PCB terminal block - PTSM 0,5/ 7-2,5-H SMD R44 - 1771075

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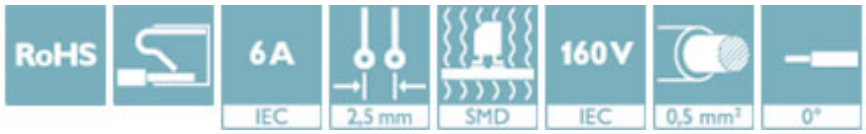
The figure shows the 3-pos. version

PCB terminal block, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², pitch: 2.5 mm, number of positions: 7, connection method: Push-in spring connection, mounting: SMD soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Linear pad geometry

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



Key Commercial Data

Packing unit	770 pc
Minimum order quantity	770 pc
GTIN	4 046356 459723
GTIN	4046356459723

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	PTSM 0,5/..-H-SMD
Pitch	2.5 mm
Number of positions	7
Connection method	Push-in spring connection
Mounting type	SMD soldering
Pin layout	Linear pad geometry
Number of levels	1
Number of connections	7
Number of potentials	7

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Technical data

Electrical parameters

Nominal current	6 A
Nom. voltage	160 V
Rated voltage	32 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	160 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 mm² ... 0.5 mm²
Conductor cross section flexible	0.2 mm² ... 0.5 mm² (up to 0.75 mm² 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 mm² ... 0.5 mm²
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
CTI according to IEC 60112	175
Flammability rating according to UL 94	V0

Dimensions for the product

Caption	Schematic representation – for additional information, see product range drawing in the Download Center
Length [l]	9 mm
Width [w]	20.1 mm
Height [h]	5.12 mm
Pitch	2.5 mm
Height (without solder pin)	5.12 mm

Packaging information

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Technical data

Packaging information

Type of packaging	packed in cardboard
Pieces per package	770
Denomination packing units	Pcs.
[W] tape width	44 mm
[A] coil diameter	330 mm
[W2] coil overall dimension	50.4 mm
Outer packaging type	Transparent-Bag

Processing notes

Process	Reflow soldering
Specification	Following IPC/JEDEC J-STD-020D.1:2008-03
	Following IEC 60068-2-58:2005-02
Moisture Sensitive Level	MSL 1
Classification temperature T_c	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
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)

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
	Test passed
Conductor cross section / conductor type / tensile force	0.14 mm² / solid / > 7 N
	0.14 mm² / flexible / > 7 N
	0.2 mm² / solid / > 10 N
	0.5 mm² / solid / > 30 N
	0.75 mm² / flexible / > 35 N

Mechanical tests according to standard

Test specification	IEC 60998-2-2 (in parts)

Electrical tests

Rated current	6 A
Conductor cross section	0.5 mm²
Rated voltage (III/2)	160 V

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Technical data

Electrical tests

Rated surge voltage (III/2)	2.5 kV

Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:1992-10 + A1:2000-02 + A2:2002-05
Specification	IEC 60664-1:1992-10 + A1:2000-02 + A2:2002-05
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)	1.3 mm
Minimum creepage distance value (III/2)	1.6 mm
Minimum creepage distance value (II/2)	1.6 mm

Temperature-rise test

Result	Test passed
Specification	IEC 60998-2-1:2002-12

Current carrying capacity / derating curves

Specification	IEC 60998-2-2 (in parts)

