

1477323

https://www.phoenixcontact.com/us/products/1477323

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PCB terminal block, nominal current: 18 A, rated voltage (III/2): 300 V, nominal cross section: 2.5  $\,$  mm², number of potentials: 4, number of rows: 1, number of positions per row: 4, product range: ICC..-TP2,5/..L5,0, pitch: 5 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: yellow, Pin layout: Linear pinning, number of solder pins per potential: 1, type of packaging: packed in cardboard. Product with pin output on left side

### Your advantages

- · Orthogonal alignment of the terminal block with the PCB for optimum accessibility in DIN-rail-mounted devices
- · Push-in technology for quick and easy wiring
- · Fixed wiring and a reduced number of individual parts
- · Choice between different pitches
- · Intuitive operation due to color-coded actuating push button

#### Commercial data

Item number	1477323
Packing unit	50 pc
Minimum order quantity	50 pc
Product key	ACHAFA
GTIN	4063151891220
Country of origin	PL



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## Technical data

#### Product properties

Product type	Printed circuit board terminal
Product family	ICCTP2,5/L5,0
Product line	COMBICON Terminals M
Number of positions	4
Pitch	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 <sub>N</sub>	18 A
Nominal voltage U <sub>N</sub>	300 V
Degree of pollution	3
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	300 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	600 V
Rated surge voltage (II/2)	4 kV

### Connection data

#### Connection technology

Nominal cross section	2.5 mm <sup>2</sup>
Interlock	
Locking type	without
Conductor connection	
Connection method	Push-in spring connection
Conductor cross section rigid	0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 2.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 2.5 mm²
2 conductors with the same cross section, flexible, with TWIN	0.5 mm² 1.5 mm²

10 mm

### Mounting

ferrule with plastic sleeve

Stripping length



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Mounting type	Wave soldering
Pin layout	Linear pinning
rocessing notes	
Process	Wave soldering
erial specifications	
aterial 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 (Sn)
Metal surface soldering area (top layer)	Tin (Sn)
Metal surface soldering area (middle layer)	Nickel (Ni)
aterial data - housing	
Color (Housing)	yellow (1018)
Insulating material	PA
Insulating material group	T
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
aterial data – actuating element	
Color (Actuating element)	orange (2003)
Insulating material	PBT GF
Insulating material group	Illa
CTI according to IEC 60112	275
Flammability rating according to UL 94	V0
es	
Recommendation	Further information and detailed dimensions are available in th
Neconinentation	download area.
General	We recommend using a soldering frame.
ensions	
Pitch	5 mm
Width [w]	25 mm
Height [h]	22.4 mm
Length [I]	23.05 mm
Pin dimensions	0.8 x 1 mm



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PCB design	
Hole diameter	1.4 mm
lechanical tests	
Test for conductor damage and slackening	
Specification	IEC 60999-1:1999-11
Result	Test passed
Repeated connection and disconnection	
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	0.2 mm² / solid / > 10 N
setpoint/actual value	0.2 mm² / flexible / > 10 N
	2.5 mm² / solid / > 50 N
	2.5 mm² / flexible / > 50 N
Specification  Requirement temperature-rise test	IEC 60947-7-4:2019-01  The sum of ambient temperature and temperature rise of the PCB terminal block shall not exceed the upper limiting temperature.
Obsel Cons. Shelmada, mad	temperature.
Short-time withstand current Specification	IEC 60947-7-4:2019-01
Cpcomodion	120 00047 1 4.2010 01
Insulation resistance	
Specification	IEC 60512-3-1:2002-02
	IEC 60512-3-1:2002-02 > 5 MΩ
Specification	
Specification Insulation resistance, neighboring positions	
Specification Insulation resistance, neighboring positions Temperature cycles	> 5 MΩ
Specification Insulation resistance, neighboring positions  Temperature cycles Specification	> 5 MΩ IEC 60999-1:1999-11
Specification Insulation resistance, neighboring positions  Temperature cycles Specification Result	> 5 MΩ IEC 60999-1:1999-11
Specification Insulation resistance, neighboring positions  Temperature cycles Specification Result  Air clearances and creepage distances	> 5 MΩ  IEC 60999-1:1999-11  Test passed
Specification Insulation resistance, neighboring positions  Temperature cycles Specification Result  Air clearances and creepage distances   Specification	> 5 MΩ  IEC 60999-1:1999-11  Test passed  IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Specification Insulation resistance, neighboring positions  Temperature cycles Specification Result  Air clearances and creepage distances   Specification Insulating material group	> 5 MΩ  IEC 60999-1:1999-11  Test passed  IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09 I
Specification Insulation resistance, neighboring positions  Temperature cycles Specification Result  Air clearances and creepage distances   Specification Insulating material group Comparative tracking index (IEC 60112)	> 5 MΩ  IEC 60999-1:1999-11  Test passed  IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09  I  CTI 600
Specification Insulation resistance, neighboring positions  Temperature cycles Specification Result  Air clearances and creepage distances   Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3)	> 5 MΩ  IEC 60999-1:1999-11  Test passed  IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09  I  CTI 600 250 V
Specification Insulation resistance, neighboring positions  Temperature cycles Specification Result  Air clearances and creepage distances   Specification Insulating material group Comparative tracking index (IEC 60112) Rated insulation voltage (III/3) Rated surge voltage (III/3)	> 5 MΩ  IEC 60999-1:1999-11  Test passed  IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09  I  CTI 600  250 V  4 kV



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Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	1.6 mm
Rated insulation voltage (II/2)	600 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

#### Vibration test

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)
Acceleration	20 m/s² (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

#### Ambient conditions

Ambient temperature (operation)	-40 °C 105 °C (Depending on the current carrying capacity/derating curve)
Ambient temperature (storage/transport)	-40 °C 55 °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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## Classifications

#### **ECLASS**

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



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## Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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