

# MKDSP 10HV/ 2-10,16 - PCB terminal block



1929517

<https://www.phoenixcontact.com/in/products/1929517>

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: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of potentials: 2, number of rows: 1, number of positions per row: 2, product range: MKDSP 10HV, pitch: 10.16 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]: 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!

## 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
- The latching on the side enables various numbers of positions to be combined
- Integrated protective guide prevents incorrect insertion of the conductor underneath the tension sleeve

## Commercial Data

Item number	1929517
Packing unit	50 pc
Minimum order quantity	50 pc
Sales Key	AAN
Product Key	AANFFC
Catalog Page	Page 451 (C-1-2013)
GTIN	4017918819637
Weight per Piece (including packing)	16.954 g
Weight per Piece (excluding packing)	16.954 g
Customs tariff number	85369010
Country of origin	PL

## Technical Data

### Product properties

Type	PC terminal block can be aligned
Product line	COMBICON Terminals L
Product type	Printed circuit board terminal
Product family	MKDSP 10HV
Number of positions	2
Pitch	10.16 mm
Number of connections	2
Number of rows	1
Number of potentials	2
Pin layout	Linear pinning
Solder pins per potential	2

### Electrical properties

Nominal current $I_N$	76 A
Nominal voltage $U_N$	1000 V
Degree of pollution	3
Rated voltage (III/3)	690 V
Rated surge voltage (III/3)	8 kV
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

### Connection data

#### Connection technology

Type	PC terminal block can be aligned
Nominal cross section	16 mm <sup>2</sup>

#### Conductor connection

Connection method	Screw connection with tension sleeve
Conductor cross section rigid	0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Conductor cross section flexible	0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Conductor cross section AWG	20 ... 6
Conductor cross section flexible, with ferrule without plastic sleeve	0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.5 mm <sup>2</sup> ... 16 mm <sup>2</sup>
2 conductors with same cross section, solid	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN	0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>

# MKDSP 10HV/ 2-10,16 - PCB terminal block



1929517

<https://www.phoenixcontact.com/in/products/1929517>

ferrule with plastic sleeve	
Stripping length	10 mm
Tightening torque	1.2 Nm ... 1.5 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

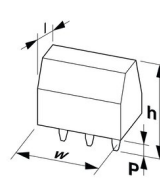
### Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Tin-plated
Metal surface terminal point (top layer)	Tin (5 - 7 $\mu\text{m}$ Sn)
Metal surface terminal point (middle layer)	Nickel (2 - 3 $\mu\text{m}$ Ni)
Metal surface soldering area (top layer)	Tin (5 - 7 $\mu\text{m}$ Sn)
Metal surface soldering area (middle layer)	Nickel (2 - 3 $\mu\text{m}$ 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	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

Dimensional drawing	
Pitch	10.16 mm
Width [w]	20.32 mm

# MKDSP 10HV/ 2-10,16 - PCB terminal block



1929517

<https://www.phoenixcontact.com/in/products/1929517>

Height [h]	35.8 mm
Length [l]	22 mm
Installed height	30.8 mm
Solder pin length [P]	5 mm
Pin dimensions	1 x 0.9 mm

## PCB design

Pin spacing	10.16 mm
Hole diameter	1.5 mm

## Mechanical tests

### Test for conductor damage and slackening

Specification	IEC 60998-2-1:1990-04
Result	Test passed

### Pull-out test

Specification	IEC 60998-2-1:1990-04
Conductor cross section/conductor type/tractive force setpoint/actual value	0.5 mm <sup>2</sup> / solid / > 30 N
	0.5 mm <sup>2</sup> / flexible / > 30 N
	16 mm <sup>2</sup> / solid / > 100 N
	10 mm <sup>2</sup> / flexible / > 90 N

### Torque test

Specification	IEC 60998-2-1:1990-04
---------------	-----------------------

## Electrical tests

### Temperature-rise test

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

### Insulation resistance

Specification	IEC 60998-2-1:1990-04
Insulation resistance, neighboring positions	10 <sup>9</sup> Ω

### Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	690 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	8 mm
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
minimum clearance value - non-homogenous field (III/2)	8 mm

# MKDSP 10HV/ 2-10,16 - PCB terminal block



1929517

<https://www.phoenixcontact.com/in/products/1929517>

minimum creepage distance (III/2)	8 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 mm

