

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



1161105

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

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.



Printed circuit board terminal, nominal current: 22 A, nominal cross section: 2.5 mm<sup>2</sup>, 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, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: multicolored, 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

## Commercial data

Item number	1161105
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA13
Product key	AAMBFC
GTIN	4063151167882
Weight per piece (including packing)	4.204 g
Weight per piece (excluding packing)	3.81 g
Customs tariff number	85369010
Country of origin	PL

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



1161105

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

## Technical data

### Product properties

Product type	Printed circuit board terminal
Product family	SPT 2,5/...-V-EX
Product line	COMBICON Terminals M
Number of positions	3
Pitch	5 mm
Number of connections	3
Number of rows	1
Number of potentials	3
Pin layout	Linear pinning
Solder pins per potential	2

### Electrical properties

#### Properties

Nominal current $I_N$	22 A
Nominal voltage $U_N$	176 V
Rated current / conductor cross-section	22 A/2.5 mm <sup>2</sup>

#### Data transmission

Signal type	APL
Transmission medium	Copper
Transmission characteristics (category)	CAT A
Data transmission rate	10 Mbps

### Ex data

#### Ex approval

Identification	0344 <sup>Ex</sup> 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 <sup>2</sup>
-----------------------	---------------------

#### Conductor connection

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

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



1161105

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

Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Stripping length 8 mm)
Stripping length	10 mm

## Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

## Material specifications

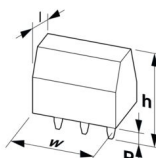
### Material data - contact

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 - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 µm Sn)

### Material data - housing

Color (Housing)	multicolored (-)
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
Pin dimensions	0.8 x 0.8 mm

### PCB design

Pin spacing	8.2 mm
Hole diameter	1.2 mm

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



1161105

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

## 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
-------------------	---------------------

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





1161105


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

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1161105>

 <b>cULus Recognized</b> Approval ID: E60425-20061129				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	300 V	20 A	24 - 12	-
D	150 V	15 A	24 - 12	-
C	150 V	20 A	24 - 12	-

 <b>ATEX</b> Approval ID: KEMA 07ATEX0193 U				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine	176 V	22 A	-	0.2 - 4

 <b>IECEx</b> Approval ID: IECEx KEM 07.0057U				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine	176 V	22 A	-	0.2 - 4

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



1161105

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

## Classifications

### ECLASS

ECLASS-13.0	27460101
ECLASS-15.0	27460101

### ETIM

ETIM 9.0	EC002643
----------	----------

### UNSPSC

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

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



1161105

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

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

### EF3.0 Climate Change

CO2e kg	0.038 kg CO2e
---------	---------------

Phoenix Contact 2025 © - 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)