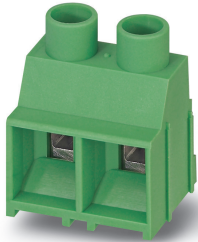


PCB terminal block - MKDS 5 HV/ 3-9,52 - 1904150

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>)

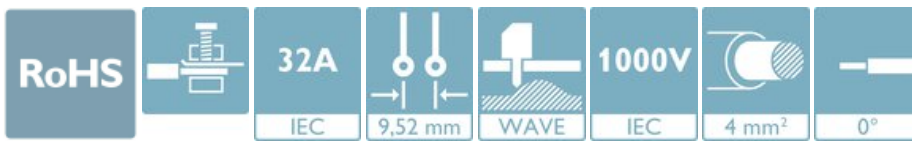


PCB terminal block, nominal current: 32 A, rated voltage (III/2): 1000 V, nominal cross section: 4 mm², number of potentials: 3, Number of rows: 1, Number of positions per row: 3, product range: MKDS 5 HV, pitch: 9.52 mm, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Linear pinning, Solder pin [P]: 5.2 mm, type of packaging: packed in cardboard. The article can be aligned to create different nos. of positions!

The figure shows a 2-pos. version of the product

Your advantages

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ 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	
GTIN	4017918187613
Weight per Piece (excluding packing)	9.810 g
Custom tariff number	85369010
Country of origin	Poland

Technical data

Item properties

Brief article description	PCB terminal block
Range of articles	MKDS 5 HV
Pitch	9.52 mm

PCB terminal block - MKDS 5 HV/ 3-9,52 - 1904150

Technical data

Item properties

Number of positions	3
Screw thread	M3
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of rows	1
Number of connections	3
Number of potentials	3

Electrical parameters

Nominal current	32 A
Nom. voltage	1000 V
Rated voltage (III/3)	800 V
Rated voltage (III/2)	1000 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	8 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (II/2)	6 kV

Connection capacity

Connection method	Screw connection with tension sleeve
pluggable	Yes
Conductor cross section solid	0.2 mm ² ... 6 mm ²
Conductor cross section flexible	0.2 mm ² ... 4 mm ²
Conductor cross section AWG / kcmil	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
Stripping length	8 mm
Torque	0.5 Nm ... 0.6 Nm

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

PCB terminal block - MKDS 5 HV/ 3-9,52 - 1904150

Technical data

Material data - contact

Metal surface terminal point (top layer)	Tin (4 - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 µm Sn)

Material data - housing

Housing color	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 for the product

Caption	Schematische Abbildung - weitere Details siehe Produktfamilienzeichnung im Download Center
Length [l]	16 mm
Width [w]	28.56 mm
Height [h]	26.7 mm
Pitch	9.52 mm
Height (without solder pin)	21.5 mm
Solder pin [P]	5.2 mm
Pin dimensions	0.9 x 0.9 mm

Dimensions for PCB design

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

Packaging information

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

General product information

Type of note	Note on application
Note	For safe conductor connection, always adhere to a defined tightening torque. Particularly in the case of PCB terminal blocks with two or three positions, the individual solder pin for each contact point cannot compensate for this. That is why the terminal blocks must be supported during conductor connection (held with one hand, support on the housing).

Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
---	------------------

PCB terminal block - MKDS 5 HV/ 3-9,52 - 1904150

Technical data

Ambient conditions

Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)

Termination and connection method

Test for conductor damage and slackening	IEC 60998-2-1:1990-04
	Test passed

Pull-out test

Pull-out test	IEC 60998-2-1:1990-04
Conductor cross section / conductor type / tensile force	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

Mechanical tests according to standard

Test specification	IEC 60998-2-1 (in parts)
--------------------	--------------------------

Electrical tests

Rated current	32 A
Conductor cross section	4 mm ²
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

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)	8 mm
Minimum clearance - inhomogeneous field (III/2)	8 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	10 mm
Minimum creepage distance value (III/2)	8 mm
Minimum creepage distance value (II/2)	5.5 mm

