

FRONT 4-H-6,35 - PCB terminal block



1703050

<https://www.phoenixcontact.com/us/products/1703050>

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PCB terminal block, nominal current: 32 A, rated voltage (III/2): 320 V, nominal cross section: 4 mm², number of potentials: 1, number of rows: 1, number of positions per row: 1, product range: FRONT 4-H, pitch: 6.35 mm, connection method: Front screw connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 5 mm, number of solder pins per potential: 2, 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
- Operation and conductor connection from one direction enable integration into front of device

Commercial data

Item number	1703050
Packing unit	1 pc
Minimum order quantity	50 pc
Sales key	AA14
Product key	AANFAB
Catalog page	Page 459 (C-1-2013)
GTIN	4017918023072
Weight per piece (including packing)	8.089 g
Weight per piece (excluding packing)	7.93 g
Customs tariff number	85369010
Country of origin	BG

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Technical data

Product properties

Type	PC terminal block can be aligned
Product line	COMBICON Terminals L
Product type	Printed circuit board terminal
Product family	FRONT 4-H
Number of positions	1
Pitch	6.35 mm
Number of connections	1
Number of rows	1
Number of potentials	1
Pin layout	Linear pinning
Solder pins per potential	2

Electrical properties

Nominal current I_N	32 A
Nominal voltage U_N	320 V
Degree of pollution	3
Rated voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

Connection data

Connection technology

Type	PC terminal block can be aligned
Nominal cross section	4 mm ²

Conductor connection

Connection method	Front screw connection
Conductor cross section rigid	0.5 mm ² ... 6 mm ²
Single-conductor/terminal point multi-stranded	0.5 mm ² ... 6 mm ²
Conductor cross section flexible	0.5 mm ² ... 6 mm ²
Conductor cross section AWG	20 ... 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm ² ... 4 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm ² ... 2.5 mm ²
2 conductors with same cross section, solid	0.5 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible	0.5 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1 mm ²

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2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 1 mm ²
Stripping length	14 mm
Tightening torque	0.5 Nm ... 0.6 Nm

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning
Connection method	Front screw connection

Material specifications

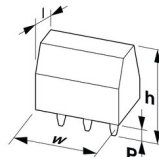
Material data - contact

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 (5 - 7 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

Dimensions

Dimensional drawing	
Pitch	6.35 mm
Width [w]	7.85 mm
Height [h]	33 mm
Length [l]	26 mm
Installed height	26 mm
Solder pin length [P]	5 mm
Pin dimensions	1 x 0.8 mm

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Mechanical tests

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	0.5 mm ² / solid / > 20 N
	0.5 mm ² / flexible / > 20 N
	6 mm ² / solid / > 80 N
	6 mm ² / flexible / > 80 N

Electrical tests

Temperature-rise test

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

Specification	IEC 60947-7-4:2013-08
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Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	4 mm
Rated insulation voltage (III/2)	320 V
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)	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

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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)
Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

Glow-wire test

Specification	IEC 60695-2-10:2000-10
Temperature	850 °C
Time of exposure	5 s

Aging

Specification	IEC 60947-7-4:2013-08
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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

Type of packaging	packed in cardboard
Outer packaging type	Carton

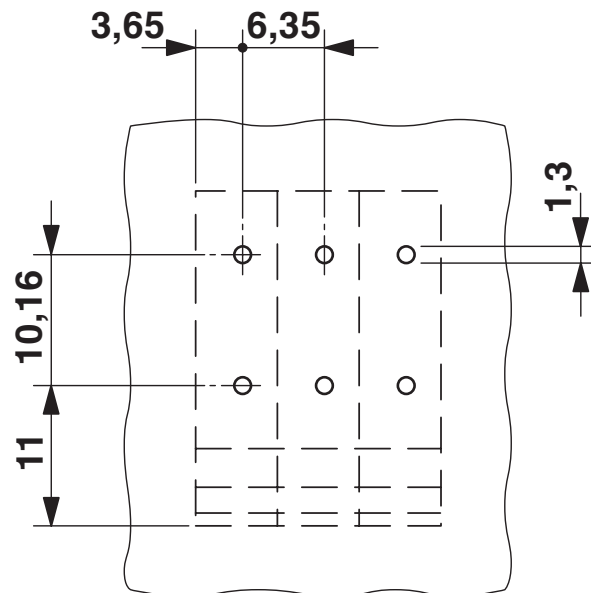
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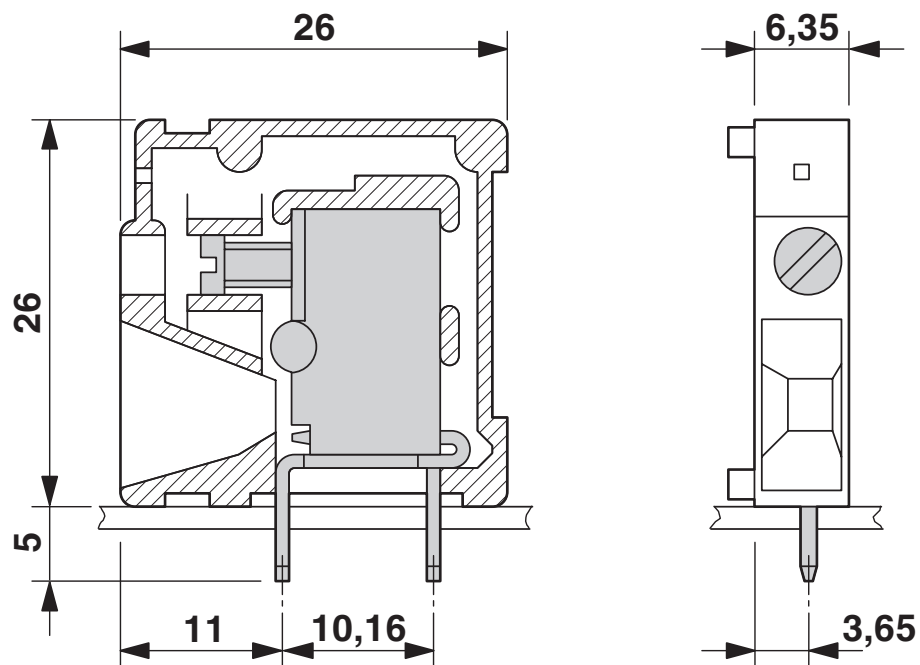
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Drawings