## Environmental and real-life conditions

### Vibration test

Specification	IEC 60068-2-6:1995-03
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Sweep speed	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

### Glow-wire test

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

### 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

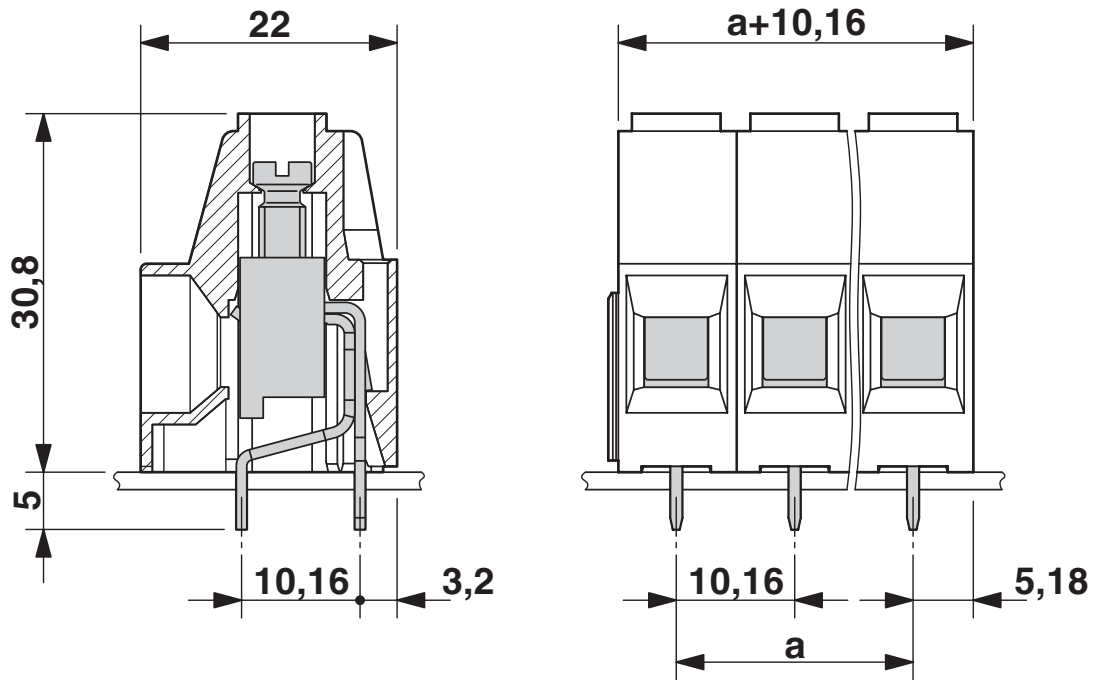
# MKDSP 10HV/ 2-10,16 - PCB terminal block

1929517

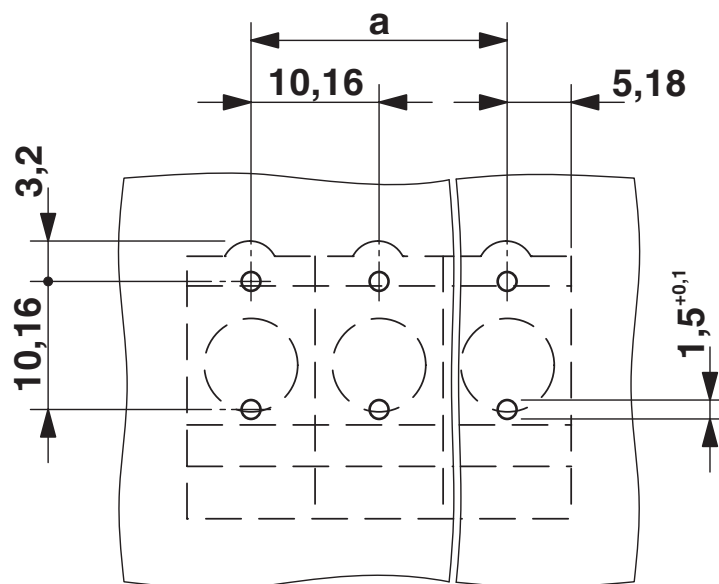
<https://www.phoenixcontact.com/in/products/1929517>