Temperature-rise test

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

Current carrying capacity / derating curves

Caption	Type: MKDS 5 HV/2-9,52 and MKDS 5 HV/3-9,52 Test following DIN EN 60512-5-2:2003-01 Reduction factor = 1
---------	--

PCB terminal block - MKDS 5 HV/ 3-9,52 - 1904150

Technical data

Current carrying capacity / derating curves

	No. of positions: 5
--	---------------------

Vibration test

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

Insulation resistance

Specification	IEC 60998-2-1:1990-04
Result	Test passed
Insulation resistance, neighboring positions	> 5 MΩ

Glow-wire test

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

Mechanical strength/tumbling barrel test

Specification	IEC 60998-2-1:1990-04
Number of drop cycles	50

Standards and Regulations

Connection in acc. with standard	EN-VDE
	CUL

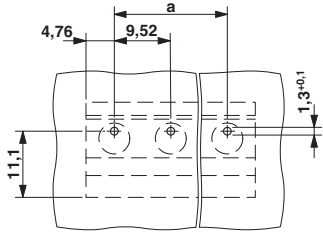
Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

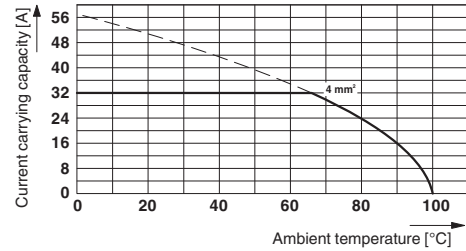
Drawings

PCB terminal block - MKDS 5 HV/ 3-9,52 - 1904150

Drilling diagram

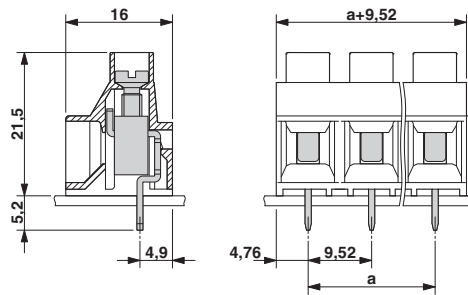


Diagram



Type: MKDS 5 HV/2-9,52 and MKDS 5 HV/3-9,52
 Test following DIN EN 60512-5-2:2003-01
 Reduction factor = 1
 No. of positions: 5

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 9.0	27440401

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

PCB terminal block - MKDS 5 HV/ 3-9,52 - 1904150

Classifications

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

Approvals


Approvals


Approvals

IECEE CB Scheme / SEV / EAC / cULus Recognized

Ex Approvals

Approval details


IECEE CB Scheme		http://www.iecee.org/	CH-10724-A1
Nominal voltage UN	690 V		
Nominal current IN	32 A		
mm ² /AWG/kcmil	6		

SEV		https://www.eurofins.ch/de/	IK-4486-A1
Nominal voltage UN	690 V		
Nominal current IN	32 A		
mm ² /AWG/kcmil	6		

PCB terminal block - MKDS 5 HV/ 3-9,52 - 1904150

Approvals

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

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19770427
	B	C	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	30 A	30 A	5 A
mm ² /AWG/kcmil	30-10	30-10	30-10

Accessories

Accessories

Screwdriver tools

Screwdriver - SZS 0,6X3,5 - 1205053



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

Terminal marking

Marker strip - SK 5,0 WH:REEL - 0805221



Marker strip, Roll, white, unlabeled, can be labeled with: 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

Additional products

PCB terminal block - MKDS 5 HV/ 3-9,52 - 1904150

Accessories

PCB terminal block - MKDS 5 HV/ 2-9,52 - 1902547



PCB terminal block, nominal current: 32 A, rated voltage (III/2): 1000 V, nominal cross section: 4 mm², number of potentials: 2, Number of rows: 1, Number of positions per row: 2, product range: MKDS 5 HV, pitch: 9.52 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]: 5.2 mm, type of packaging: packed in cardboard. The article can be aligned to create different nos. of positions! If used purely as 2-pos., we recommend version MKDSV 5 HV with anti-rotation pins.