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

Resistance to ageing, humidity and penetration of solids

Dry heat	168 h/100°C
Humid heat	48 h/30 °C/92 %

Standards and Regulations

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

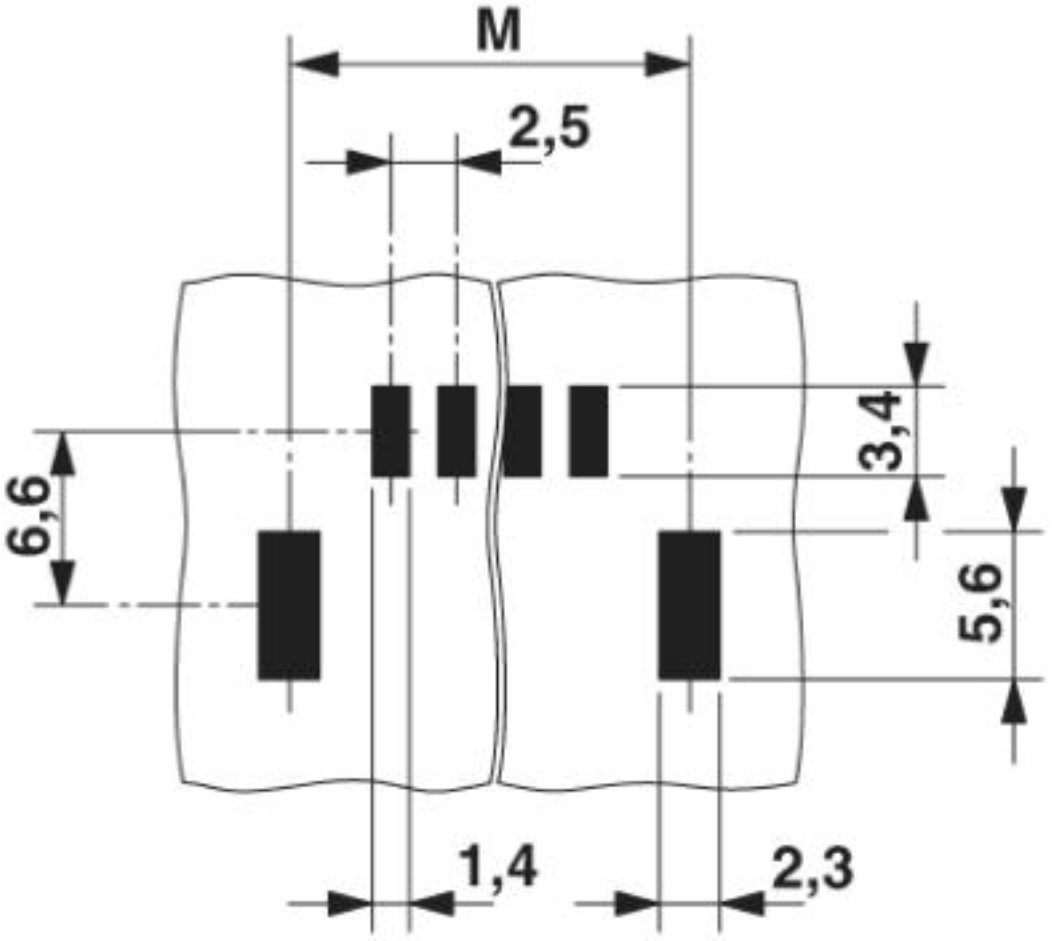
Environmental Product Compliance