## Drawings

Dimensional drawing



Drilling plan/solder pad geometry



# MKDSP 10HV/ 2-10,16 - PCB terminal block



1929517

<https://www.phoenixcontact.com/in/products/1929517>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/in/products/1929517>



**EAC**

Approval ID: B.01687



**cULus Recognized**

Approval ID: E60425-19770427

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
Use group B	300 V	60 A	20 - 6	-
Use group C	300 V	60 A	20 - 6	-
Use group D	600 V	5 A	20 - 6	-



**IECEE CB Scheme**

Approval ID: DE1-66634

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	1000 V	76 A	-	0.2 - 16



**VDE Zeichengenehmigung**

Approval ID: 40055535

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	1000 V	76 A	-	0.2 - 16

# MKDSP 10HV/ 2-10,16 - PCB terminal block



1929517

<https://www.phoenixcontact.com/in/products/1929517>

## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC002643
----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------



# MKDSP 10HV/ 2-10,16 - PCB terminal block



1929517

<https://www.phoenixcontact.com/in/products/1929517>

## Environmental Product Compliance

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

# MKDSP 10HV/ 2-10,16 - PCB terminal block

1929517

<https://www.phoenixcontact.com/in/products/1929517>

## Accessories

### RPS - Reducing plug

0201647

<https://www.phoenixcontact.com/in/products/0201647>



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

---

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

1205066

<https://www.phoenixcontact.com/in/products/1205066>



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

# MKDSP 10HV/ 2-10,16 - PCB terminal block

1929517

<https://www.phoenixcontact.com/in/products/1929517>

## SK 5,0 WH:REEL - Marker strip

0805221

<https://www.phoenixcontact.com/in/products/0805221>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: continuous x 5 mm, Number of individual labels: 90000

---

## CRIMPFOX 6 - Crimping pliers

1212034

<https://www.phoenixcontact.com/in/products/1212034>



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm<sup>2</sup> ... 6.0 mm<sup>2</sup>, lateral entry, trapezoidal crimp

# MKDSP 10HV/ 2-10,16 - PCB terminal block



1929517

<https://www.phoenixcontact.com/in/products/1929517>

## MPS-MT - Test plugs

0201744

<https://www.phoenixcontact.com/in/products/0201744>



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

---

## MPS-IH WH - Insulating sleeve

0201663

<https://www.phoenixcontact.com/in/products/0201663>

Insulating sleeve, color: white



# MKDSP 10HV/ 2-10,16 - PCB terminal block

1929517

<https://www.phoenixcontact.com/in/products/1929517>



## MPS-IH RD - Insulating sleeve

0201676

<https://www.phoenixcontact.com/in/products/0201676>

Insulating sleeve, color: red



---

## MPS-IH BK - Insulating sleeve

0201731

<https://www.phoenixcontact.com/in/products/0201731>

Insulating sleeve, color: black



# MKDSP 10HV/ 2-10,16 - PCB terminal block

1929517

<https://www.phoenixcontact.com/in/products/1929517>

## MPS-IH GY - Insulating sleeve

0201728

<https://www.phoenixcontact.com/in/products/0201728>

Insulating sleeve, color: gray



---

## MPS-IH GN - Insulating sleeve

0201702

<https://www.phoenixcontact.com/in/products/0201702>

Insulating sleeve, color: green



# MKDSP 10HV/ 2-10,16 - PCB terminal block



1929517

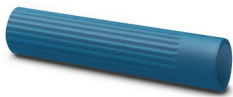
<https://www.phoenixcontact.com/in/products/1929517>

## MPS-IH BU - Insulating sleeve

0201689

<https://www.phoenixcontact.com/in/products/0201689>

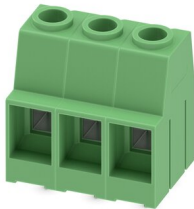
Insulating sleeve, color: blue



## MKDSP 10HV/ 3-10,16 - PCB terminal block

1929520

<https://www.phoenixcontact.com/in/products/1929520>



PCB terminal block, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of potentials: 3, number of rows: 1, number of positions per row: 3, product range: MKDSP 10HV, pitch: 10.16 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]: 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!

Phoenix Contact 2023 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.  
A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420  
[info@phoenixcontact.co.in](mailto:info@phoenixcontact.co.in)