

Phoenix | 菲尼克斯 1704020 PDF



深圳创唯电子有限公司

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PCB terminal block - KDS10 - 1704020

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PCB terminal block, nominal current: 76 A, rated voltage (III/2): 320 V, nominal cross section: 10 mm², number of potentials: 1, Number of rows: 1, Number of positions per row: 1, product range: KDS10, pitch: 10 mm, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 4.3 mm, type of packaging: packed in cardboard. The article can be aligned to create different nos. of positions!

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

Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ Potentials can be easily looped through with additional connection to the PCB
- ✓ The latching on the side enables various numbers of positions to be combined



Key Commercial Data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	
GTIN	4017918023164
Custom tariff number	8536901900
Sales Key	AABDAA

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	KDS10
Pitch	10 mm
Number of positions	1
Drive form screw head	Slotted
Screw thread	M4
Mounting type	Wave soldering

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Technical data

Item properties

Pin layout	Linear pinning
Number of levels	1
Number of connections	2
Number of potentials	1

Electrical parameters

Nominal current	76 A
Nom. voltage	320 V
Rated voltage (III/3)	250 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV

Connection capacity

Connection method	Screw connection with tension sleeve
pluggable	Yes
Conductor cross section solid	0.5 mm ² ... 16 mm ²
Conductor cross section flexible	0.5 mm ² ... 10 mm ²
Conductor cross section AWG / kcmil	20 ... 6
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm ² ... 10 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm ² ... 10 mm ²
2 conductors with same cross section, solid	0.5 mm ² ... 4 mm ²
2 conductors with same cross section, flexible	0.5 mm ² ... 4 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm ² ... 2.5 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 6 mm ²
Stripping length	12 mm
Torque	1.2 Nm ... 1.5 Nm

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

Housing color	green (6021)
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Technical data

Material data - housing

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 for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	36.8 mm
Width [w]	10 mm
Height [h]	33.3 mm
Pitch	10 mm
Height (without solder pin)	29 mm
Solder pin [P]	4.3 mm
Pin dimensions	1 x 0.9 mm

Dimensions for PCB design

Hole diameter	1.4 mm
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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

Test for conductor damage and slackening	IEC 60998-2-1:1990-04
	Test passed

Pull-out test

Pull-out test	IEC 60998-2-1:1990-04
Conductor cross section / conductor type / tensile force	0.5 mm ² / solid / > 30 N
	0.5 mm ² / flexible / > 30 N
	16 mm ² / solid / > 100 N
	10 mm ² / flexible / > 90 N

Mechanical tests according to standard

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Technical data

Mechanical tests according to standard

Test specification	IEC 60998-2-1 (in parts)
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Electrical tests

Rated current	76 A
Conductor cross section	10 mm ²
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 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)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	3.2 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm

Temperature-rise test

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

Current carrying capacity / derating curves

Caption	Type: KDS 10 Test following DIN EN 60512-5-2:2003-01 Reduction factor = 1 No. of positions: 5
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Vibration test

Specification	IEC 60068-2-6:1995-03
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

Test result	Test passed
Test specification	IEC 60998-2-1:1990-04

Insulation resistance

Specification	IEC 60998-2-1:1990-04
Result	Test passed
Insulation resistance, neighboring positions	10 ⁹ Ω

Glow-wire test

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Technical data

Glow-wire test

Specification	IEC 60998-2-1:1990-04
Temperature	850 °C
Time of exposure	5 s

Mechanical strength/tumbling barrel test

Specification	IEC 60998-2-1:1990-04
Number of drop cycles	50

Standards and Regulations

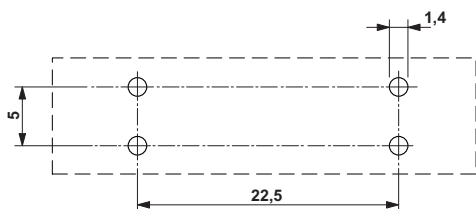
Connection in acc. with standard	EN-VDE
	CSA
Flammability rating according to UL 94	V0

Environmental Product Compliance

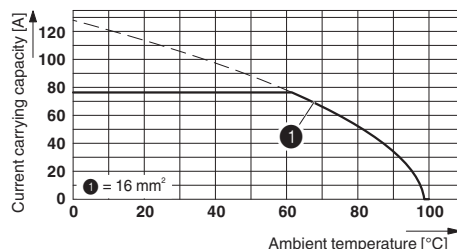
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Drilling diagram

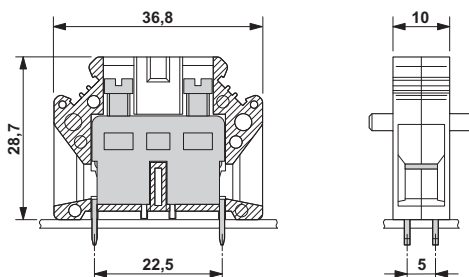


Diagram



Type: KDS 10
 Test following DIN EN 60512-5-2:2003-01
 Reduction factor = 1
 No. of positions: 5

Dimensional drawing



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Classifications

eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 11.0	27460101
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 9.0	27440401

ETIM

ETIM 3.0	EC001121
ETIM 4.0	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

DNV GL / CSA / RS / UL Recognized / cUL Recognized / SEV / EAC / IECB Scheme / cULus Recognized


Ex Approvals

Approval details


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Approvals


DNV GL		https://approvalfinder.dnvgl.com/	TAE00001EV
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CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	B	C	
Nominal voltage UN	300 V	300 V	
Nominal current IN	65 A	65 A	
mm ² /AWG/kcmil	18-6	18-6	

RS		http://www.rs-head.spb.ru/en/index.php	17.00014.272
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UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	C	D
Nominal voltage UN	250 V	300 V	600 V
Nominal current IN	65 A	65 A	5 A
mm ² /AWG/kcmil	24-6	24-6	24-6

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	C	D
Nominal voltage UN	250 V	300 V	600 V
Nominal current IN	65 A	65 A	5 A
mm ² /AWG/kcmil	24-6	24-6	24-6

SEV		https://www.eurofins.ch/de/	IK-4497
Nominal voltage UN	400 V		
Nominal current IN	76 A		
mm ² /AWG/kcmil	16		

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Approvals

EAC		B.01687
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IECEE CB Scheme		http://www.iecee.org/	CH-10787
Nominal voltage UN	400 V		
Nominal current IN	76 A		
mm ² /AWG/kcmil	16		

cULus Recognized	
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Accessories

Accessories

Labeled terminal marker

Zack marker strip - ZB10,LGS:FORTL.ZAHLEN - 1053014



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into tall marker groove, for terminal block width: 10.2 mm, lettering field size: 10.15 x 10.5 mm, Number of individual labels: 10

Pitch spacer

Pitch spacer - RZ-KDS10 - 1701065



Pitch spacer, raises the pitch by 2.5 mm, interlocks with terminal block of the same shape, color: green

Screw bridge

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Accessories

Fixed bridge - FBI 10-10 - 0203276



Fixed bridge, pitch: 10 mm, number of positions: 10, color: silver

Screwdriver tools

Screwdriver - SZS 1,0X4,0 VDE - 1205066



Screwdriver, slot-headed, VDE insulated, size: 1.0 x 4.0 x 100 mm, 2-component grip, with non-slip grip

Test socket

Female test connector - PSB 4/7/6 - 0303299



Female test connector, color: silver
