

## PCB terminal block - PTSM 0,5/ 3-2,5-H THR R32 - 1770898

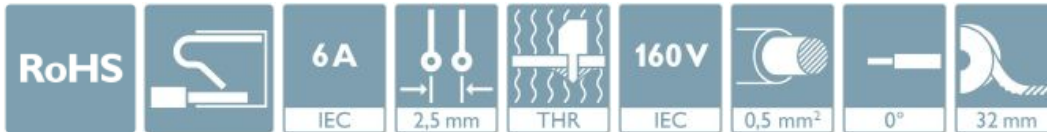
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PCB terminal block, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm<sup>2</sup>, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, product range: PTSM 0,5/..-H-THR, pitch: 2.5 mm, connection method: Push-in spring connection, mounting: THR soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Linear double pinning, Solder pin [P]: 2.1 mm, type of packaging: 32 mm wide tape. User information and design recommendations for through hole reflow technology can be found under: Downloads

### 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



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	530 pc
GTIN	
GTIN	4046356459471
Weight per Piece (excluding packing)	1.550 g
Custom tariff number	85369010
Country of origin	India

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	PTSM 0,5/..-H-THR
Pitch	2.5 mm
Number of positions	3

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### Technical data

#### Item properties

Mounting type	THR soldering
Pin layout	Linear double pinning
Number of levels	1
Number of connections	3
Number of potentials	3

#### Electrical parameters

Nominal current	6 A
Nom. voltage	160 V
Rated voltage (III/3)	63 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	200 V
Rated surge voltage (III/3)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 kV

#### Connection capacity

Connection method	Push-in spring connection
pluggable	no
Conductor cross section solid	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, at a rated insulation voltage of 32 V at III/2)
Conductor cross section AWG / kcmil	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>
Cylindrical gauge a x b / diameter	- / 1.2 mm
Stripping length	6 mm

#### 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

Housing color	black (9005)
Insulating material	LCP
Insulating material group	IIIa

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## Technical data

### Material data - housing

CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

### Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [ l ]	10 mm
Width [ w ]	8 mm
Height [ h ]	7.1 mm
Pitch	2.5 mm
Height (without solder pin)	5 mm
Solder pin [P]	2.1 mm
Pin spacing	5 mm
Pin dimensions	0.3 x 0.8 mm

### Dimensions for PCB design

Hole diameter	1.2 mm
Pin spacing	5 mm

### Packaging information

Type of packaging	32 mm wide tape
Pieces per package	530
Denomination packing units	Pcs.
[W] tape width	32 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	38.4 mm
Outer packaging type	Transparent-Bag

### Processing notes

Process	Reflow/wave soldering
Specification	Following IPC/JEDEC J-STD-020D.1:2008-03
	Following IEC 61760-1:2006-04
	Following IEC 60068-2-58:2005-02
Moisture Sensitive Level	MSL 1
Classification temperature T <sub>c</sub>	260 °C
Solder cycles in the reflow	3

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C

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## Technical data

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)
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### Termination and connection method

Connection test	IEC 60998-2-2:2002-12
Test result	Test passed
Test for conductor damage and slackening	IEC 60998-2-2:2002-12
	Test passed

### Pull-out test

Pull-out test	IEC 60998-2-2:2002-12
Conductor cross section / conductor type / tensile force	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

### Mechanical tests according to standard

Test specification	IEC 60998-2-2 (in parts)
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### Electrical tests

Rated current	6 A
Conductor cross section	0.5 mm <sup>2</sup>
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

### Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Minimum clearance - inhomogeneous field (III/3)	1.5 mm
Minimum clearance - inhomogeneous field (III/2)	1.5 mm
Minimum clearance - inhomogeneous field (II/2)	1.5 mm
Minimum creepage distance value (III/3)	2 mm
Minimum creepage distance value (III/2)	2 mm
Minimum creepage distance value (II/2)	2 mm

### Temperature-rise test

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

### Current carrying capacity / derating curves

Caption	Type: PTSM 0,5/...-2,5-H- THR R... Tested in accordance with DIN EN 60512-5-2:2003-01
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## Technical data

