

PCB terminal block - SPT 2,5/ 3-V-5,0 EX MCRDGNGYBD



1161105

<https://www.phoenixcontact.com/us/products/1161105>

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PCB terminal block, nominal current: 23 A, nominal cross section: 2.5 mm², number of potentials: 3, number of rows: 1, number of positions per row: 3, product range: SPT 2,5/..-V-EX, pitch: 5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 90 °, color: multi-color, Pin layout: Linear pinning, Solder pin [P]: 2.5 mm, number of solder pins per potential: 2, type of packaging: packed in cardboard. Satisfies the requirements of the "APL Port Profile Specification"

Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Clamping space opened by means of fixed screwdriver enables convenient conductor connection
- Operation and conductor connection from one direction enable integration into front of device
- Satisfies the more stringent safety requirements of "Ex eb" protection according to IEC 60079-7 for potentially explosive areas
- Two solder pins reduce the mechanical strain on the soldering spots

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Commercial Data

Item number	1161105
Packing unit	1 pc
Minimum order quantity	50 pc
Sales Key	A01
Product Key	AAMBFC
GTIN	4063151167882
Weight per Piece (including packing)	4.24 g
Weight per Piece (excluding packing)	3.81 g
Customs tariff number	85369010
Country of origin	PL

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Technical Data

Product properties

Product line	COMBICON Terminals M
Product type	Printed circuit board terminal
Number of positions	3
Pitch	5 mm
Number of connections	3
Number of rows	1
Number of potentials	3
Pin layout	Linear pinning

Electrical properties

Nominal current I_N	23 A
Nominal voltage U_N	176 V
Rated current / conductor cross section	23 A/2.5 mm ²
Pollution degree	3
Rated voltage (III/3)	176 V

Ex data

Ex approval

Identification	0344□ II 2GD / Ex eb IIC Gb
EU-type examination certificate	KEMA 07ATEX0193 U
IECEx certificate	IECEx KEM 07.0057 U

Connection data

Connection technology

Nominal cross section	2.5 mm ²
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Conductor connection

Connection method	Push-in spring connection
Conductor cross section solid	0.2 mm ² ... 4 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 2.5 mm ² (Stripping length 8 mm)
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 1.5 mm ² (Stripping length 8 mm)
Stripping length	10 mm

Mounting

Mounting type Wave soldering	Wave soldering
Mounting type	Wave soldering

Material specifications

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Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
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	multi-color
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

Dimensional drawing	
Pitch	5 mm
Width [w]	16.4 mm
Height [h]	16.9 mm
Length [l]	13.5 mm
Installed height	14.4 mm
Solder pin length [P]	2.5 mm

PCB design

Pin spacing	8.2 mm
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Electrical tests

Air clearances and creepage distances |

Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	176 V
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 mm
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	2 mm

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minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-50 °C ... 110 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard
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Approvals

 cULus Recognized Approval ID: E60425-20061129				
	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B	300 V	20 A	24 - 12	-
Use group D				
Use group C	150 V	15 A	24 - 12	-
Use group C	150 V	20 A	24 - 12	-

 EAC Ex Approval ID: B.00065/19				
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 ATEX Approval ID: KEMA 07ATEX0193 U				
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 IECEx Approval ID: IECEx KEM 07.0057U				
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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 - SZF 1-0,6X3,5 - 1204517

<https://www.phoenixcontact.com/us/products/1204517>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

Shield connection clamp

Shield connection clamp - ME-SAS MINI - 2200456

<https://www.phoenixcontact.com/us/products/2200456>



Shield connection clamp for terminal points starting from 1.5 mm²

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Shield connection clamp

Shield connection clamp - ME-SAS - 2853899

<https://www.phoenixcontact.com/us/products/2853899>

Shield connection clamp for terminal points starting from 2.5 mm²



Shield connection clamp

Shield connection clamp - SH-PCB 6 - 1322664

<https://www.phoenixcontact.com/us/products/1322664>

Shield connection, Shield connection clamp, connection method: Spring-cage connection, product range: ZUBEHOER, width: 11 mm



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