

FRONT 4-V-7,62 - PCB terminal block



1703021

<https://www.phoenixcontact.com/us/products/1703021>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



PCB terminal block, nominal current: 32 A, rated voltage (III/2): 630 V, nominal cross section: 4 mm², number of potentials: 1, number of rows: 1, number of positions per row: 1, product range: FRONT 4-V, pitch: 7.62 mm, connection method: Front screw connection, mounting: Wave soldering, conductor/PCB connection direction: 90 °, 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	1703021
Packing unit	1 pc
Minimum order quantity	50 pc
Sales key	AA14
Product key	AANFAC
Catalog page	Page 461 (C-1-2013)
GTIN	4017918023041
Weight per piece (including packing)	9.011 g
Weight per piece (excluding packing)	8.5 g
Customs tariff number	85369010
Country of origin	BG

FRONT 4-V-7,62 - PCB terminal block



1703021

<https://www.phoenixcontact.com/us/products/1703021>

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-V
Number of positions	1
Pitch	7.62 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	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

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
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 ... 4 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
2 conductors with the same cross section, flexible, with TWIN	0.5 mm ² ... 1 mm ²

FRONT 4-V-7,62 - PCB terminal block

1703021

<https://www.phoenixcontact.com/us/products/1703021>

ferrule with plastic sleeve	
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

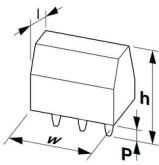
Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Tin-plated
Metal surface terminal point (top layer)	Tin (5 - 7 µm Sn)
Metal surface soldering area (top layer)	Tin (5 - 7 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	7.62 mm
Width [w]	7.62 mm
Height [h]	32 mm
Length [l]	27 mm
Installed height	26 mm
Solder pin length [P]	5 mm
Pin dimensions	1 x 0.8 mm

Mechanical tests

FRONT 4-V-7,62 - PCB terminal block



1703021

<https://www.phoenixcontact.com/us/products/1703021>

Test for conductor damage and slackening

Specification	IEC 60998-2-1:1990-04
Result	Test passed

Pull-out test

Specification	IEC 60998-2-1:1990-04
Conductor cross section/conductor type/tractive force setpoint/actual value	0.5 mm ² / solid / > 30 N
	0.5 mm ² / flexible / > 30 N
	6 mm ² / solid / > 80 N
	4 mm ² / flexible / > 60 N

Torque test

Specification	IEC 60998-2-1:1990-04
---------------	-----------------------

Electrical tests

Temperature-rise test

Specification	IEC 60998-2-1:1990-04
Requirement temperature-rise test	Increase in temperature ≤ 45 K

Insulation resistance

Specification	IEC 60998-2-1:1990-04
Insulation resistance, neighboring positions	10 ⁹ Ω

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)	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
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 60068-2-6:1995-03
Frequency	10 - 150 - 10 Hz

FRONT 4-V-7,62 - PCB terminal block



1703021

<https://www.phoenixcontact.com/us/products/1703021>

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 60998-2-1:1990-04
Temperature	850 °C
Time of exposure	5 s

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
-------------------	---------------------

