

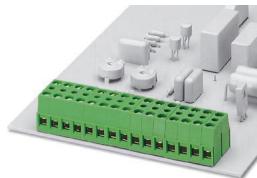
KDSP 1,5/ 2 - PCB terminal block

1780905

<https://www.phoenixcontact.com/us/products/1780905>



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Printed circuit board terminal, nominal current: 17.5 A, rated voltage (III/2): 400 V, nominal cross section: 1.5 mm², number of potentials: 2, number of rows: 1, number of positions per row: 2, product range: KDSP 1,5, pitch: 5 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]: 3.7 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!

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
- Potentials can be easily looped through with additional connection to the PCB
- 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	1780905
Packing unit	50 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AA12
Product key	AALFCB
GTIN	4017918040949
Weight per piece (including packing)	6.094 g
Weight per piece (excluding packing)	6.09 g
Customs tariff number	85369010
Country of origin	PL

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Technical data

Product properties

Product type	Printed circuit board terminal
Product family	KDSP 1,5
Product line	COMBICON Terminals S
Type	PCB terminal block can be aligned in rows+feed-through terminal block
Number of positions	2
Pitch	5 mm
Number of connections	4
Number of rows	1
Number of potentials	2
Pin layout	Linear pinning
Solder pins per potential	2

Electrical properties

Properties

Nominal current I_N	17.5 A
Nominal voltage U_N	400 V
Rated voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	400 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+feed-through terminal block
Nominal cross section	1.5 mm ²

Conductor connection

Connection method	Screw connection with tension sleeve
Conductor cross-section rigid	0.14 mm ² ... 1.5 mm ²
Conductor cross-section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross-section AWG	26 ... 16
Conductor cross-section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
Conductor cross-section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 1.5 mm ²
2 conductors with same cross section, solid	0.14 mm ² ... 0.75 mm ²
2 conductors with same cross section, flexible	0.14 mm ² ... 0.5 mm ²
2 conductors with same cross section, flexible, with ferrule	0.25 mm ²

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without plastic sleeve	
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 1 mm ²
Stripping length	7 mm
Drive form screw head	Slotted (L)
Tightening torque	0.6 Nm ... 0.8 Nm

Mounting

Mounting type	Wave soldering
Pin layout	Linear pinning

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 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

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 mm
Width [w]	10 mm
Height [h]	17.5 mm
Length [l]	18.8 mm
Installed height	13.8 mm
Solder pin length [P]	3.7 mm
Pin dimensions	0.9 x 0.9 mm

PCB design

Hole diameter	1.3 mm
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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)	400 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
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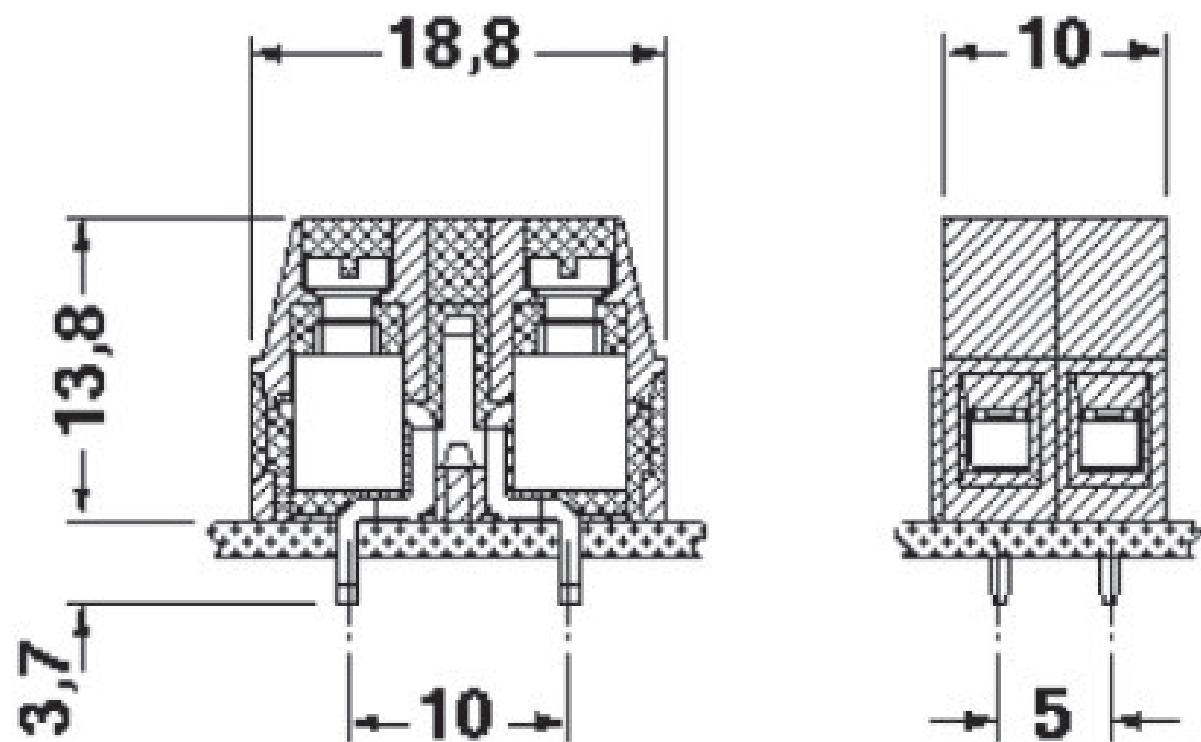
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Drawings

