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 $\mu$ m - 8 $\mu$ m Sn)
Metal surface soldering area (top layer)	Tin (4 $\mu$ m - 8 $\mu$ m Sn)

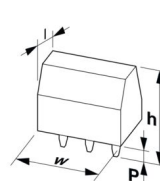
### Material data - housing

Color (Housing)	black (9005)
Insulating material	LCP
Insulating material group	IIIa
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

### Material data – actuating element

Color (Actuating element)	black (9005)
---------------------------	--------------

## Dimensions

Dimensional drawing	
Pitch	2.5 mm
Width [w]	21.9 mm
Height [h]	5 mm
Length [l]	11 mm

### PCB design

Pad geometry	1.4 x 3.4 mm
--------------	--------------

## Mechanical tests

### Connection test

Specification	IEC 60998-2-2:2002-12
---------------	-----------------------

1771075

<https://www.phoenixcontact.com/us/products/1771075>

Result	Test passed
--------	-------------

#### Test for conductor damage and slackening

Specification	IEC 60998-2-2:2002-12
Result	Test passed

#### Pull-out test

Specification	IEC 60998-2-2:2002-12
Conductor cross-section/conductor type/tractive force setpoint/actual value	0.14 mm <sup>2</sup> / solid / > 10 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	0.5 mm <sup>2</sup> / solid / > 20 N
	0.75 mm <sup>2</sup> / flexible / > 30 N

#### Flexion test

Specification	IEC 60998-2-2:2002-12
Result	Test passed

### Electrical tests

#### Temperature-rise test

Specification	IEC 60998-2-1:2002-12
Requirement temperature-rise test	Increase in temperature ≤ 45 K

#### Insulation resistance

Specification	IEC 60998-1:2002-12
Insulation resistance, neighboring positions	> 5 MΩ

#### Air clearances and creepage distances |

Specification	IEC 60664-1:1992-10 + A1:2000-02 + A2:2002-05
Insulating material group	IIIa
Comparative tracking index (IEC 60112)	CTI 175
Rated insulation voltage (III/3)	32 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	1.3 mm
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	1.6 mm
Rated insulation voltage (II/2)	160 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	1.6 mm

### Environmental and real-life conditions

#### Vibration test

# PTSM 0,5/ 7-2,5-H SMD R44 - PCB terminal block



1771075

<https://www.phoenixcontact.com/us/products/1771075>

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
Test directions	X-, Y- and Z-axis

