

1756896

https://www.phoenixcontact.com/us/products/1756896

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: 16 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm², number of potentials: 9, number of rows: 1, number of positions per row: 9, product range: ZFKDS(A) 1,5-W, pitch: 5.08 mm, connection method: Spring-cage connection, mounting: Wave soldering, conductor/PCB connection direction: 45 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm, number of solder pins per potential: 2, type of packaging: packed in cardboard

Your advantages

- Defined contact force ensures that contact remains stable over the long term
- · Can be operated without tools by means of color-coded actuating lever
- · Angled connection enables multi-row arrangement on the PCB
- The latching on the side enables various numbers of positions to be combined
- Two solder pins reduce the mechanical strain on the soldering spots

Commercial data

| Item number | 1756896 |
|--------------------------------------|---------------|
| Packing unit | 1 pc |
| Minimum order quantity | 50 pc |
| Sales key | AA12 |
| Product key | AALMBF |
| GTIN | 4046356338127 |
| Weight per piece (including packing) | 11.72 g |
| Weight per piece (excluding packing) | 11 g |
| Customs tariff number | 85369010 |
| Country of origin | GR |



1756896

https://www.phoenixcontact.com/us/products/1756896

Technical data

Product properties

| Product line | COMBICON Terminals S |
|---------------------------|--------------------------------|
| Product type | Printed circuit board terminal |
| Product family | ZFKDS(A) 1,5-W |
| Number of positions | 9 |
| Pitch | 5.08 mm |
| Number of connections | 9 |
| Number of rows | 1 |
| Number of potentials | 9 |
| Pin layout | Linear pinning |
| Solder pins per potential | 2 |

Electrical properties

| Nominal current I _N | 16 A |
|--------------------------------|-------|
| Nominal voltage U _N | 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

| Nominal cross section | 1.5 mm² |
|-----------------------|---------|
|-----------------------|---------|

Conductor connection

| Connection method | Spring-cage connection |
|-----------------------------------------------------------------------|------------------------|
| Conductor cross section rigid | 0.2 mm² 2.5 mm² |
| Conductor cross section flexible | 0.2 mm² 1.5 mm² |
| Conductor cross section AWG | 24 14 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm² 1.5 mm² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm² 1.5 mm² |
| Stripping length | 7.5 mm |

Mounting

| Mounting type | Wave soldering |
|-------------------|------------------------|
| Pin layout | Linear pinning |
| Connection method | Spring-cage connection |



1756896

https://www.phoenixcontact.com/us/products/1756896

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 (10 - 16 μm Sn) |
| Metal surface soldering area (top layer) | Tin (10 - 16 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 |

Material data – actuating element

| Color (Actuating element) green (6021) |
|----------------------------------------|
|----------------------------------------|

Dimensions

| Dimensional drawing | h p |
|-----------------------|----------|
| Pitch | 5.08 mm |
| Width [w] | 45.72 mm |
| Height [h] | 17.7 mm |
| Length [I] | 16.85 mm |
| Installed height | 14.2 mm |
| Solder pin length [P] | 3.5 mm |

Electrical tests

Air clearances and creepage distances |

| , in closurations and croopings distances | |
|-------------------------------------------|-------|
| Insulating material group | I I |
| Rated insulation voltage (III/3) | 250 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated insulation voltage (III/2) | 400 V |



1756896

https://www.phoenixcontact.com/us/products/1756896

| Rated surge voltage (III/2) | 4 kV |
|---------------------------------|-------|
| Rated insulation voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |

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 |
|-------------------|---------------------|



1756896

https://www.phoenixcontact.com/us/products/1756896

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1756896

| CSA Approval ID: 13631 | | | | |
|------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| Use group B | | | | |
| | 300 V | 10 A | 28 - 12 | - |
| Use group D | | | | |
| | 300 V | 10 A | 28 - 12 | - |

| EAC | EAC |
|------|----------------------|
| LIIL | Approval ID: B.01687 |

| cULus Recognized Approval ID: E60425-19941110 | | | | |
|-----------------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| Use group B | | | | |
| | 250 V | 10 A | 26 - 12 | - |
| Use group D | | | | |
| | 300 V | 10 A | 26 - 12 | - |



1756896

https://www.phoenixcontact.com/us/products/1756896

Classifications

UNSPSC 21.0

ECLASS

| | ECLASS-11.0 | 27460101 |
|------|-------------|----------|
| | ECLASS-12.0 | 27460101 |
| | ECLASS-13.0 | 27460101 |
| ETIM | | |
| | ETIM 8.0 | EC002643 |
| UN | SPSC | |

39121400



1756896

https://www.phoenixcontact.com/us/products/1756896

Environmental product compliance

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

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