

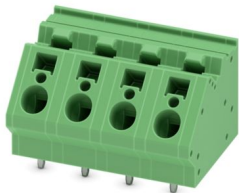
ZFKDSA 4-10- 4 - PCB terminal block



1743744

<https://www.phoenixcontact.com/pc/products/1743744>

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: 32 A, rated voltage (III/2): 630 V, nominal cross section: 4 mm², number of potentials: 4, number of rows: 1, number of positions per row: 4, product range: ZFKDS(A) 4, pitch: 10 mm, 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, 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
- Clamping space opened by means of fixed screwdriver enables convenient conductor connection
- Separate bridge shaft for easily connecting multiple positions to jumpers
- Quick and convenient testing using integrated test option

Commercial data

Item number	1743744
Packing unit	50 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	AANMAB
GTIN	4046356302951
Weight per piece (including packing)	21.5 g
Weight per piece (excluding packing)	21.5 g
Customs tariff number	85369010
Country of origin	PL

1743744

<https://www.phoenixcontact.com/pc/products/1743744>

Technical data

Product properties

Type	PC terminal block can be aligned
Product line	COMBICON Terminals L
Product type	Printed circuit board terminal
Product family	ZFKDS(A) 4
Number of positions	4
Pitch	10 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Pin layout	Linear pinning
Solder pins per potential	2

Electrical properties

Nominal current I_N	32 A
Nominal voltage U_N	630 V
Degree of pollution	3
Rated voltage (III/3)	630 V
Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

Connection data

Connection technology

Type	PC terminal block can be aligned
Nominal cross section	4 mm ²

Conductor connection

Connection method	Spring-cage connection
Conductor cross section rigid	0.2 mm ² ... 6 mm ²
Conductor cross section flexible	0.2 mm ² ... 4 mm ²
Conductor cross section AWG	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

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

ZFKDSA 4-10- 4 - PCB terminal block



1743744

<https://www.phoenixcontact.com/pc/products/1743744>

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

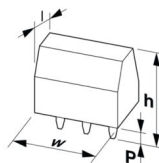
Material data - housing

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	
Pitch	10 mm
Width [w]	41.5 mm
Height [h]	27.6 mm
Length [l]	29 mm
Installed height	23 mm
Solder pin length [P]	4.6 mm
Pin dimensions	1 x 1.4 mm

PCB design

Hole diameter	1.8 mm
---------------	--------

Mechanical tests

Connection test

Specification	IEC 60998-2-2:1991-10
---------------	-----------------------

ZFKDSA 4-10- 4 - PCB terminal block



1743744

<https://www.phoenixcontact.com/pc/products/1743744>

Result	Test passed
Test for conductor damage and slackening	
Specification	IEC 60998-2-2:1991-10
Result	Test passed
Pull-out test	
Specification	IEC 60998-2-2:1991-10
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	6 mm ² / solid / > 80 N
	4 mm ² / flexible / > 60 N

Electrical tests

Temperature-rise test

Specification	IEC 60998-2-1:1990-04
Requirement temperature-rise test	Increase in temperature ≤ 45 K

Insulation resistance

Specification	IEC 60998-2-2:1991-10
Insulation resistance, neighboring positions	10 ⁹ Ω

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	630 V
Rated surge voltage (III/3)	6 kV
minimum clearance value - non-homogenous field (III/3)	5.5 mm
minimum creepage distance (III/3)	8 mm
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
minimum clearance value - non-homogenous field (III/2)	5.5 mm
minimum creepage distance (III/2)	5.5 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 mm

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:1995-03
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)

ZFKDSA 4-10- 4 - PCB terminal block



1743744

<https://www.phoenixcontact.com/pc/products/1743744>

Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

Glow-wire test

Specification	IEC 60998-2-2:1991-10
Temperature	850 °C
Time of exposure	5 s

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
-------------------	---------------------

