

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



1708299

<https://www.phoenixcontact.com/us/products/1708299>

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The figure shows a 10-position version of the product

PCB terminal block, nominal current: 22 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: black, Pin layout: Linear pinning, Solder pin [P]: 2.5 mm, number of solder pins per potential: 2, type of packaging: packed in cardboard

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	1708299
Packing unit	50 pc
Minimum order quantity	1 pc
Product key	AAMBFC
GTIN	4046356998215
Weight per piece (including packing)	4.151 g
Weight per piece (excluding packing)	3.875 g
Country of origin	PL

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Technical data

Product properties

Product type	PCB terminal block
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 ²

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 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
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
Surface characteristics	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (4 µm - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 µm - 8 µm Sn)

Material data - housing

Color (Housing)	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

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

Environmental and real-life conditions

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %

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Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-50 °C ... 110 °C

Packaging specifications

Type of packaging	packed in cardboard
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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1708299>

 cULus Recognized Approval ID: E60425-20061129				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B	300 V	20 A	24 - 12	-
D	150 V	15 A	24 - 12	-
C	150 V	20 A	24 - 12	-

 ATEX Approval ID: KEMA 07ATEX0193 U				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine	176 V	22 A	-	0.2 - 4

 IECEx Approval ID: IECEx KEM 07.0057U				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine	176 V	22 A	-	0.2 - 4

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Classifications

ECLASS

ECLASS-13.0	27460101
ECLASS-15.0	27460101

ETIM

ETIM 10.0	EC002643
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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%
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EF3.1 Climate Change

CO2e kg	0.041 kg CO2e
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