

1791761

https://www.phoenixcontact.com/us/products/1791761

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: 15 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm², number of potentials: 1, number of rows: 1, number of positions per row: 1, product range: FFKDS(A)/V1, pitch: 5.08 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 3.4 mm, number of solder pins per potential: 2, 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
- · Intuitive operation due to color-coded actuating push button
- · Operation and conductor connection from one direction enable integration into front of device
- Two solder pins reduce the mechanical strain on the soldering spots
- The latching on the side enables various numbers of positions to be combined
- · Vertical connection enables multi-row arrangement on the PCB

### Commercial data

Item number	1791761
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA12
Product key	AALBAK
GTIN	4017918228804
Weight per piece (including packing)	1.216 g
Weight per piece (excluding packing)	0.836 g
Customs tariff number	85369010
Country of origin	GR



https://www.phoenixcontact.com/us/products/1791761



### Technical data

### Product properties

Product type	Printed circuit board terminal
Product family	FFKDS(A)/V1
Product line	COMBICON Terminals S
Туре	PC terminal block can be aligned
Number of positions	1
Pitch	5.08 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 <sub>N</sub>	15 A
Nominal voltage U <sub>N</sub>	400 V
Degree of pollution	3
Rated voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	400 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

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

#### Conductor connection

Connection method	Push-in spring connection
Conductor cross section rigid	0.2 mm² 1.5 mm²
Conductor cross section flexible	0.2 mm² 1.5 mm²
Conductor cross section AWG	24 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² 0.75 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² 0.75 mm²
Stripping length	10 mm

### Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning



https://www.phoenixcontact.com/us/products/1791761



### 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 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	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)	orange (2003)
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	ph ph
Pitch	5.08 mm
Width [w]	7.62 mm
Height [h]	17 mm



1791761

https://www.phoenixcontact.com/us/products/1791761

Length [I]	12.7 mm
Installed height	13.6 mm
Solder pin length [P]	3.4 mm
Pin dimensions	0.5 x 1 mm
PCB design	
Pin spacing	7.62 mm
Hole diameter	1.3 mm
Mechanical tests	
Test for conductor damage and slackening	
Specification	IEC 60999-1:1990-05

Pu	II-oi	ıŧ	test

Result

Pull-out test	
Specification	IEC 60999-1:1990-05
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm <sup>2</sup> / solid / > 10 N
	0.2 mm² / flexible / > 10 N
	1.5 mm² / solid / > 40 N
	1.5 mm² / flexible / > 40 N

Test passed

IEC 60998-1:1990-04

#### Electrical tests

#### Temperature-rise test

Specification

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Insulation resistance	
Specification	IEC 60512-2:1985-00
Insulation resistance, neighboring positions	10 <sup>12</sup> Ω

#### Air clearances and creepage distances |

7 an elegationed and elegation	
Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Insulating material group	l I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	250 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	3.2 mm
Rated insulation voltage (III/2)	400 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 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



1791761

https://www.phoenixcontact.com/us/products/1791761

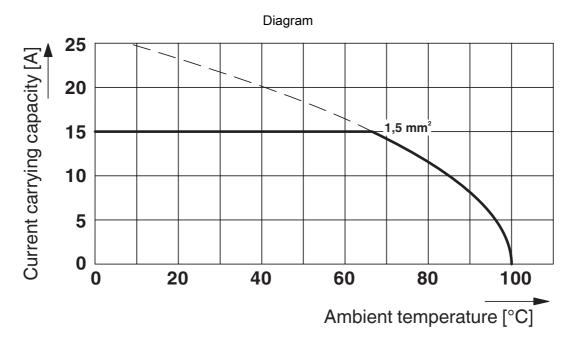
minimum creepage distance (II/2)	3.2 mm
nvironmental and real-life conditions	
Vibration test	
Specification	IEC 60068-2-6:1982 + AMD 2:1985
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz 60.1 Hz)
Acceleration	5g (60.1 Hz 150 Hz)
Test duration per axis	2.5 h
Aging	
Specification	DIN VDE 0627:1993-05
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
ackaging specifications	
Type of packaging	packed in cardboard



https://www.phoenixcontact.com/us/products/1791761



## Drawings



Type: FFKDS/V1-5,08
Test following DIN EN 60512-5-2:2003-01
Peduation factor = 1

Reduction factor = 1 No. of positions: 5



1791761

https://www.phoenixcontact.com/us/products/1791761

## Classifications

UNSPSC 21.0

#### **ECLASS**

ECLASS-	11.0	27460101
ECLASS-	12.0	27460101
ECLASS-	13.0	27460101
ETIM		
ETIM 8.0		EC002643
UNSPSC		

39121400



1791761

https://www.phoenixcontact.com/us/products/1791761

## Environmental product compliance

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%



https://www.phoenixcontact.com/us/products/1791761



### Mandatory accessories

#### FFKDSAL/V1-7,62 - PCB terminal block

1791758

https://www.phoenixcontact.com/us/products/1791758



PCB terminal block, nominal current: 17.5 A, rated voltage (III/2): 630 V, nominal cross section: 1.5 mm², number of potentials: 1, number of rows: 1, number of positions per row: 1, product range: FFKDS(A)/V1, pitch: 7.62 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 90 °, color: green, Pin layout: Linear double pinning, Solder pin [P]: 3.4 mm, number of solder pins per potential: 2, type of packaging: packed in cardboard

#### Accessories

#### SK 5,08/3,8:FORTL.ZAHLEN - Marker card

0804293

https://www.phoenixcontact.com/us/products/0804293



Marker card, white, labeled, horizontal: consecutive numbers 1  $\dots$  10, 11  $\dots$  20, etc. up to 91  $\dots$  (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm



1791761

https://www.phoenixcontact.com/us/products/1791761

#### SZF 1-0,6X3,5 - Screwdriver

1204517

https://www.phoenixcontact.com/us/products/1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size:  $0.6 \times 3.5 \times 100$  mm, 2-component grip, with non-slip grip

Phoenix Contact 2024 © - 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