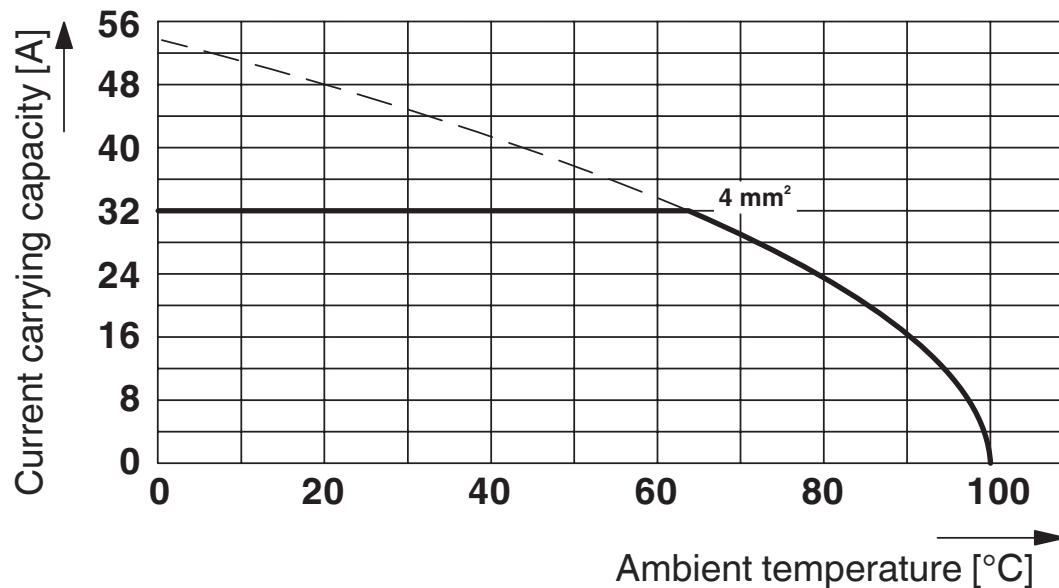
FRONT 4-V-7,62 - PCB terminal block

1703021

<https://www.phoenixcontact.com/us/products/1703021>

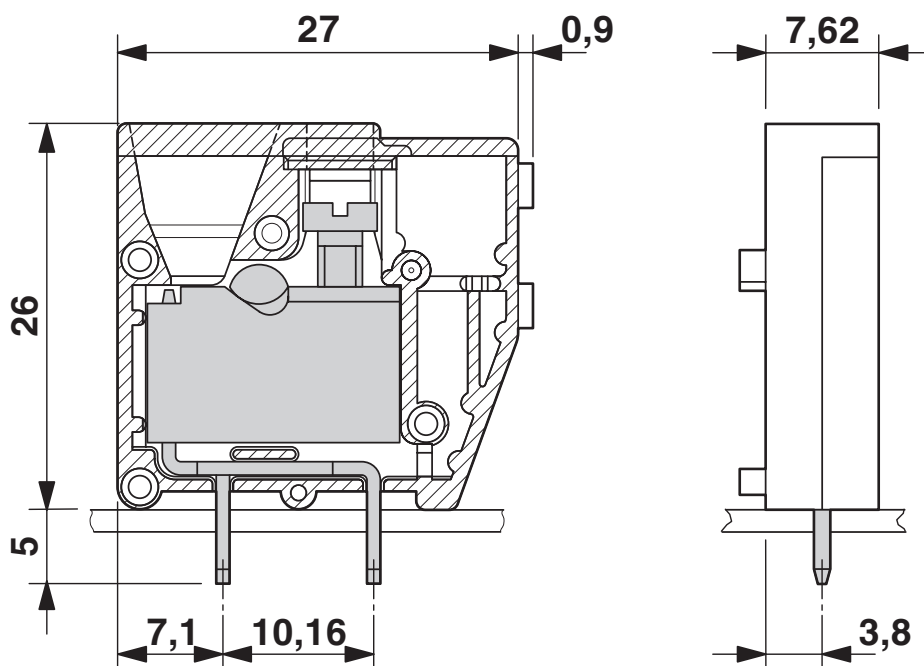
Drawings

Diagram



Type: FRONT 4-V-7,62

Dimensional drawing



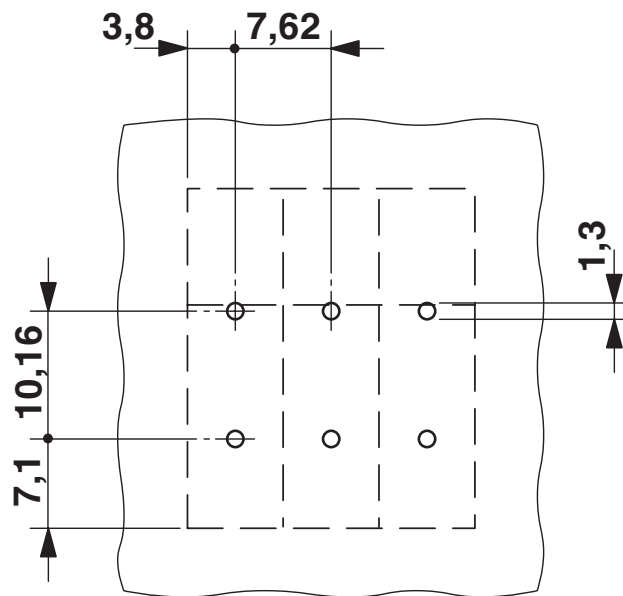
FRONT 4-V-7,62 - PCB terminal block

1703021

<https://www.phoenixcontact.com/us/products/1703021>



Drilling plan/solder pad geometry



FRONT 4-V-7,62 - PCB terminal block




1703021


<https://www.phoenixcontact.com/us/products/1703021>


Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1703021>

 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				
--	--	--	--	--

 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				
--	--	--	--	--

FRONT 4-V-7,62 - PCB terminal block



1703021

<https://www.phoenixcontact.com/us/products/1703021>

Classifications

ECLASS

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

ETIM

ETIM 8.0	EC002643
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

FRONT 4-V-7,62 - PCB terminal block



1703021

<https://www.phoenixcontact.com/us/products/1703021>

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

FRONT 4-V-7,62 - PCB terminal block



1703021

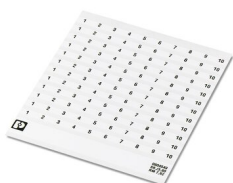
<https://www.phoenixcontact.com/us/products/1703021>

Accessories

SK 7,62/3,8:FORTL.ZAHLEN - Marker card

0804549

<https://www.phoenixcontact.com/us/products/0804549>



Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: adhesive, for terminal block width: 7.62 mm, lettering field size: 7.62 x 3.8 mm

SZS 0,6X3,5 - Screwdriver

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

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA

586 Fulling Mill Road

Middletown, PA 17057, United States

(+717) 944-1300

info@phoenixcon.com