

1988820

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PCB terminal block, nominal current: 17.5 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm², number of potentials: 4, number of rows: 1, number of positions per row: 4, product range: PTA 1,5, pitch: 5 mm, connection method: Screw connection with wire protector, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear front pinning, Solder pin [P]: 3.5 mm, number of solder pins per potential: 1, 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
- · Angled connection enables multi-row arrangement on the PCB
- The latching on the side enables various numbers of positions to be combined



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Commercial Data

Item number	1988820
Packing unit	1 pc
Minimum order quantity	250 pc
Sales Key	A03
Product Key	AALFMF
Catalog Page	Page 421 (C-1-2013)
GTIN	4046356036818
Weight per Piece (including packing)	4.102 g
Weight per Piece (excluding packing)	4.096 g
Customs tariff number	85369010
Country of origin	GR



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Technical Data

Product properties

Туре	PC termination block
Product line	COMBICON Terminals S
Product type	Printed circuit board terminal
Number of positions	4
Pitch	5 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Pin layout	Linear front pinning

Electrical properties

Nominal current I _N	17.5 A
Nominal voltage U _N	400 V
Pollution degree	3
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV

Connection data

Connection technology

Туре	PC termination block
Nominal cross section	1.5 mm²

Conductor connection

Connection method	Screw connection with wire protector
Conductor cross section solid	0.14 mm² 2.5 mm²
Conductor cross section flexible	0.14 mm² 2.5 mm²
Conductor cross section AWG	26 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² 1.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 1.5 mm²
2 conductors with same cross section, solid	0.14 mm² 1 mm²
2 conductors with same cross section, flexible	0.14 mm² 0.75 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² 0.34 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.25 mm² 0.75 mm²
Stripping length	5 mm
Torque	0.35 Nm 0.4 Nm



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Mounting

Mounting type Wave soldering	Wave soldering
Mounting type	Wave soldering

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	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	green (6021)
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	ph ph
Pitch	5 mm
Width [w]	20 mm
Height [h]	15.4 mm
Length [I]	12.8 mm
Installed height	11.9 mm
Solder pin length [P]	3.5 mm
PCB design	

5 mm

Electrical tests

Pin spacing



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Air clearances and creepage distances |

Chapification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Specification	IEC 00947-1.2007-00 + A1.2010-12 + A2.2014-09
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 mm
Note on connection cross section	With connected conductor 2.5 mm² (solid).
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 mm
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
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)	-40 °C 100 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C 70 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 100 °C

Packaging specifications

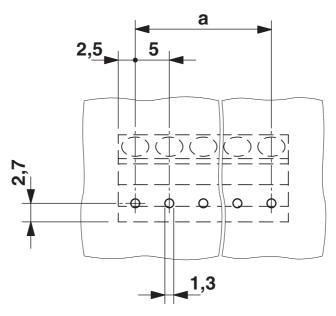


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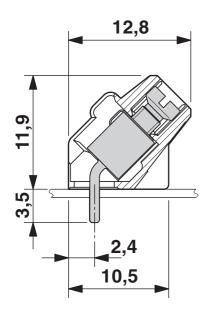


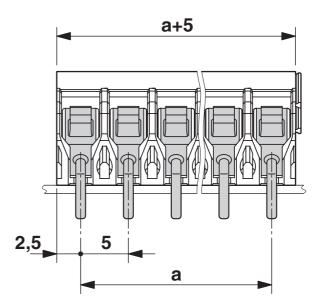
Drawings

Drilling plan/solder pad geometry



Dimensional drawing

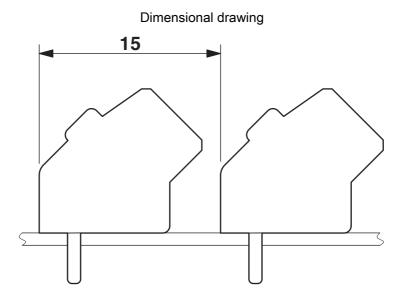


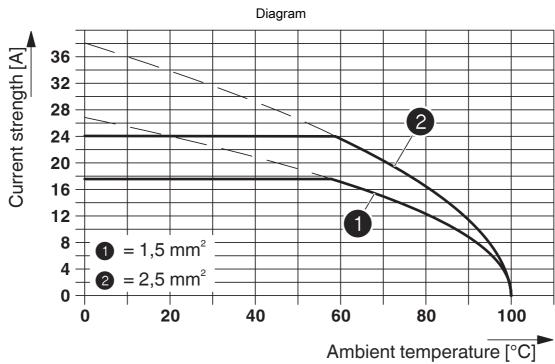




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Approvals

CB scheme	IECEE CB Scheme Approval ID: DE1-61760				
		Nominal Voltage U _N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
		250 V	24 A	-	0.2 - 2.5

EAC
Approval ID: B.01687

CULus Recognized Approval ID: E60425-20030211				
	Nominal Voltage U _N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
Use group B				
	300 V	15 A	26 - 12	-
Use group D				
	300 V	10 A	26 - 12	-

₹	VDE report with production monitoring Approval ID: 40031691				
		Nominal Voltage U_N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
		250 V	24 A	-	0.2 - 2.5



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Classifications

UNSPSC 21.0

ECLASS

ECLASS-9.0	27440401	
ECLASS-10.0.1	27440401	
ECLASS-11.0	27460101	
ETIM		
ETIM 8.0	EC002643	
UNSPSC		

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Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"



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Accessories

Screwdriver

Screwdriver - SZS 0,6X3,5 - 1205053 https://www.phoenixcontact.com/us/products/1205053



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

Marker card

Marker card - SK 5/3,8:FORTL.ZAHLEN - 0804183 https://www.phoenixcontact.com/us/products/0804183



Marker card, white, labeled, horizontal: consecutive numbers 1 \dots 10, 11 \dots 20, etc. up to 91 \dots (99)100, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: 5 x 3.8 mm

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