

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



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, 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

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Technical data

Product properties

Product line	COMBICON Terminals M
Product type	Printed circuit board terminal
Product family	SPT 2,5/..-V-EX
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

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

Ex data

Ex approval

Identification	0344 ^{Ex} 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 rigid	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
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Pin layout	Linear pinning
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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
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

Electrical tests

Air clearances and creepage distances |

Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600

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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
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

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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	-
	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-11.0	27460101
ECLASS-12.0	27460101
ECLASS-13.0	27460101

ETIM

ETIM 9.0	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

SZF 1-0,6X3,5 - Screwdriver

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

ME-SAS MINI - Shield connection clamp

2200456

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



Shield connection clamp for terminal points starting from 1.5 mm²

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ME-SAS - Shield connection clamp

2853899

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

Shield connection clamp for terminal points starting from 2.5 mm²



SH-PCB 6 - Shield connection clamp

1322664

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

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



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CRIMPFOX 6 - Crimping pliers

1212034

<https://www.phoenixcontact.com/us/products/1212034>



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

SK 3,8 REEL P5 WH CUS - Marker card

0825124

<https://www.phoenixcontact.com/us/products/0825124>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: continuous x 3.8 mm

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