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

Drawings

PCB terminal block - PTSM 0,5/ 7-2,5-H SMD R44 - 1771075

Drilling diagram



Dimension M: 20.2 mm

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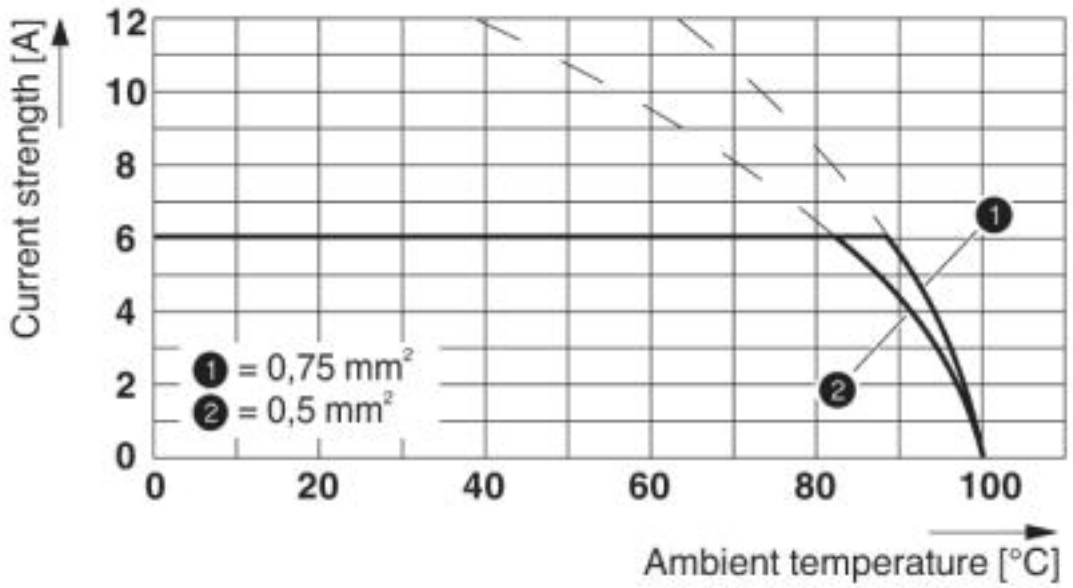
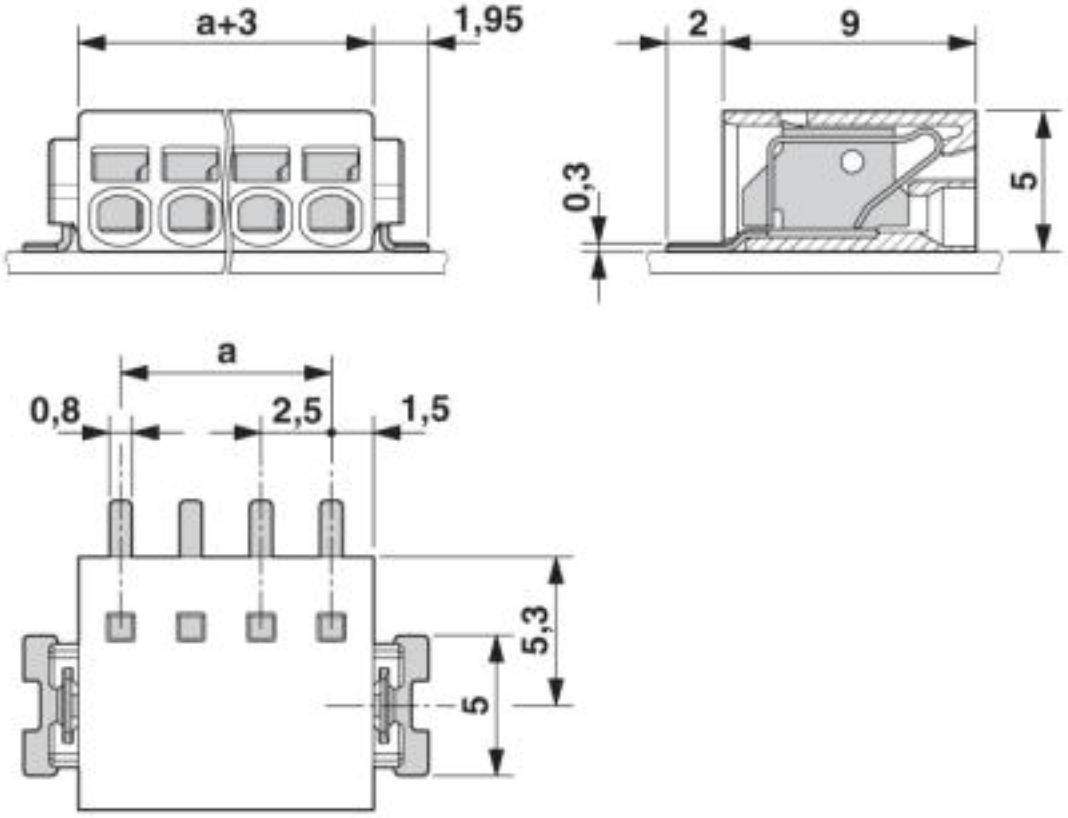
Diagram



