PCB terminal block - PT 2,5/ 3-5,0-H BK - 1700404

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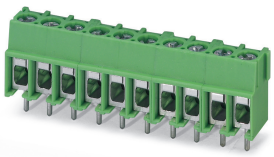
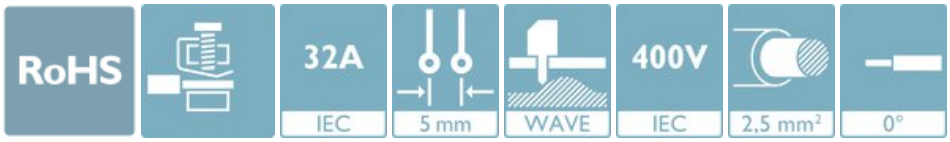


The figure shows a 10-position version of the product

PCB terminal block, nominal current: 32 A, rated voltage (III/2): 400 V, nominal cross section: 2.5 mm², number of potentials: 3, Number of rows: 1, Number of positions per row: 3, product range: PT 2,5/..-H, pitch: 5 mm, connection method: Screw connection with wire protector, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Linear pinning, Solder pin [P]: 4.1 mm, type of packaging: packed in cardboard

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- High terminal block capacity thanks to rectangular terminal block space
- Allows connection of two conductors
- The latching on the side enables various numbers of positions to be combined



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	250 pc
GTIN	4 046356 483896
GTIN	4046356483896
Weight per Piece (excluding packing)	3.600 g
Custom tariff number	85369010
Country of origin	Poland

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	PT 2,5/..-H

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Technical data

Item properties

Pitch	5 mm
Number of positions	3
Screw thread	M3
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of rows	1
Number of connections	3
Number of potentials	3

Electrical parameters

Nominal current	32 A
Nom. voltage	400 V
Contact resistance	Test passed IEC 60512-2-2:2003-05
Rated voltage (III/3)	250 V
Rated voltage (III/2)	400 V
Rated voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV

Connection capacity

Connection method	Screw connection with wire protector
pluggable	no
Conductor cross section solid	0.5 mm² ... 4 mm²
Conductor cross section flexible	0.5 mm² ... 4 mm²
Conductor cross section AWG / kcmil	20 ... 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm² ... 2.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm² ... 2.5 mm²
2 conductors with same cross section, solid	0.5 mm² ... 1.5 mm²
2 conductors with same cross section, flexible	0.5 mm² ... 1.5 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm² ... 0.75 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² ... 1.5 mm²
Stripping length	6.5 mm
Torque	0.45 Nm ... 0.5 Nm

Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/ JEDEC JESD 201

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Material data - contact

Contact material	Cu alloy
Surface characteristics	Tin-plated
Metal surface terminal point (top layer)	Tin (3 - 12 µm Sn)
Metal surface terminal point (middle layer)	Nickel (1.5 - 4 µm Ni)
Metal surface soldering area (top layer)	Tin (3 - 12 µm Sn)
Metal surface soldering area (middle layer)	Nickel (1.5 - 4 µm Ni)

Material data - housing

Housing color	black (9005)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
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

Dimensions for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	9 mm
Height [h]	13.5 mm
Pitch	5 mm
Height (without solder pin)	13.5 mm
Solder pin [P]	4.1 mm
Pin spacing	5 mm
Pin dimensions	ø 1 mm

Dimensions for PCB design

Hole diameter	1.3 mm
Pin spacing	5 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	250
Denomination packing units	Pcs.

General product information

Type of note	Note on application
Note	For safe conductor connection, always adhere to a defined tightening torque. Particularly in the case of PCB terminal blocks with two or

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General product information

	three positions, the individual solder pin for each contact point cannot compensate for this. That is why the terminal blocks must be supported during conductor connection (held with one hand, support on the housing).

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 ... 105 °C (Depending on the current carrying capacity/derating curve)

Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

Pull-out test

Pull-out test	IEC 60999-1:1999-11
Conductor cross section / conductor type / tensile force	0.5 mm² / solid / > 20 N
	0.5 mm² / flexible / > 20 N
	4 mm² / solid / > 60 N
	4 mm² / flexible / > 60 N

Mechanical tests according to standard

Test specification	IEC 60947-7-4

Electrical tests

Rated current	32 A
Conductor cross section	4 mm²
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

Air clearances and creepage distances

Clearances and creepage distances	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	3.2 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm

Temperature-rise test

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Temperature-rise test

Specification	IEC 60947-7-4:2019-01
Requirement temperature-rise test	The sum of ambient temperature and temperature rise of the PCB terminal block shall not exceed the upper limiting temperature.

Current carrying capacity / derating curves

Caption	Type: PT 2,5/...-5,0-H

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	5g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Result	Test passed
Insulation resistance, neighboring positions	> 5 MΩ

Glow-wire test

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

Alternating climate test

Result	Test passed
Specification	ISO 6988:1985-02

Standards and Regulations

Connection in acc. with standard	EN-VDE

Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

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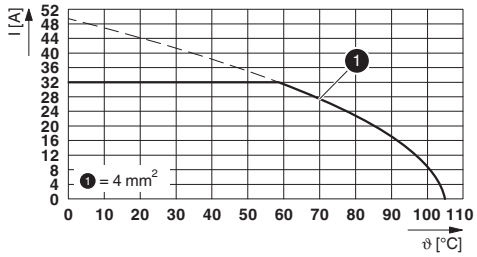
Diagram



Type: PT 2,5/...-5,0-H

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

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

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Approvals

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VDE Gutachten mit Fertigungsüberwachung / CCA / IECEE CB Scheme / EAC / cULus Recognized

Ex Approvals

Approval details

VDE Gutachten mit Fertigungsüberwachung	VDE	http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40029839

Nominal voltage UN	250 V
Nominal current IN	32 A
mm²/AWG/kcmil	0.5-4

CCA	DE1 34001

Nominal voltage UN	250 V
Nominal current IN	32 A
mm²/AWG/kcmil	0.5-4

IECEE CB Scheme	CB scheme	http://www.iecee.org/	DE1-63844

Nominal voltage UN	250 V
Nominal current IN	32 A
mm²/AWG/kcmil	0.5-4

EAC	EAC	B.01687

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cULus Recognized	c UL us	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-20030211

	B	D
Nominal voltage UN	300 V	300 V
Nominal current IN	20 A	10 A
mm²/AWG/kcmil	20-12	20-12