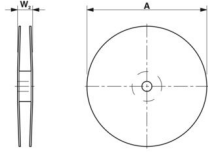
## Glow-wire test

Specification	IEC 60998-1:2002-12
Temperature	850 °C
Time of exposure	5 s

## Ambient conditions

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

## 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

# PTSM 0,5/ 7-2,5-H SMD R44 - PCB terminal block

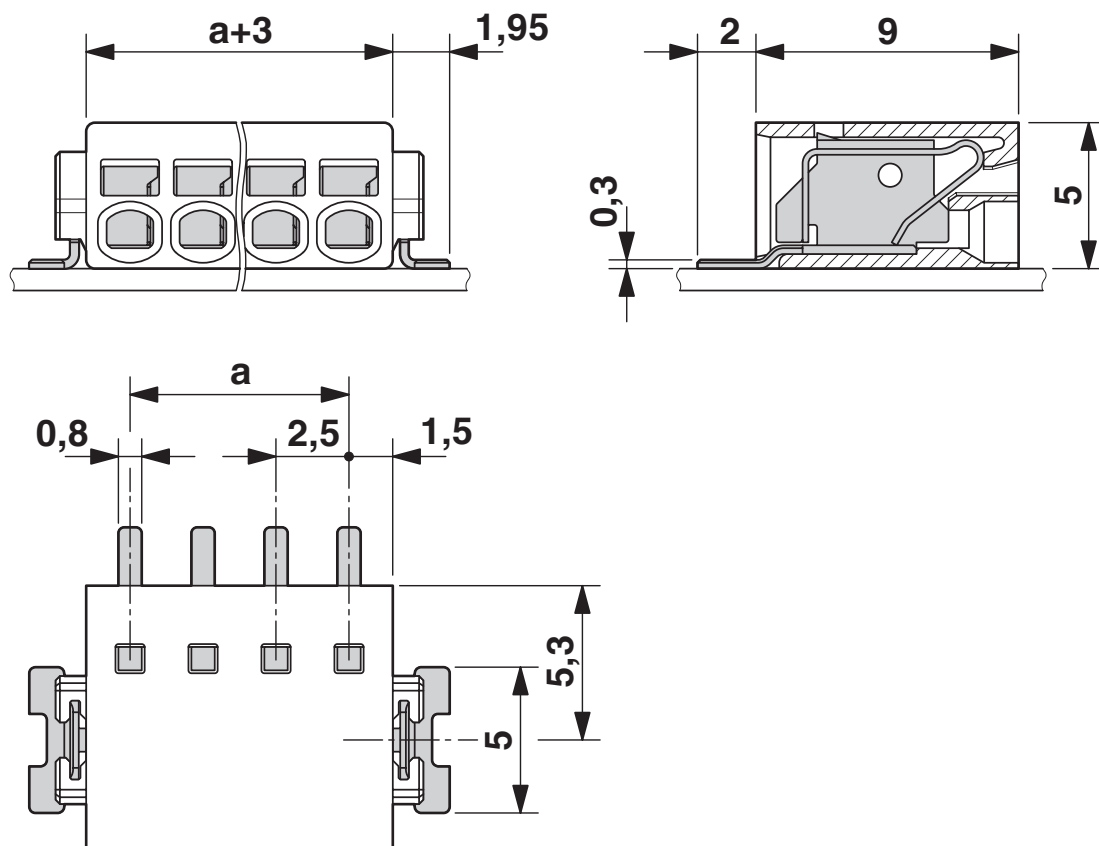


1771075

<https://www.phoenixcontact.com/us/products/1771075>

## Drawings

Dimensional drawing



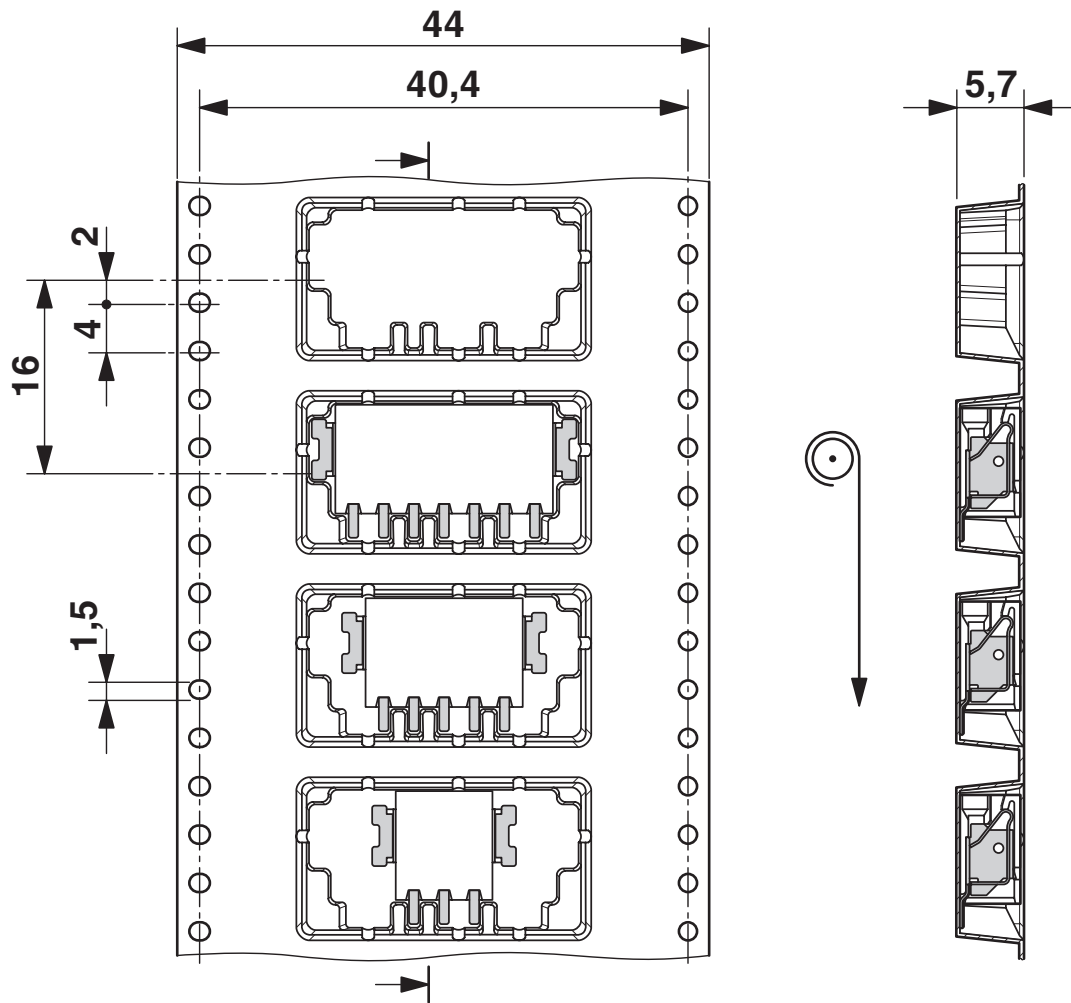
# PTSM 0,5/ 7-2,5-H SMD R44 - PCB terminal block

