

MKDS 5N HV/ 4-ZB-6,35 BK - PCB terminal block



1711079

<https://www.phoenixcontact.com/us/products/1711079>

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: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 4 mm², number of potentials: 4, number of rows: 1, number of positions per row: 4, product range: MKDS 5 N HV, pitch: 6.35 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: black, Pin layout: Zigzag pinning W, Solder pin [P]: 5 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard

Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Allows connection of two conductors
- Unrestricted 600-V-UL approval thanks to compact zig-zag pinning

Commercial data

Item number	1711079
Packing unit	50 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	AANFDF
GTIN	4055626225302
Weight per piece (including packing)	13.529 g
Weight per piece (excluding packing)	13.322 g
Country of origin	PL

MKDS 5N HV/ 4-ZB-6,35 BK - PCB terminal block



1711079

<https://www.phoenixcontact.com/us/products/1711079>

Technical data

Product properties

Product type	Printed circuit board terminal
Product family	MKDS 5 N HV
Product line	COMBICON Terminals L
Number of positions	4
Pitch	6.35 mm
Number of connections	4
Number of rows	1
Number of potentials	4
Pin layout	Zigzag pinning W
Solder pins per potential	1

Electrical properties

Nominal current I_N	41 A
Nominal voltage U_N	1000 V
Degree of pollution	3
Rated voltage (III/3)	800 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)	8 kV

Connection data

Connection technology

Type	PC termination block
Nominal cross section	4 mm ²

Conductor connection

Connection method	Screw connection with tension sleeve
Conductor cross section rigid	0.2 mm ² ... 6 mm ²
Conductor cross section flexible	0.2 mm ² ... 4 mm ²
Conductor cross section AWG	24 ... 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 4 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 4 mm ²
2 conductors with same cross section, solid	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm ² ... 0.75 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 2.5 mm ²

MKDS 5N HV/ 4-ZB-6,35 BK - PCB terminal block



1711079

<https://www.phoenixcontact.com/us/products/1711079>

Stripping length	8 mm
Tightening torque	0.5 Nm ... 0.6 Nm

Mounting

Mounting type	Wave soldering
Pin layout	Zigzag pinning W
Drive form screw head	Slotted (L)

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	hot-dip tin-plated
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)	black (9005)
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	6.35 mm
Width [w]	12.7 mm
Height [h]	32 mm
Length [l]	15.85 mm
Installed height	27 mm
Solder pin length [P]	5 mm
Pin dimensions	0.9 x 0.9 mm

PCB design

Pin spacing	9 mm
-------------	------

MKDS 5N HV/ 4-ZB-6,35 BK - PCB terminal block



1711079

<https://www.phoenixcontact.com/us/products/1711079>

Hole diameter	1.3 mm
---------------	--------

Mechanical tests

Test for conductor damage and slackening

Specification	IEC 60998-2-1:2002-12
Result	Test passed

Pull-out test

Specification	IEC 60998-2-1:2002-12
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	6 mm ² / solid / > 80 N
	4 mm ² / flexible / > 60 N

Torque test

Specification	IEC 60998-2-1:2002-12
---------------	-----------------------

Electrical tests

Temperature-rise test

Specification	IEC 60998-1:2002-12
Requirement temperature-rise test	Increase in temperature ≤ 45 K

Insulation resistance

Specification	IEC 60998-1:2002-12
Insulation resistance, neighboring positions	10 ¹² Ω

Air clearances and creepage distances |

Specification	IEC 60947-7-4:2013-08
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	10 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
minimum creepage distance (III/2)	8 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	8 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

MKDS 5N HV/ 4-ZB-6,35 BK - PCB terminal block



1711079

<https://www.phoenixcontact.com/us/products/1711079>

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)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

