

PCB terminal block - KDS10-PE/SO - 1704062

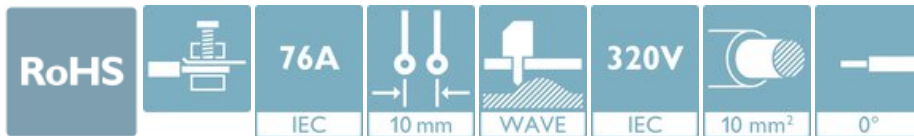
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PCB terminal block, nominal current: 76 A, rated voltage (III/2): 320 V, nominal cross section: 10 mm², number of potentials: 1, Number of rows: 1, Number of positions per row: 1, product range: KDS10-PE, pitch: 10 mm, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, 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!

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
GTIN	
GTIN	4017918023195

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	KDS10-PE
Pitch	10 mm
Number of positions	1
Screw thread	M4
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1
Number of connections	2
Number of potentials	1

Electrical parameters

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Technical data

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

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

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Technical data

Material data - housing

Temperature for the ball pressure test according to EN 60695-10-2	125 °C
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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

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

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Technical data

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: KDS10-PE
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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

Insulation resistance

Specification	IEC 60998-2-1:1990-04
Result	Test passed
Insulation resistance, neighboring positions	$10^9 \Omega$

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
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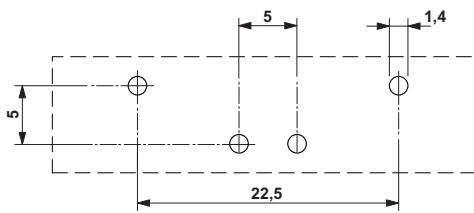
Technical data

Environmental Product Compliance

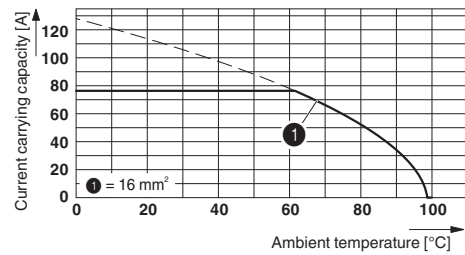
	No hazardous substances above threshold values
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Drawings

Drilling diagram

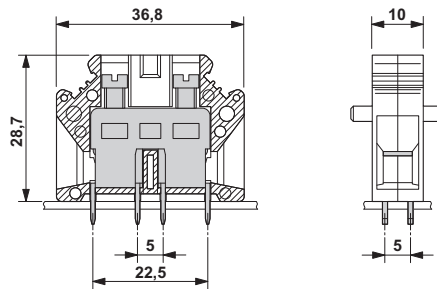


Diagram



Type: KDS10-PE

Dimensional drawing



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

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Classifications

ETIM

ETIM 7.0	EC002643
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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 / UL Recognized / cUL Recognized / EAC / cULus Recognized

Ex Approvals

Approval details

DNV GL		https://approvalfinder.dnvgl.com/	TAE00001EV
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CSA		http://www.csagroup.org/services-industries/product-listing/	13631
	B	C	
mm ² /AWG/kcmil	18-6	18-6	

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	B	C	
mm ² /AWG/kcmil	24-6	24-6	

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Approvals

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
		B	C
mm²/AWG/kcmil		24-6	24-6

EAC		B.01687
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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

Fixed bridge - FBI 10-10 - 0203276



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

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Accessories

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

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