Dimensional drawing



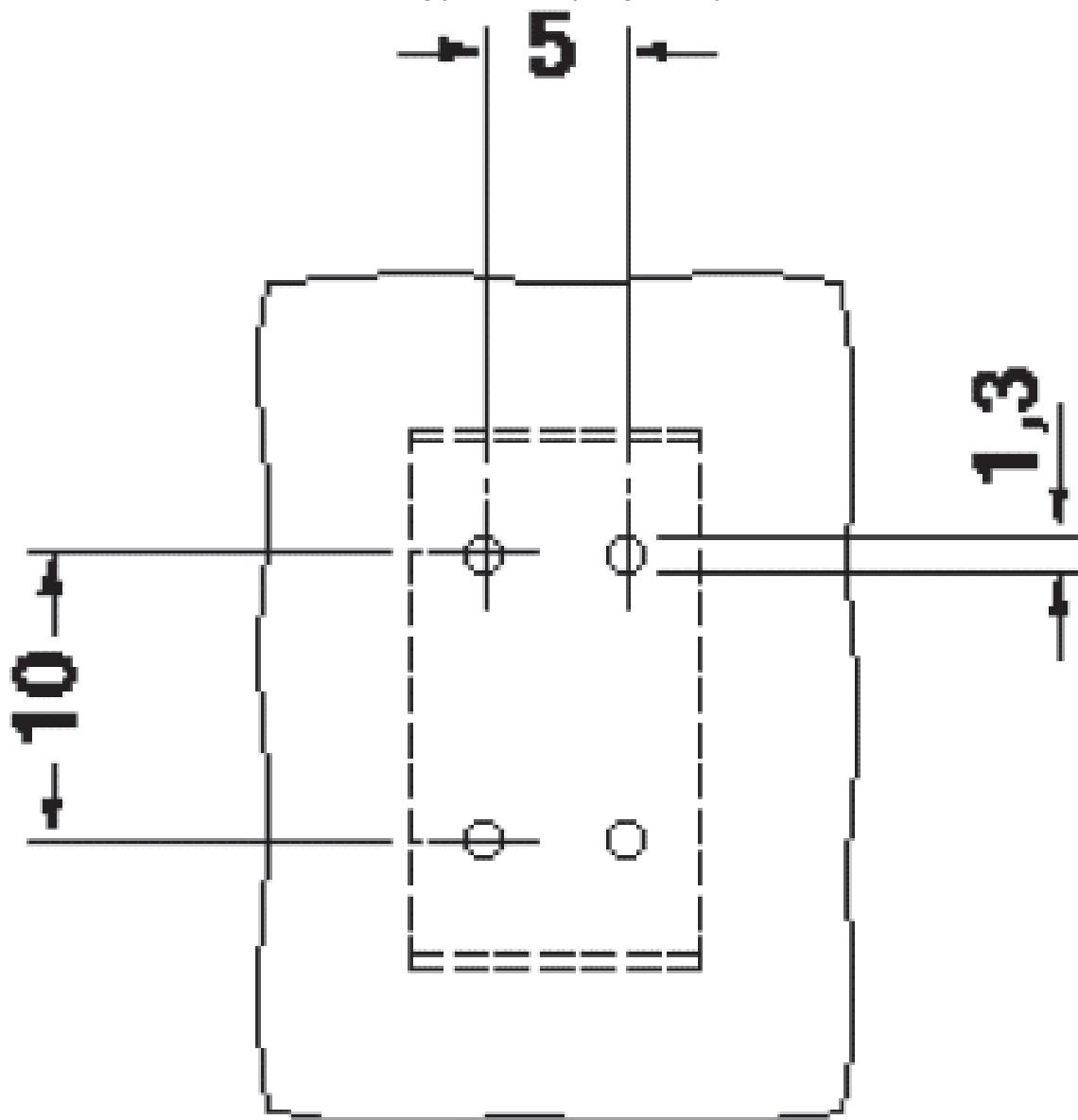
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Drilling plan/solder pad geometry



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Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1780905>

cULus Recognized				
Approval ID: E60425-19770427				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B	300 V	15 A	30 - 14	-
D	300 V	10 A	30 - 14	-

CSA				
Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine	300 V	10 A	28 - 14	-

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Classifications

ECLASS

ECLASS-13.0	27460101
ECLASS-15.0	27460101

ETIM

ETIM 9.0	EC002643
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UNSPSC

UNSPSC 21.0	39121400
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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EF3.0 Climate Change

CO2e kg	0.059 kg CO2e
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