### Current carrying capacity / derating curves

	Reduction factor = 1 No. of positions: 5
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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 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

### Insulation resistance

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

### Glow-wire test

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

### Mechanical strength/tumbling barrel test

Specification	IEC 60998-1:2002-12
Number of drop cycles	50

### Standards and Regulations

Connection in acc. with standard	EN-VDE
	UL
Flammability rating according to UL 94	V0

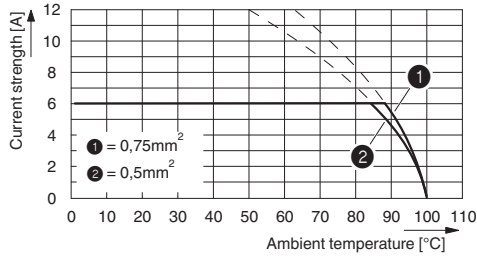
### Environmental Product Compliance

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

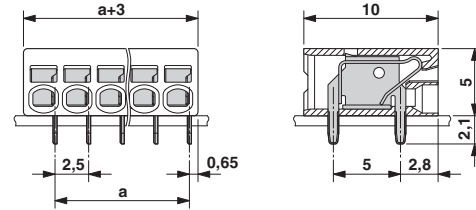
## Drawings

# PCB terminal block - PTSM 0,5/ 3-2,5-H THR R32 - 1770898

Diagram

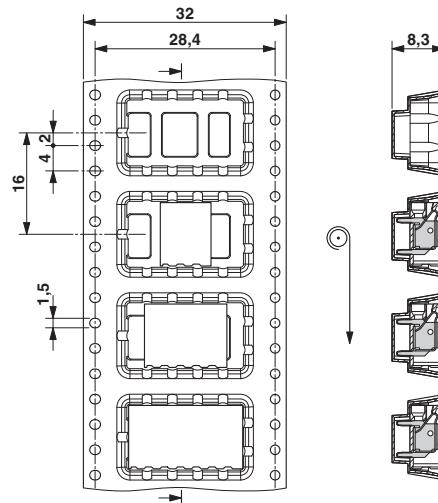


Dimensional drawing



Type: PTSM 0,5/...-2,5-H- THR R...  
 Tested in accordance with DIN EN 60512-5-2:2003-01  
 Reduction factor = 1  
 No. of positions: 5

Dimensional drawing



## Classifications

eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 11.0	27460101
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27261100
eCl@ss 6.0	27261100
eCl@ss 7.0	27440401
eCl@ss 9.0	27440401

# PCB terminal block - PTSM 0,5/ 3-2,5-H THR R32 - 1770898

## Classifications

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

### UNSPSC

UNSPSC 6.01	30211801
UNSPSC 7.0901	39121432
UNSPSC 11	39121432
UNSPSC 12.01	39121432
UNSPSC 13.2	39121432
UNSPSC 18.0	39121432
UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

## Approvals


### Approvals


#### Approvals

VDE Zeichengenehmigung / UL Recognized / EAC / cULus Recognized

#### Ex Approvals

### Approval details

VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40048725
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UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E118976-20130619
			B
Nominal voltage UN			150 V

# PCB terminal block - PTSM 0,5/ 3-2,5-H THR R32 - 1770898

## Approvals

	B
Nominal current IN	5 A
mm <sup>2</sup> /AWG/kcmil	26-18

EAC		B.01687
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cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-20030527
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	B
Nominal voltage UN	150 V
Nominal current IN	5 A
mm <sup>2</sup> /AWG/kcmil	26-20

## Accessories

### Accessories

#### Cable end sleeve

Ferrule - AI 0,25- 6 BU - 3203040



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

Ferrule - AI 0,25- 6 YE - 3203024



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



## PCB terminal block - PTSM 0,5/ 3-2,5-H THR R32 - 1770898

### Accessories

Ferrule - AI 0,34- 6 TQ - 3203053



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

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### Screwdriver tools

Screwdriver - SZS 0,4X2,0 - 1205202



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

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### Additional products

Sample set - SAMPLE PTSM 0,5/ 3-2,5-H-THR - 1701093



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