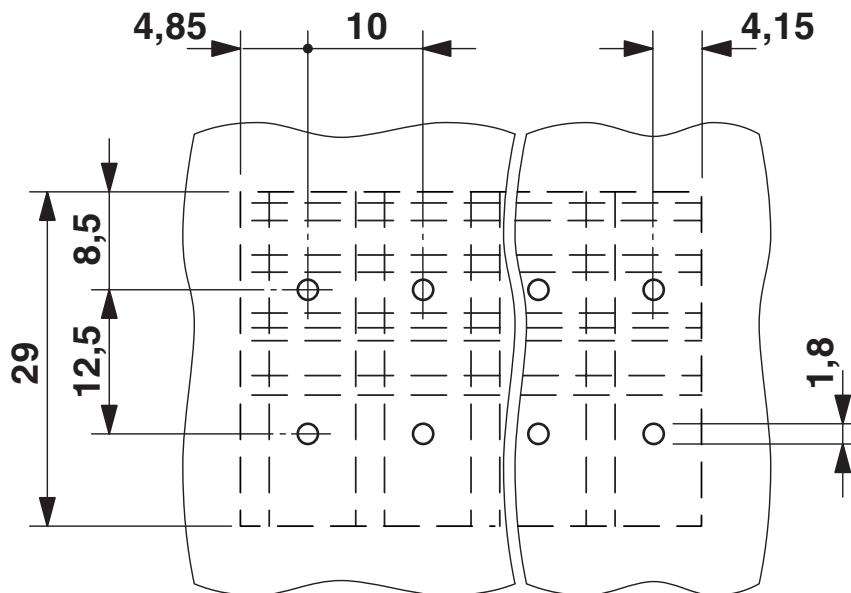
ZFKDSA 4-10- 4 - PCB terminal block

1743744

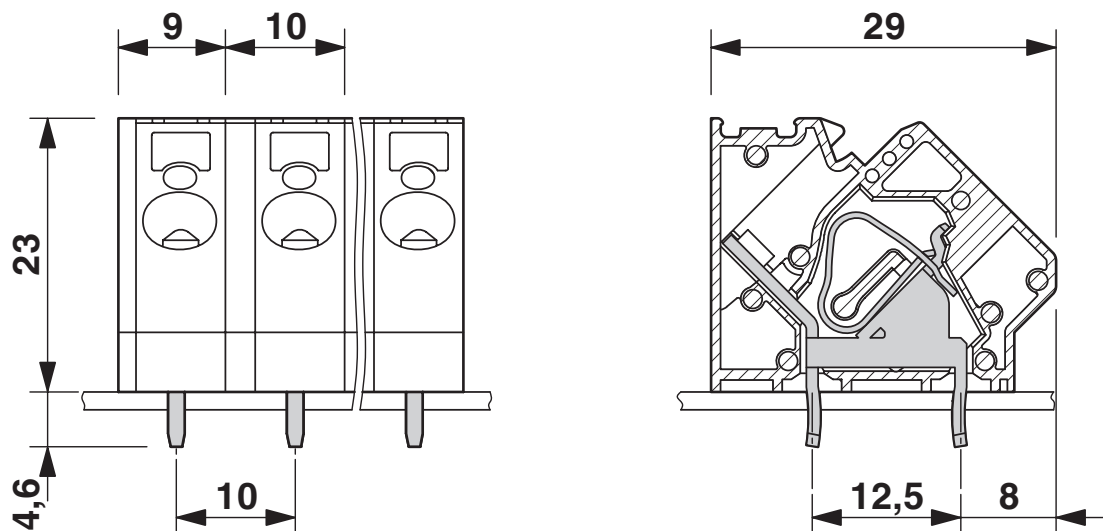
<https://www.phoenixcontact.com/pc/products/1743744>