Drilling plan/solder pad geometry



Dimensional drawing

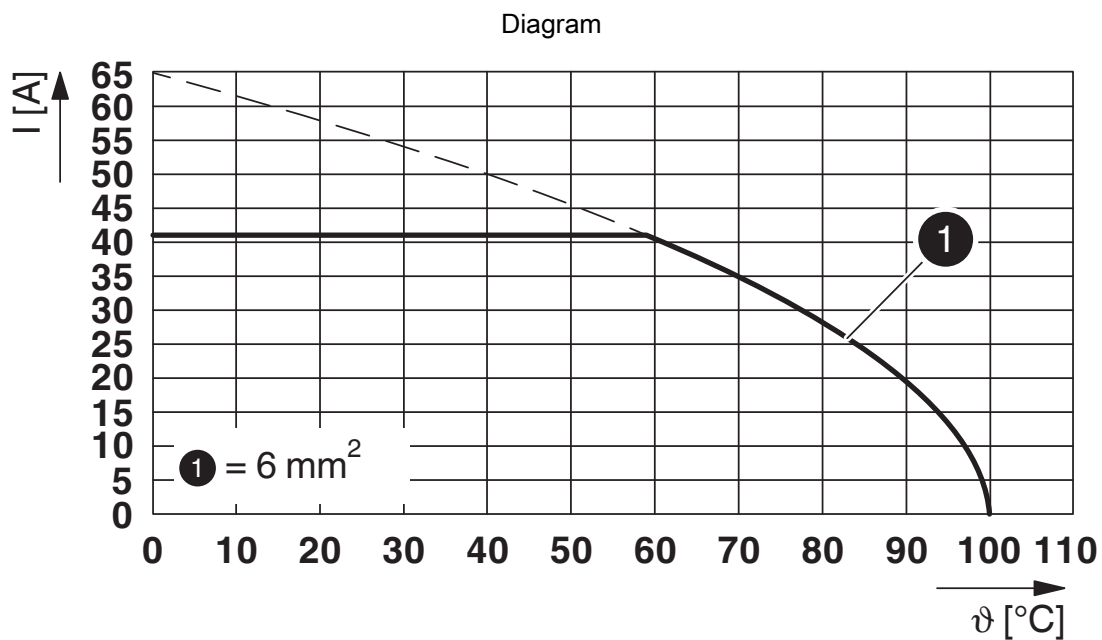


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Type: FRONT 4-H-6,35

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1703050>

 CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	300 V	30 A	22 - 10	-
Use group D	300 V	10 A	22 - 10	-

 EAC Approval ID: B.01687				
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 cULus Recognized Approval ID: E60425-19860303				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	300 V	30 A	24 - 10	-
Use group D	300 V	10 A	24 - 10	-

 DNV GL Approval ID: TAE00001EV				
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Classifications

ECLASS

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

ETIM

ETIM 8.0	EC002643
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UNSPSC

UNSPSC 21.0	39121400
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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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Accessories

D-FRONT 4-6,35 - End cover

1703076

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End cover, necessary at the end of a terminal row, 1.5 mm thick, color: green

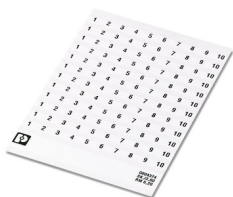


SK 6,2/3,8:FORTL.ZAHLEN - Marker card

0804374

<https://www.phoenixcontact.com/us/products/0804374>

Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 6.2 mm, lettering field size: 6.2 x 3.8 mm



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SZS 0,6X3,5 - Screwdriver

1205053

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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

SK 6,2/3,8:UNBEDRUCKT - Marker card

0805425

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Marker card, Din A4, white, unlabeled, can be labeled with: Marker pen: without print, mounting type: adhesive, for terminal block width: 6.2 mm, lettering field size: 6.2 x 3.8 mm, Number of individual labels: 1

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D-FRONT 4-6,35 - End cover

1703076

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End cover, necessary at the end of a terminal row, 1.5 mm thick, color: green



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