

PCB terminal block - KDS10/SO - 1704059

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)

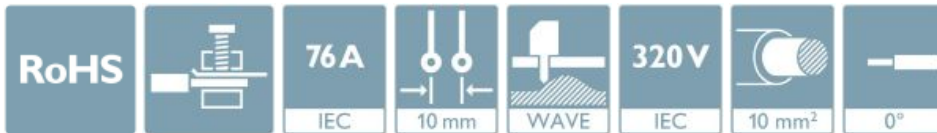


The figure shows a 5-pos. version of the product


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 °, 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	1 pc
Minimum order quantity	50 pc
GTIN	 4 017918 023188
GTIN	4017918023188
Weight per Piece (excluding packing)	16.800 g
Custom tariff number	85369010
Country of origin	Germany

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	KDS10

PCB terminal block - KDS10/SO - 1704059

Technical data

Item properties

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

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

PCB terminal block - KDS10/SO - 1704059

Technical data

Material data - contact

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

Packaging information

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

Electrical tests

Rated current	76 A
Conductor cross section	10 mm²
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV

Air clearances and creepage distances

PCB terminal block - KDS10/SO - 1704059

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

Standards and Regulations

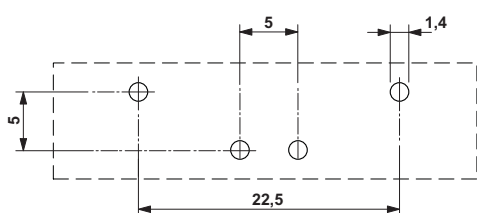
Connection in acc. with standard	EN-VDE
	CSA
Flammability rating according to UL 94	V0

Environmental Product Compliance

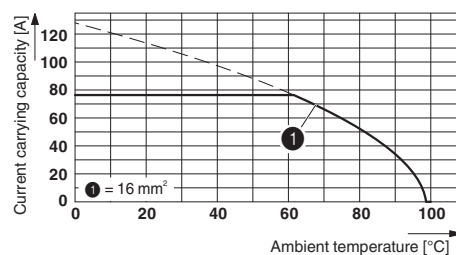
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Drilling diagram



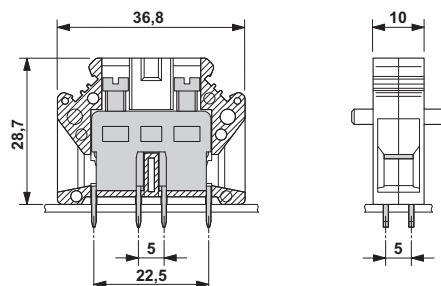
Diagram



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

PCB terminal block - KDS10/SO - 1704059

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 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

PCB terminal block - KDS10/SO - 1704059

Approvals

Approvals


Approvals


DNV GL / CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized


Ex Approvals

Approval details

DNV GL		https://approvalfinder.dnvgl.com/	TAE00001EV
--------	---	---	------------

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	
mm²/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	D
Nominal voltage UN	250 V	300 V	600 V
Nominal current IN	65 A	65 A	5 A
mm²/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
mm²/AWG/kcmil	24-6	24-6	24-6

PCB terminal block - KDS10/SO - 1704059

Approvals

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

cULus Recognized	
------------------	---

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

Screwdriver tools

PCB terminal block - KDS10/SO - 1704059

Accessories

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

Phoenix Contact 2021 © - all rights reserved
<http://www.phoenixcontact.com>