Drawings

Drilling plan/solder pad geometry



Dimensional drawing

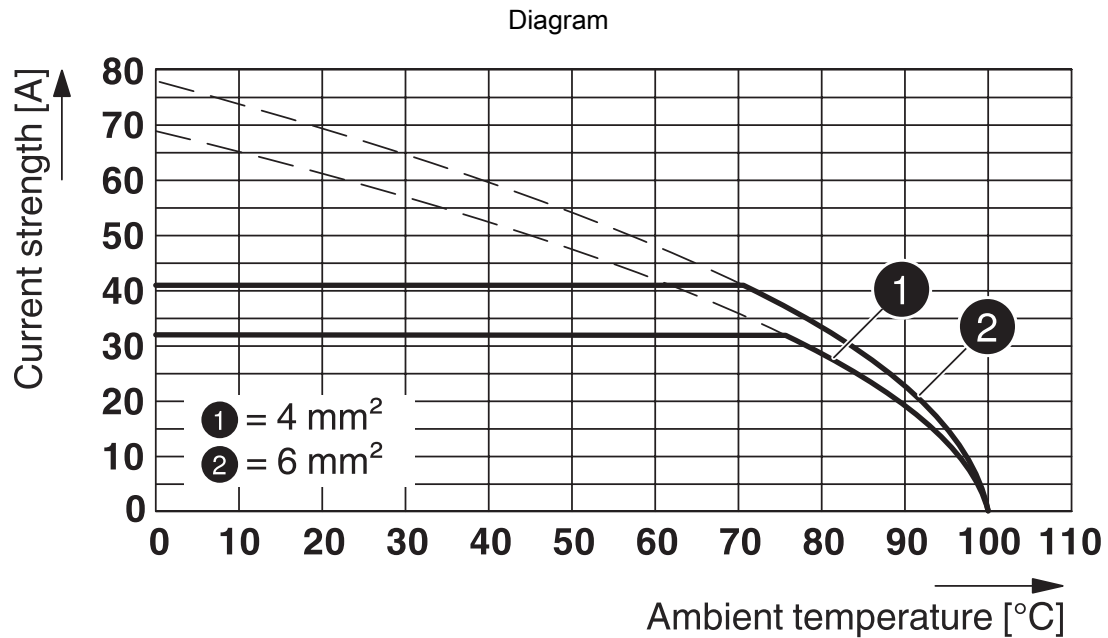


ZFKDSA 4-10- 4 - PCB terminal block



1743744

<https://www.phoenixcontact.com/pc/products/1743744>



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

ZFKDSA 4-10- 4 - PCB terminal block



1743744

<https://www.phoenixcontact.com/pc/products/1743744>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1743744>

 cULus Recognized Approval ID: E60425-19941110				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	30 A	24 - 10	-
Use group C				
	300 V	30 A	24 - 10	-
Use group D				
	600 V	5 A	24 - 10	-

ZFKDSA 4-10- 4 - PCB terminal block



1743744

<https://www.phoenixcontact.com/pc/products/1743744>

Classifications

ECLASS

ECLASS-11.0	27460101
ECLASS-12.0	27460101
ECLASS-13.0	27460101

ETIM

ETIM 9.0	EC002643
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

ZFKDSA 4-10- 4 - PCB terminal block



1743744

<https://www.phoenixcontact.com/pc/products/1743744>

Environmental product compliance

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

ZFKDSA 4-10- 4 - PCB terminal block



1743744

<https://www.phoenixcontact.com/pc/products/1743744>

Accessories

CRIMPFOX 6 - Crimping pliers

1212034

<https://www.phoenixcontact.com/pc/products/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

RZ-ZFKDS 4 - Pitch spacer

1928521

<https://www.phoenixcontact.com/pc/products/1928521>



Pitch spacer, 2.5 mm wide

ZFKDSA 4-10- 4 - PCB terminal block

1743744

<https://www.phoenixcontact.com/pc/products/1743744>



FL-ZFKDS 4 - PCB terminal block

1928495

<https://www.phoenixcontact.com/pc/products/1928495>



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

MPS-MT - Test plug

0201744

<https://www.phoenixcontact.com/pc/products/0201744>



Test plug, with solder connection up to 1 mm² conductor cross section, number of positions: 1, color: gray

ZFKDSA 4-10- 4 - PCB terminal block

1743744

<https://www.phoenixcontact.com/pc/products/1743744>



SZF 1-0,6X3,5 - Screwdriver

1204517

<https://www.phoenixcontact.com/pc/products/1204517>



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

ZBF10:UNBEDRUCKT - Zack Marker strip, flat

0809997

<https://www.phoenixcontact.com/pc/products/0809997>



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

ZFKDSA 4-10- 4 - PCB terminal block

1743744

<https://www.phoenixcontact.com/pc/products/1743744>



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

0803922

<https://www.phoenixcontact.com/pc/products/0803922>



Marker card, Din A4, 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

ZBF10 CUS - Zack Marker strip, flat

0825031

<https://www.phoenixcontact.com/pc/products/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

ZFKDSA 4-10- 4 - PCB terminal block

1743744

<https://www.phoenixcontact.com/pc/products/1743744>



B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/pc/products/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

FBSK 2-10 - Plug-in bridge

1928398

<https://www.phoenixcontact.com/pc/products/1928398>



Bridge, fully insulated, pitch 10 mm, 2-pos.

ZFKDSA 4-10- 4 - PCB terminal block



1743744

<https://www.phoenixcontact.com/pc/products/1743744>

FBSK 3-10 - Plug-in bridge

1928408

<https://www.phoenixcontact.com/pc/products/1928408>



Bridge, fully insulated, pitch 10 mm, 3-pos.

FBSK 4-10 - Plug-in bridge

1928411

<https://www.phoenixcontact.com/pc/products/1928411>



Bridge, fully insulated, pitch 10 mm, 4-pos.

ZFKDSA 4-10- 4 - PCB terminal block

1743744

<https://www.phoenixcontact.com/pc/products/1743744>



ZFKDSA 4- 9 - PCB terminal block

1907542

<https://www.phoenixcontact.com/pc/products/1907542>



End terminal block, 9 mm wide, necessary at the end of a row of terminal blocks

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

info@phoenixcontact.com