

1718647

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PCB terminal block, nominal current: 16 A, rated voltage (III/2): 630 V, nominal cross section: 1.5 mm², number of potentials: 6, number of rows: 1, number of positions per row: 6, product range: GSMKDSN 1,5, pitch: 7.62 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard. The article can be aligned to create different nos. of positions!

## Your advantages

- · Well-known connection principle allows worldwide use
- · Low temperature rise, thanks to maximum contact force
- · Allows connection of two conductors
- Extremely small design for the respective conductor cross section
- · Angled connection enables multi-row arrangement on the PCB
- · Larger pitch for increased voltage requirements
- The latching on the side enables various numbers of positions to be combined

#### Commercial data

Item number	1718647
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AA12
Product key	AALFHB
Catalog page	Page 119 (C-1-2013)
GTIN	4017918024864
Weight per piece (including packing)	7.85 g
Weight per piece (excluding packing)	7.35 g
Customs tariff number	85369010
Country of origin	DE



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## Technical data

### Product properties

Туре	PC terminal block can be aligned
Product line	COMBICON Terminals S
Product type	Printed circuit board terminal
Product family	GSMKDSN 1,5
Number of positions	6
Pitch	7.62 mm
Number of connections	6
Number of rows	1
Number of potentials	6
Pin layout	Linear pinning
Solder pins per potential	1

### Electrical properties

Nominal current I <sub>N</sub>	16 A
Nominal voltage U <sub>N</sub>	630 V
Degree of pollution	3
Rated voltage (III/3)	500 V
Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

#### Connection data

### Connection technology

Туре	PC terminal block can be aligned
Nominal cross section	1.5 mm²

#### Conductor connection

Connection method	Screw connection with tension sleeve
Conductor cross section rigid	0.14 mm² 1.5 mm²
Conductor cross section flexible	0.14 mm² 1.5 mm²
Conductor cross section AWG	26 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 1.5 mm²
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 0.75 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 0.5 mm²
2 conductors with the same cross section, flexible, with TWIN	0.5 mm² 1 mm²



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	ferrule with plastic sleeve	
	Stripping length	6 mm
	Tightening torque	0.5 Nm 0.6 Nm
Мс	punting	
	Mounting type	Wave soldering

Linear pinning

Slotted (L)

Slotted (L)

# Material specifications

Drive form screw head

Drive form screw head

Pin layout

#### 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 (5 - 7 μm Sn)
Metal surface terminal point (middle layer)	Nickel (2 - 3 µm Ni)
Metal surface soldering area (top layer)	Tin (5 - 7 μm Sn)
Metal surface soldering area (middle layer)	Nickel (2 - 3 µm Ni)

#### Material data - housing

Color (Housing)	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V2

#### Notes

Note on application	For safe conductor connection, always adhere to a defined tightening torque. Particularly in the case of PCB terminal blocks with two or three positions, the individual solder pin for each contact point cannot compensate for this. That is why the terminal blocks must be supported during conductor connection
	(held with one hand, support on the housing).

#### **Dimensions**

Dimensional drawing	n n
Pitch	7.62 mm
Width [w]	45.72 mm
Height [h]	14.5 mm



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Length [I]	12 mm	
Installed height	11 mm	
Solder pin length [P]	3.5 mm	
Pin dimensions	1 x 0.5 mm	
PCB design		
Hole diameter	1.3 mm	

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#### Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
Result	Test passed
Pull-out test	
Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	0.14 mm² / solid / > 10 N
	0.14 mm² / flexible / > 10 N
	1.5 mm² / solid / > 40 N
	1.5 mm² / flexible / > 40 N

## Electrical tests

### Temperature-rise test

Specification	IEC 60947-7-4:2019-01
Requirement temperature-rise test	The sum of ambient temperature and temperature rise of the PCB terminal block shall not exceed the upper limiting temperature.
Short-time withstand current	
Specification	IEC 60947-7-4:2019-01
Insulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

#### Air clearances and creenage distances I

Air clearances and creepage distances	
Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	500 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	6.3 mm
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
minimum clearance value - non-homogenous field (III/2)	5.5 mm
minimum creepage distance (III/2)	5.5 mm



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Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 mm

#### Environmental and real-life conditions

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Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz 60.1 Hz)
Sweep speed	5g (60.1 Hz 150 Hz)
Test duration per axis	2.5 h

#### Glow-wire test

Specification	IEC 60695-2-10:2013-04
Temperature	850 °C
Time of exposure	5 s

#### Aging

Specification	IEC 60947-7-4:2019-01
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#### Ambient conditions

Ambient temperature (operation)	-40 °C 105 °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

Type of packaging	packed in cardboard
71 1 0 0	•



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# Classifications

UNSPSC 21.0

### **ECLASS**

ECLASS-11.0	27460101
ECLASS-12.0	27460101
ECLASS-13.0	27460101
ETIM	
ETIM 9.0	EC002643
UNSPSC	

39121400



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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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