

1791868

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Printed circuit board terminal, nominal current: 6 A, rated voltage (III/2): 160 V, nominal cross section: 0.5 mm², number of potentials: 1, number of rows: 1, number of positions per row: 1, product range: FFKDS(A) 0,5/..-H, pitch: 2.54 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.

### 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

#### Commercial data

Item number	1791868
Packing unit	250 pc
Minimum order quantity	250 pc
Sales key	AA11
Product key	AAKBBB
GTIN	4017918044473
Weight per piece (including packing)	0.78 g
Weight per piece (excluding packing)	0.679 g
Customs tariff number	85369010
Country of origin	CZ



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## Technical data

#### Product properties

Product type	Printed circuit board terminal
Product family	FFKDS(A) 0,5/H
Product line	COMBICON Terminals XS
Туре	End terminal
Number of positions	1
Pitch	2.54 mm
Number of connections	1
Number of rows	1
Number of potentials	1
Pin layout	Linear pinning
Solder pins per potential	2

#### Electrical properties

#### Properties

Nominal current I <sub>N</sub>	6 A
Nominal voltage U <sub>N</sub>	160 V
Rated voltage (III/3)	63 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
Rated voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV

### Connection data

### Connection technology

Туре	PC terminal block can be aligned
Nominal cross section	0.5 mm <sup>2</sup>
Conductor connection	
Connection method	Push-in spring connection
Conductor cross section rigid	0.14 mm² 0.5 mm²
Conductor cross section flexible	0.14 mm² 0.5 mm²
Conductor cross section AWG	26 20
Stripping length	11 mm

### Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

### Material specifications



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#### 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	h h
Pitch	2.54 mm
Width [w]	5.04 mm
Height [h]	16 mm
Length [I]	13.6 mm
Installed height	12.6 mm



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Solder pin length [P]	3.4 mm
Pin dimensions	0.5 x 0.8 mm
PCB design	
PCB design Pin spacing	5.08 mm

#### Mechanical tests

#### Test for conductor damage and slackening

Specification	IEC 60999-1:1990-05
Result	Test passed
Pull-out test	
Specification	IEC 60999-1:1990-05
Conductor cross section/conductor type/tractive force setpoint/actual value	0.14 mm² / solid / > 7 N
	0.2 mm² / flexible / > 10 N
	$0.5 \text{ mm}^2 / \text{solid} / > 30 \text{ N}$
	0.5 mm² / flexible / > 30 N

#### 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

IEC 60998-1:1990-04

#### Air clearances and creepage distances I

Air clearances and creepage distances			
Specification	IEC 60664-1:2007-04		
Insulating material group	I I		
Comparative tracking index (IEC 60112)	CTI 600		
Rated insulation voltage (III/3)	63 V		
Rated surge voltage (III/3)	2.5 kV		
minimum clearance value - non-homogenous field (III/3)	1.5 mm		
minimum creepage distance (III/3)	1.6 mm		
Rated insulation voltage (III/2)	160 V		
Rated surge voltage (III/2)	2.5 kV		
minimum clearance value - non-homogenous field (III/2)	1.5 mm		
minimum creepage distance (III/2)	1.5 mm		
Rated insulation voltage (II/2)	320 V		
Rated surge voltage (II/2)	2.5 kV		
minimum clearance value - non-homogenous field (II/2)	1.5 mm		
minimum creepage distance (II/2)	1.6 mm		



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#### Environmental 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
Test directions	X-, Y- and Z-axis

#### 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

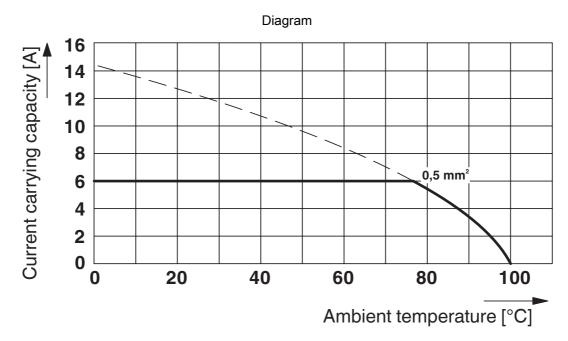
Type of packaging	packed in cardboard



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## **Drawings**



Type: FFKDS/H-2,54

Test following DIN EN 60512-5-2:2003-01

Reduction factor = 1 No. of positions: 5



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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1791868

CSA Approval ID: 13631				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
В				
Only rigid conductors	150 V	6 A	- 20	-

c <b>7/1</b> us	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>
В					
		150 V	6 A	26 - 20	-

KEMA	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>
keine					
		63 V	-	-	0.14 - 0.5



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## Classifications

#### **ECLASS**

	ECLASS-13.0	27460101
	ECLASS-15.0	27460101
ET	IM	
	ETIM 9.0	EC002643
UN	ISPSC	

UNSPSC 21.0 39121400



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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%	
EF3.0 Climate Change		
CO2e kg	0.065 kg CO2e	

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