Dimensional drawing



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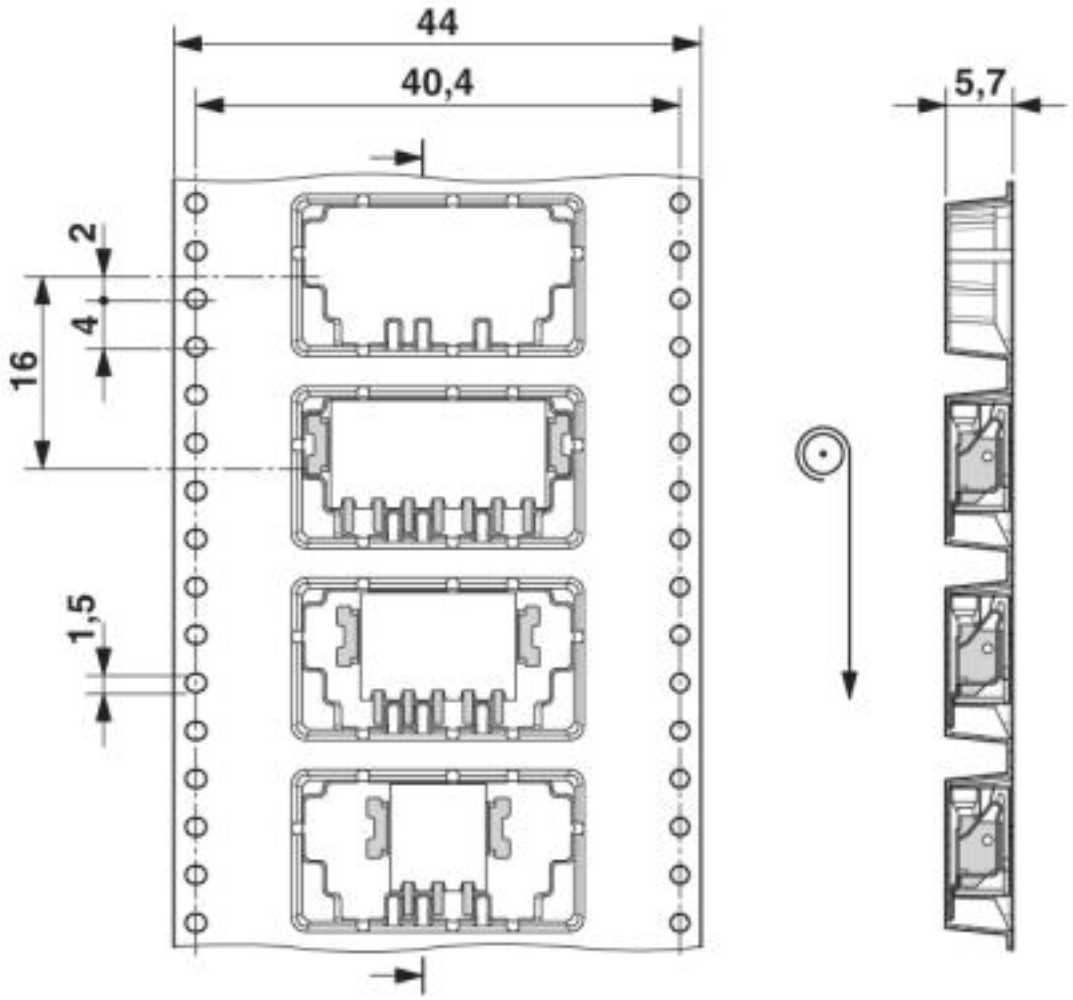
Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27440401
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 8.0	27440401
eCl@ss 9.0	27440401

ETIM

ETIM 3.0	EC001121

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Classifications

ETIM

ETIM 4.0	EC002643
ETIM 5.0	EC002637
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

UL Recognized / VDE Zeichengenehmigung / EAC / cULus Recognized

Ex Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E118976-20130619

	B
Nominal voltage UN	150 V
Nominal current IN	5 A
mm²/AWG/kcmil	26-18

VDE Zeichengenehmigung		http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40048725

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Approvals

EAC		B.01687

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20030527

	B
Nominal voltage UN	150 V
Nominal current IN	5 A
mm²/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

Ferrule - AI 0,34- 6 TQ - 3203053

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

Screwdriver tools

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Accessories

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

Additional products

Sample set - SAMPLE PTSM 0,5/ 7-2,5-H-SMD - 1701082

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