KDS 3-SI - PCB terminal block

1780112

https://www.phoenixcontact.com/us/products/1780112

PHŒNIX CONTACT

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: 6.3 A, rated voltage (III/2): 320 V, nominal cross section: 2.5 mm^2, number of potentials: 1, number of rows: 1, number of positions per row: 1, product range: KDS 3-SI, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm, number of solder pins per potential: 2, type of packaging: packed in cardboard. The article can be aligned to create different nos. of positions! The current is determined by the fuse used.

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- Quick and convenient testing using integrated test option
- Two solder pins reduce the mechanical strain on the soldering spots
- The latching on the side enables various numbers of positions to be combined

Commercial data

Item number	1780112
Packing unit	1 pc
Minimum order quantity	50 pc
Sales key	AA13
Product key	AAMFFD
GTIN	4017918040734
Weight per piece (including packing)	12.155 g
Weight per piece (excluding packing)	11.877 g
Customs tariff number	85369010
Country of origin	PL

PHŒNIX
CONTACT

Technical data

Product properties

Type	PCB terminal block can be aligned in rows + fuse terminal block
Product line	COMBICON Terminals M
Product type	Printed circuit board terminal
Product family	KDS 3-SI
Number of positions	1
Pitch	5.08 mm
Number of connections	1
Number of rows	1
Number of potentials	1
Pin layout	Linear pinning
Solder pins per potential	2

Electrical properties

Nominal current I_N	6.3 A
Nominal voltage U_N	320 V
Degree of pollution	3
Rated voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

Connection data

Connection technology

Type	PCB terminal block can be aligned in rows + fuse terminal block
Nominal cross section	2.5 mm²

Conductor connection

Connection method	Screw connection with tension sleeve
Conductor cross section rigid	0.2 mm² ... 4 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 12
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm² ... 2.5 mm²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm² ... 1.5 mm²
2 conductors with same cross section, solid	0.2 mm² ... 1 mm²
2 conductors with same cross section, flexible	0.2 mm² ... 1 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm² ... 0.75 mm²
2 conductors with the same cross section, flexible, with TWIN	0.5 mm² ... 1 mm²

ferrule with plastic sleeve	
Stripping length	8 mm
Tightening torque	0.5 Nm ... 0.6 Nm

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning
Drive form screw head	Slotted (L)
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)

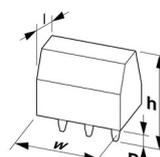| Processing notes	
Process	Wave soldering

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
Metal surface terminal point (top layer)	Tin (5 - 7 µm Sn)
Metal surface soldering area (top layer)	Tin (5 - 7 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	V2

Dimensions

Dimensional drawing	
Pitch	5.08 mm
Width [w]	5.08 mm
Height [h]	40.5 mm
Length [l]	27 mm
Installed height	37 mm
Solder pin length [P]	3.5 mm
Pin dimensions	1.1 x 0.8 mm

Electrical tests

Air clearances and creepage distances |

Insulating material group	I
Rated insulation voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

Environmental and real-life conditions

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

KDS 3-SI - PCB terminal block

1780112

https://www.phoenixcontact.com/us/products/1780112

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1780112

CSA
Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	300 V	10 A	24 - 12	-

UL Recognized
Approval ID: FILE E 60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	250 V	15 A	28 - 12	-
Use group D				
	300 V	10 A	28 - 12	-

EAC
Approval ID: B.01687

Classifications

ECLASS

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

ETIM

ETIM 8.0	EC002643

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

REACh SVHC	Lead 7439-92-1

China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

KDS 3-SI - PCB terminal block

1780112

https://www.phoenixcontact.com/us/products/1780112

Accessories

RZ 2,54 - Pitch spacer

1780044

https://www.phoenixcontact.com/us/products/1780044

Pitch spacer, raises the pitch by 2.54 mm, interlocks with terminal block of the same shape, color: green

RPS - Reducing plug

0201647

https://www.phoenixcontact.com/us/products/0201647

Reducing plug, number of positions: 1, color: gray

KDS 3-SI - PCB terminal block

1780112

https://www.phoenixcontact.com/us/products/1780112

SZG 0,6X3,5 VDE - Screwdriver

1205121

https://www.phoenixcontact.com/us/products/1205121

Screwdriver, slot-headed, graded, for test socket screws, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

MPS-MT - Test plugs

0201744

https://www.phoenixcontact.com/us/products/0201744

Test plugs, with solder connection up to 1 mm^2 conductor cross section, number of positions: 1, color: gray

KDS 3-SI - PCB terminal block

1780112

https://www.phoenixcontact.com/us/products/1780112

BNB-ZB 5,LGS:FORTL.ZAHLEN - Marker pin Zack strip

1400201

https://www.phoenixcontact.com/us/products/1400201

Marker pin Zack strip, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: plug in, for terminal block width: 5 mm, lettering field size: 4 x 4 mm, Number of individual labels: 10

EB 8- KDS 3-SI - Insertion bridge

1780125

https://www.phoenixcontact.com/us/products/1780125

Insertion bridge, number of positions: 8, color: gray