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PCB terminal block, nominal current: 32 A, rated voltage (III/2): 630 V, nominal cross section: 4 mm², pitch: 10 mm, number of positions: 2, connection method: Spring-cage connection, mounting: Wave soldering, conductor/ PCB connection direction: 45 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 4.6 mm

The figure shows a 5-pos. version of the product

Your advantages

- Defined contact force ensures that contact remains stable over the long term
- Clamping space opened by means of fixed screwdriver enables convenient conductor connection
- ☑ Quick and convenient testing using integrated test option



Key Commercial Data

| Packing unit | 1 |
|----------------------|---------------------------|
| GTIN | 4 0 4 6 3 5 6 1 1 6 5 3 4 |
| GTIN | 4046356116534 |
| Custom tariff number | 85369010 |

Technical data

Item properties

| Brief article description | PCB terminal block |
|---------------------------|------------------------|
| Range of articles | ZFKDS(A) 4 |
| Pitch | 10 mm |
| Number of positions | 2 |
| Connection method | Spring-cage connection |
| Mounting type | Wave soldering |
| Pin layout | Linear pinning |

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Technical data

Item properties

| Number of levels | 1 |
|-----------------------|---|
| Number of connections | 2 |
| Number of potentials | 2 |

Electrical parameters

| Nominal current | 32 A |
|-----------------------------|--------|
| Nom. voltage | 630 V |
| Rated voltage | 630 V |
| Rated voltage (III/2) | 630 V |
| Rated voltage (II/2) | 1000 V |
| Rated surge voltage (III/3) | 6 kV |
| Rated surge voltage (III/2) | 6 kV |
| Rated surge voltage (II/2) | 6 kV |

Connection capacity

| Connection method | Spring-cage connection |
|---|--|
| pluggable | Yes |
| Conductor cross section solid | 0.2 mm ² 6 mm ² |
| Conductor cross section flexible | 0.2 mm ² 4 mm ² |
| Conductor cross section AWG / kcmil | 24 10 |
| Conductor cross section flexible, with ferrule without plastic sleeve | 0.25 mm ² 4 mm ² |
| Conductor cross section, flexible, with ferrule, with plastic sleeve | 0.25 mm ² 4 mm ² |
| Stripping length | 10 mm |

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

Material data - housing

| Housing color | green (6021) |
|--|--------------|
| Insulating material | РА |
| Insulating material group | 1 |
| 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 |

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Technical data

Material data - housing

| Temperature for the ball pressure test according to EN 60695-10-2 | 125 °C |
|---|------------|
| Dimensions for the product | |
| Length [I] | 29 mm |
| Width [w] | 21.5 mm |
| Height [h] | 27.6 mm |
| Pitch | 10 mm |
| Height (without solder pin) | 23 mm |
| Solder pin [P] | 4.6 mm |
| Pin dimensions | 1 x 1.4 mm |
| Dimensions for PCB design | |
| Hole diameter | 1.8 mm |

Packaging information

| Type of packaging | packed in cardboard |
|----------------------------|---------------------|
| Pieces per package | 50 |
| Denomination packing units | Pcs. |

Ambient conditions

| Ambient temperature (storage/transport) | -40 °C 70 °C |
|---|---|
| Ambient temperature (assembly) | -5 °C 100 °C |
| Ambient temperature (operation) | -40 °C 100 °C (Depending on the current carrying capacity/derating curve) |

Termination and connection method

| Connection test | IEC 60998-2-2:1991-10 |
|--|-----------------------|
| Test result | Test passed |
| Test for conductor damage and slackening | IEC 60998-2-2:1991-10 |
| | Test passed |

Pull-out test

| Pull-out test | IEC 60998-2-2:1991-10 |
|--|-----------------------------|
| | Test passed |
| Conductor cross section / conductor type / tensile force | 0.2 mm² / solid / > 10 N |
| | 0.2 mm² / flexible / > 10 N |
| | 6 mm² / solid / > 80 N |
| | 4 mm² / flexible / > 60 N |

Mechanical tests according to standard

| Test specification | IEC 60998-2-2 (in parts) |
|--------------------|--------------------------|
| | |



Technical data

Electrical tests

| Rated current | 32 A |
|-----------------------------|-------------------|
| Conductor cross section | 4 mm ² |
| Rated voltage (III/2) | 630 V |
| Rated surge voltage (III/2) | 6 kV |

Air clearances and creepage distances

| Clearances and creepage distances | IEC 60664-1:2007-04 |
|---|---------------------|
| Specification | IEC 60664-1:2007-04 |
| Minimum clearance - inhomogeneous field (III/3) | 5.5 mm |
| Minimum clearance - inhomogeneous field (III/2) | 5.5 mm |
| Minimum clearance - inhomogeneous field (II/2) | 5.5 mm |
| Minimum creepage distance value (III/3) | 8 mm |
| Minimum creepage distance value (III/2) | 5.5 mm |
| Minimum creepage distance value (II/2) | 5.5 mm |

Temperature-rise test

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

Current carrying capacity / derating curves

| Specification | IEC 60998-2-2 (in parts) |
|---------------|--------------------------|
|---------------|--------------------------|

Vibration test

| Specification | IEC 60068-2-6:1995-03 |
|------------------------|------------------------|
| Result | Test passed |
| Frequency | 10 - 150 - 10 Hz |
| Sweep speed | 1 octave/min |
| Amplitude | 0.35 mm (10 - 60.1 Hz) |
| Acceleration | 5 g (60.1 - 150 Hz) |
| Test duration per axis | 2.5 h |

