

1703086

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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: 4, number of rows: 1, number of positions per row: 4, product range: PTS 1,5/..-H, pitch: 7.5 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 2.5 mm, number of solder pins per potential: 1, 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
- · Finger-operated release button for very convenient operation
- · Quick and convenient testing using integrated test option
- · Largest possible clamping space in a small component size

Commercial data

Item number	1703086
Packing unit	250 pc
Minimum order quantity	250 pc
Sales key	AA12
Product key	AALBCB
Catalog page	Page 415 (C-1-2013)
GTIN	4046356635158
Weight per piece (including packing)	3.786 g
Weight per piece (excluding packing)	3.6 g
Customs tariff number	85369010
Country of origin	IN



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Technical data

Product properties

Туре	PC termination block
Product line	COMBICON Terminals S
Product type	Printed circuit board terminal
Product family	PTS 1,5/H
Number of positions	4
Pitch	7.5 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Pin layout	Linear pinning
Solder pins per potential	1

Electrical properties

Nominal current I _N	16 A
Nominal voltage U _N	630 V
Degree of pollution	3
Rated voltage (III/3)	400 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 termination block
Nominal cross section	1.5 mm ²

Conductor connection

Connection method	Push-in spring connection
Conductor cross section rigid	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 mm² 1.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 1.5 mm²
Stripping length	8 mm

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning



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Process 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	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)	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

Material data - actuating element

Color (Actuating element)	green (6021)
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Dimensions

Dimensional drawing	h p
Pitch	7.5 mm
Width [w]	27.5 mm
Height [h]	16.1 mm
Length [I]	10.5 mm
Installed height	13.6 mm
Solder pin length [P]	2.5 mm
Pin dimensions	0.83 x 0.5 mm
PCB design	
Hole diameter	1.2 mm

Mechanical tests



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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
	2.5 mm² / solid / > 50 N
	2.5 mm² / flexible / > 50 N

Electrical tests

Temperature-rise test

Specification

Specification	IEC 60947-7-4:2013-08
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	temperature.

IEC 60512-3-1:2002-02

> 5 MΩ

A: 1

Insulation resistance, neighboring positions

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)	400 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	5.5 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
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

Vibration test

Specification	IEC 60068-2-6:2007-12
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Specification IEC 60695-2-10:2013-04 Temperature 850 °C Time of exposure 5 s ging Specification IEC 60947-7-4:2013-08 Milent conditions Ambient temperature (operation) -40 °C 100 °C (Depending on the current car capacity/derating curve)		
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 60947-7-4:2013-08 Ambient conditions Ambient temperature (operation) -40 °C 100 °C (Depending on the current car capacity/derating curve)	Frequency	10 - 150 - 10 Hz
Sweep speed 5g (60.1 Hz 150 Hz) Test duration per axis 2.5 h Slow-wire test Specification IEC 60695-2-10:2013-04 Temperature 850 °C Time of exposure 5 s Aging Specification IEC 60947-7-4:2013-08 Ambient conditions Ambient temperature (operation) -40 °C 100 °C (Depending on the current car capacity/derating curve)	Sweep speed	1 octave/min
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 60947-7-4:2013-08 Ambient conditions Ambient temperature (operation) -40 °C 100 °C (Depending on the current car capacity/derating curve)	Amplitude	0.35 mm (10 Hz 60.1 Hz)
Specification IEC 60695-2-10:2013-04 Temperature 850 °C Time of exposure 5 s Aging Specification IEC 60947-7-4:2013-08 Ambient conditions Ambient temperature (operation) -40 °C 100 °C (Depending on the current car capacity/derating curve)	Sweep speed	5g (60.1 Hz 150 Hz)
Specification IEC 60695-2-10:2013-04 Temperature 850 °C Time of exposure 5 s Aging Specification IEC 60947-7-4:2013-08 Ambient conditions Ambient temperature (operation) -40 °C 100 °C (Depending on the current car capacity/derating curve)	Test duration per axis	2.5 h
Temperature 850 °C Time of exposure 5 s Anging Specification IEC 60947-7-4:2013-08 Ambient conditions Ambient temperature (operation) -40 °C 100 °C (Depending on the current car capacity/derating curve)	Slow-wire test	
Time of exposure 5 s Aging Specification IEC 60947-7-4:2013-08 Ambient conditions Ambient temperature (operation) -40 °C 100 °C (Depending on the current car capacity/derating curve)	Specification	IEC 60695-2-10:2013-04
Specification IEC 60947-7-4:2013-08 Ambient conditions Ambient temperature (operation) -40 °C 100 °C (Depending on the current car capacity/derating curve)	Temperature	850 °C
Specification IEC 60947-7-4:2013-08 Ambient conditions -40 °C 100 °C (Depending on the current car capacity/derating curve)	Time of exposure	5 s
Ambient conditions Ambient temperature (operation) -40 °C 100 °C (Depending on the current car capacity/derating curve)	ging	
Ambient temperature (operation) -40 °C 100 °C (Depending on the current car capacity/derating curve)	Specification	IEC 60947-7-4:2013-08
capacity/derating curve)	mbient conditions	
Ambient temperature (storage/transport) -40 °C 70 °C	Ambient temperature (operation)	-40 °C 100 °C (Depending on the current carrying capacity/derating curve)
7 insient temperature (storage/transport)	Ambient temperature (storage/transport)	-40 °C 70 °C
Relative humidity (storage/transport) 30 % 70 %	Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly) -5 °C 100 °C	Ambient temperature (assembly)	-5 °C 100 °C
	ckaging specifications	
ckaging specifications	Type of packaging	packed in cardboard
ckaging specifications Type of packaging packed in cardboard		



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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	

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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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