

1790335

https://www.phoenixcontact.com/us/products/1790335

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)/H1, pitch: 5.08 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, 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. Single module for the custom grouping of different numbers of positions. An end terminal block is also needed to terminate the block (see accessories). Blocked items with different numbers of positions are also available.

### 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

#### Commercial data

Item number	1790335
Packing unit	250 pc
Minimum order quantity	250 pc
Sales key	AA12
Product key	AALBAG
Catalog page	Page 147 (C-1-2013)
GTIN	4017918044244
Weight per piece (including packing)	0.993 g
Weight per piece (excluding packing)	0.98 g
Customs tariff number	85369010
Country of origin	GR



https://www.phoenixcontact.com/us/products/1790335



### Technical data

#### Product properties

Product type	Printed circuit board terminal
Product family	FFKDS(A)/H1
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
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 mm <sup>2</sup> 1.5 mm <sup>2</sup>
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/1790335



### 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]	16.15 mm



1790335

https://www.phoenixcontact.com/us/products/1790335

Length [I]	13.65 mm
Installed height	12.75 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

#### Electrical tests

#### Air clearances and creepage distances |

Specification	IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09
Insulating material group	1
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
minimum creepage distance (II/2)	3.2 mm

#### Environmental and real-life conditions

#### 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

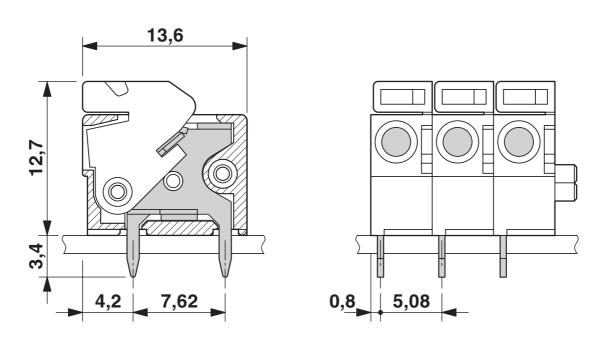


https://www.phoenixcontact.com/us/products/1790335

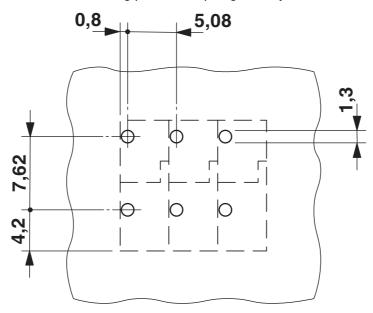


## Drawings

#### Dimensional drawing



### Drilling plan/solder pad geometry





1790335

https://www.phoenixcontact.com/us/products/1790335

### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1790335

CULus Recogn Approval ID: E6042	CULus Recognized Approval ID: E60425-19870330			
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	10 A	24 - 16	-
Use group D				
	300 V	10 A	24 - 16	-

KEUR	KEMA-KEUR Approval ID: 2160724.01				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	-	-	0.2 - 1.5



1790335

https://www.phoenixcontact.com/us/products/1790335

### Classifications

UNSPSC 21.0

#### **ECLASS**

ECLASS-11.0	27460101	
ECLASS-12.0	27460101	
ECLASS-13.0	27460101	
ETIM		
ETIM 9.0	EC002643	
UNSPSC		

39121400



1790335

https://www.phoenixcontact.com/us/products/1790335

## Environmental product compliance

EU I	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%



https://www.phoenixcontact.com/us/products/1790335



#### Mandatory accessories

#### FFKDSA1/H1-7,62 - PCB terminal block

1790513

https://www.phoenixcontact.com/us/products/1790513



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)/H1, pitch: 7.62 mm, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, 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. End terminal block for terminating custom-grouped blocks.

#### 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



1790335

https://www.phoenixcontact.com/us/products/1790335

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