Resistance to ageing, humidity and penetration of solids

| Dry heat | 168 h/100°C |
|------------|-----------------|
| Humid heat | 48 h/30 °C/92 % |

Standards and Regulations

| Connection in acc. with standard | EN-VDE |
|--|--------|
| | CUL |
| Flammability rating according to UL 94 | V0 |

Environmental Product Compliance

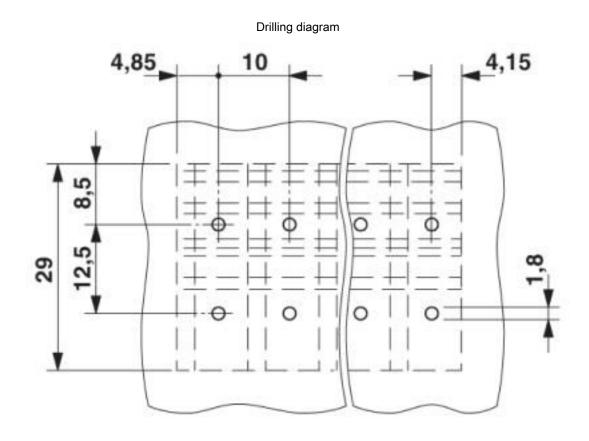


Technical data

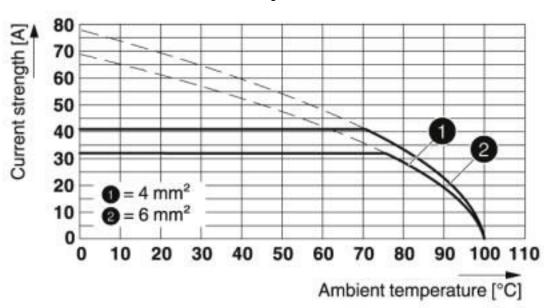
Environmental Product Compliance

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

Drawings

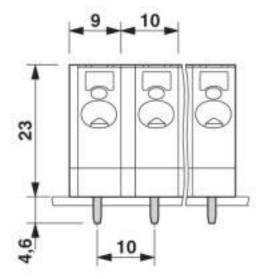


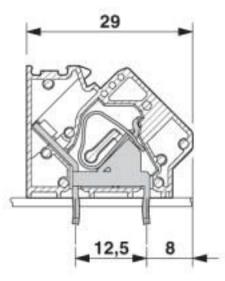




Type: ZFKDS 4-10 Test according to DIN EN 60947-7-4 (VDE 0611-7-4):2014-08 Illustration according to DIN EN 60512-5-2:2003-01 Reduction factor = 1 Number of positions: 4

Dimensional drawing





Diagram

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Classifications

eCl@ss

| eCl@ss 10.0.1 | 27440401 |
|---------------|----------|
| eCl@ss 4.0 | 27141100 |
| eCl@ss 4.1 | 27141100 |
| eCl@ss 5.0 | 27141100 |
| eCl@ss 5.1 | 27261100 |
| eCl@ss 6.0 | 27261100 |
| eCl@ss 7.0 | 27440401 |
| eCl@ss 8.0 | 27440401 |
| eCl@ss 9.0 | 27440401 |

ETIM

| ETIM 3.0 | EC001121 |
|----------|----------|
| ETIM 4.0 | EC002643 |
| ETIM 5.0 | EC002643 |
| ETIM 6.0 | EC002643 |
| ETIM 7.0 | EC002643 |

UNSPSC

| UNSPSC 6.01 | 30211801 |
|---------------|----------|
| UNSPSC 7.0901 | 39121432 |
| UNSPSC 11 | 39121432 |
| UNSPSC 12.01 | 39121432 |
| UNSPSC 13.2 | 39121432 |
| UNSPSC 18.0 | 39121432 |
| UNSPSC 19.0 | 39121432 |
| UNSPSC 20.0 | 39121432 |
| UNSPSC 21.0 | 39121432 |

Approvals

Approvals

Approvals

EAC / cULus Recognized

Ex Approvals



Approvals

Γ

Approval details

| EAC | EAC | B.01687 |
|-----|-----|---------|
|-----|-----|---------|

| cULus Recognized http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E60425-19941110 | | | | | |
|--|-------|-------|-------|--|--|
| | В | С | D | | |
| Nominal voltage UN | 300 V | 300 V | 600 V | | |
| Nominal current IN | 30 A | 30 A | 5 A | | |
| mm²/AWG/kcmil | 24-10 | 24-10 | 24-10 | | |

Accessories

Accessories

Crimping tool

Crimping pliers - CRIMPFOX 6 - 1212034



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

Flange

PCB terminal block - FL-ZFKDS 4 - 1928495



Pair of flanges, can be snapped onto a row of single terminal blocks

Labeled terminal marker



Accessories

Zack Marker strip, flat - ZBF10 CUS - 0825031



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 10 mm, lettering field size: 5.15 x 10 mm, Number of individual labels: 10

Pitch spacer

Pitch spacer - RZ-ZFKDS 4 - 1928521



Pitch spacer, 2.5 mm wide

Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517



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

Terminal marking

Zack Marker strip, flat - ZBF10:UNBEDRUCKT - 0809997



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into flat marker groove, for terminal block width: 10 mm, lettering field size: 5.15 x 10 mm, Number of individual labels: 10



Accessories

Marker card - SK U/5,0 WH:UNBEDRUCKT - 0803922



Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 5 mm, Number of individual labels: 630

Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm² conductor cross section, color: gray

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