Glow-wire test

Specification	IEC 60998-1:2002-12
Temperature	850 °C
Time of exposure	5 s

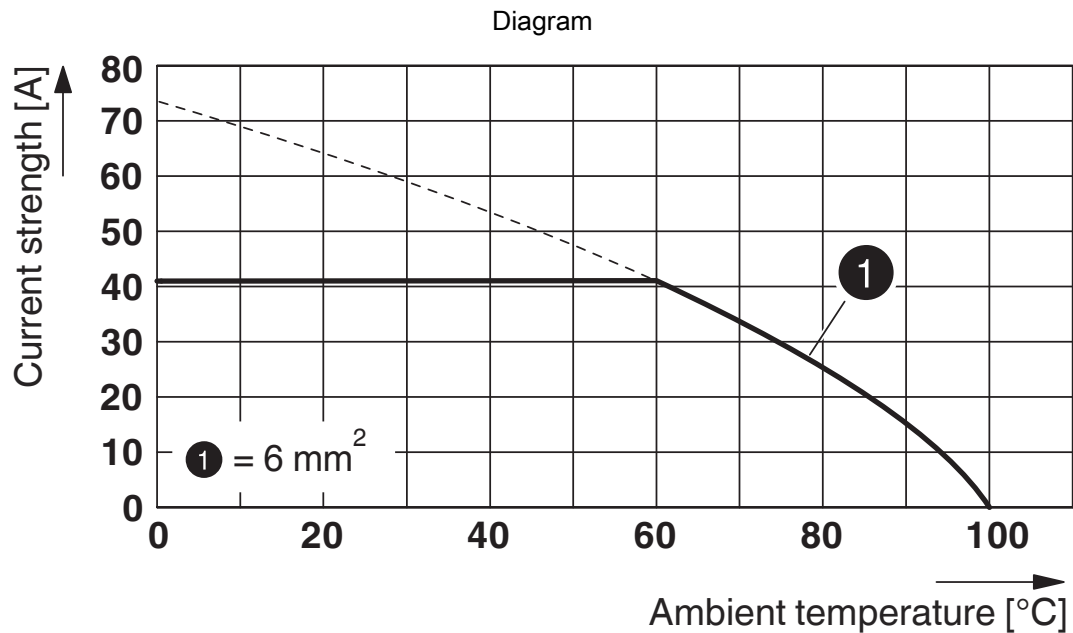
Ambient conditions

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

Packaging specifications

Type of packaging	packed in cardboard
-------------------	---------------------

Drawings



Type: MKDS 5N HV/...-ZB-6,35

Tested in accordance with DIN EN 60512-5-2:2003-01

Reduction factor = 1

Number of positions: 5

MKDS 5N HV/ 4-ZB-6,35 BK - PCB terminal block



1711079

<https://www.phoenixcontact.com/us/products/1711079>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1711079>

 cULus Recognized Approval ID: E60425-19770427				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B	600 V	30 A	30 - 10	-
Use group C	600 V	30 A	30 - 10	-

MKDS 5N HV/ 4-ZB-6,35 BK - PCB terminal block



1711079

<https://www.phoenixcontact.com/us/products/1711079>

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC002643
----------	----------

UNSPSC

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

MKDS 5N HV/ 4-ZB-6,35 BK - PCB terminal block



1711079

<https://www.phoenixcontact.com/us/products/1711079>

Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
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%

MKDS 5N HV/ 4-ZB-6,35 BK - PCB terminal block



1711079

<https://www.phoenixcontact.com/us/products/1711079>

Accessories

SZF 1-0,6X3,5 - Screwdriver

1204517

<https://www.phoenixcontact.com/us/products/1204517>

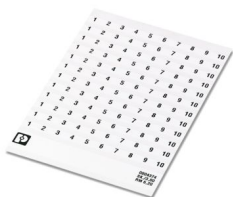


Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

SK 6,2/3,8:FORTL.ZAHLEN - Marker card

0804374

<https://www.phoenixcontact.com/us/products/0804374>



Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 6.2 mm, lettering field size: 6.2 x 3.8 mm

MKDS 5N HV/ 4-ZB-6,35 BK - PCB terminal block



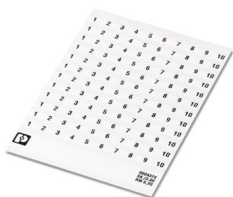
1711079

<https://www.phoenixcontact.com/us/products/1711079>

SK 3,8 REEL P6,2 WH CUS - Marker card

0825126

<https://www.phoenixcontact.com/us/products/0825126>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 6.2 mm, lettering field size: continuous x 3.8 mm

SK 5,0 WH:REEL - Marker strip

0805221

<https://www.phoenixcontact.com/us/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, lettering field size: continuous x 5 mm, Number of individual labels: 10

MKDS 5N HV/ 4-ZB-6,35 BK - PCB terminal block



1711079

<https://www.phoenixcontact.com/us/products/1711079>

SZS 0,8X4,0 VDE - Screwdriver

1212508

<https://www.phoenixcontact.com/us/products/1212508>



Screwdriver, slot-headed, VDE insulated, size: 0.8 x 4.0 x 100 mm, 2-component grip, with non-slip grip

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com