1771075

<https://www.phoenixcontact.com/us/products/1771075>

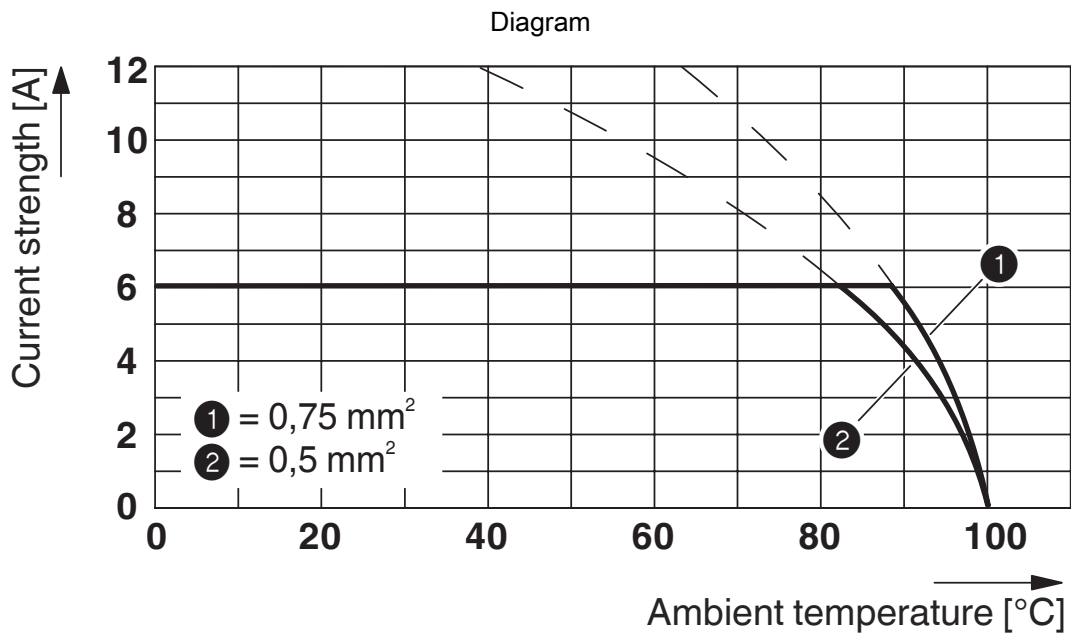


Dimensional drawing



1771075

<https://www.phoenixcontact.com/us/products/1771075>



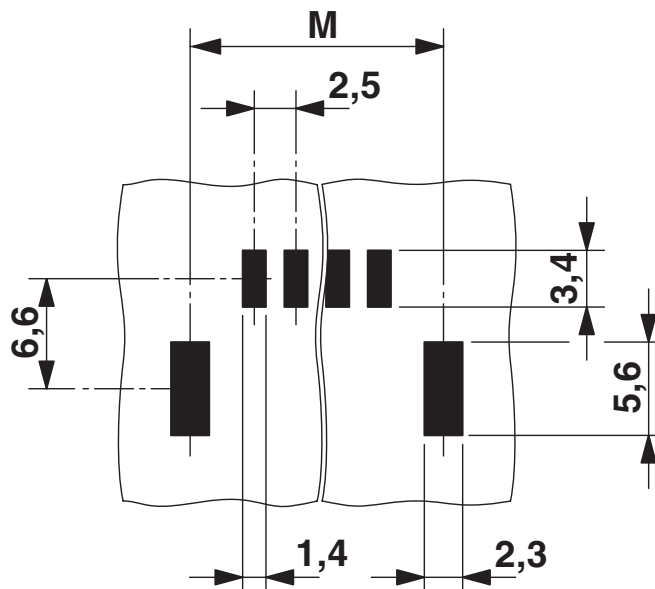
Type: PTSM 0,5/...-2,5-H- SMD R44

Tested in accordance with DIN EN 60512-5-2:2003-01

Reduction factor = 1

No. of positions: 5

Drilling plan/solder pad geometry



Dimension M: 20.2 mm

# PTSM 0,5/ 7-2,5-H SMD R44 - PCB terminal block



1771075

<https://www.phoenixcontact.com/us/products/1771075>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1771075>

 <b>UL Recognized</b> Approval ID: E118976-20130619				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B				
	150 V	5 A	26 - 18	-

 <b>cULus Recognized</b> Approval ID: E60425-20030527				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B				
	150 V	5 A	26 - 20	-

 <b>VDE Zeichengenehmigung</b> Approval ID: 40048725				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	160 V	6 A	-	0.14 - 0.5

# PTSM 0,5/ 7-2,5-H SMD R44 - PCB terminal block



1771075

<https://www.phoenixcontact.com/us/products/1771075>

## Classifications

### ECLASS

ECLASS-13.0	27460101
ECLASS-15.0	27460101

### ETIM

ETIM 10.0	EC002643
-----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

# PTSM 0,5/ 7-2,5-H SMD R44 - PCB terminal block



1771075

<https://www.phoenixcontact.com/us/products/1771075>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### 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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)