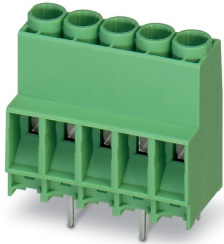


## PCB terminal block - MKDS 5N HV/ 3-ZB-6,35 - 1777558

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PCB terminal block, nominal current: 41 A, rated voltage (III/2): 1000 V, nominal cross section: 4 mm<sup>2</sup>, Number of potentials: 3, Number of rows: 1, Number of positions per row: 3, product range: MKDS 5 N HV, pitch: 6.35 mm, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green, Pin layout: Zigzag pinning W, Solder pin [P]: 5 mm, type of packaging: packed in cardboard

The figure shows the 5-pos. version

### 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



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 046356 522335
GTIN	4046356522335
Weight per Piece (excluding packing)	40.000 g
Custom tariff number	85369010
Country of origin	Poland

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	MKDS 5 N HV
Pitch	6.35 mm
Number of positions	3

## PCB terminal block - MKDS 5N HV/ 3-ZB-6,35 - 1777558

### Technical data

#### Item properties

Drive form screw head	Slotted (L)
Screw thread	M3
Mounting type	Wave soldering
Pin layout	Zigzag pinning W
Number of levels	1
Number of connections	3
Number of potentials	3

#### Electrical parameters

Nominal current	41 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)	8 kV

#### Connection capacity

Connection method	Screw connection with tension sleeve
pluggable	no
Conductor cross section solid	0.2 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 ... 10
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 4 mm <sup>2</sup>
2 conductors with same cross section, solid	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
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	hot-dip tin-plated

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## Technical data

### Material data - contact

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

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 ]	15.85 mm
Width [ w ]	19.05 mm
Height [ h ]	32 mm
Pitch	6.35 mm
Height (without solder pin)	27 mm
Solder pin [P]	5 mm
Pin spacing	9 mm
Pin dimensions	0.9 x 0.9 mm

### Dimensions for PCB design

Hole diameter	1.3 mm
Pin spacing	9 mm

### Packaging information

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

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)

### Termination and connection method

# PCB terminal block - MKDS 5N HV/ 3-ZB-6,35 - 1777558

## Technical data

### Termination and connection method

Test for conductor damage and slackening	IEC 60998-2-1:2002-12
	Test passed

### Pull-out test

Pull-out test	IEC 60998-2-1:2002-12
Conductor cross section / conductor type / tensile force	0.2 mm <sup>2</sup> / solid / > 10 N
	4 mm <sup>2</sup> / flexible / > 60 N
	6 mm <sup>2</sup> / solid / > 80 N

### Mechanical tests according to standard

Test specification	IEC 60998-2-1 (in parts)
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### Electrical tests

Rated current	41 A
Conductor cross section	4 mm <sup>2</sup>
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV

### Air clearances and creepage distances

Clearances and creepage distances	IEC 60947-7-4:2013-08
Specification	IEC 60947-7-4:2013-08
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 60998-1:2002-12
Requirement temperature-rise test	Increase in temperature ≤ 45 K

### Current carrying capacity / derating curves

Caption	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
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### Vibration test

Specification	IEC 60068-2-6:1995-03
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min

# PCB terminal block - MKDS 5N HV/ 3-ZB-6,35 - 1777558

## Technical data

### Vibration test

Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

### Insulation resistance

Specification	IEC 60998-1:2002-12
Result	Test passed
Insulation resistance, neighboring positions	$10^{12} \Omega$

### Glow-wire test

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

### Mechanical strength/tumbling barrel test

Specification	IEC 60998-1:2002-12
Number of drop cycles	50

### Standards and Regulations

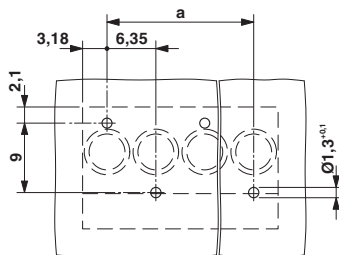
Connection in acc. with standard	EN-VDE
	CUL
Flammability rating according to UL 94	V0

### Environmental Product Compliance

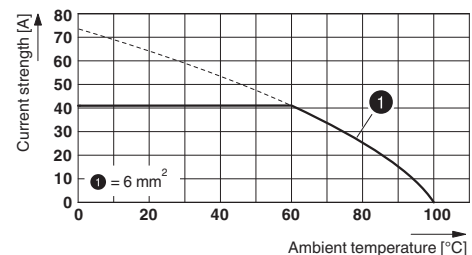
REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Drilling diagram



Diagram



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

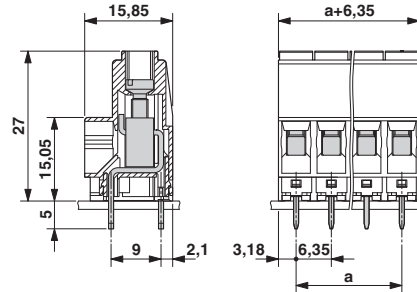
# PCB terminal block - MKDS 5N HV/ 3-ZB-6,35 - 1777558

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

Reduction factor = 1

Number 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 8.0	27440401
eCl@ss 9.0	27440401

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002643
ETIM 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

### UNSPSC

UNSPSC 6.01	30211801
UNSPSC 7.0901	39121432
UNSPSC 11	39121432
UNSPSC 12.01	39121432
UNSPSC 13.2	39121432
UNSPSC 18.0	39121432

# PCB terminal block - MKDS 5N HV/ 3-ZB-6,35 - 1777558

## Classifications

### UNSPSC

UNSPSC 19.0	39121432
UNSPSC 20.0	39121432
UNSPSC 21.0	39121432

## Approvals


### Approvals

#### Approvals


SEV / EAC / cULus Recognized / IECCEB Scheme

#### Ex Approvals

### Approval details

SEV		<a href="https://www.eurofins.ch/de/">https://www.eurofins.ch/de/</a>	IK-4497
Nominal voltage UN		1000 V	
Nominal current IN		41 A	
mm <sup>2</sup> /AWG/kcmil		4	

EAC		B.01687
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cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm</a>	E60425-19770427
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	30 A	30 A	
mm <sup>2</sup> /AWG/kcmil	30-10	30-10	

# PCB terminal block - MKDS 5N HV/ 3-ZB-6,35 - 1777558

## Approvals

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	CH-10787
Nominal voltage UN	1000 V		
Nominal current IN	41 A		
mm <sup>2</sup> /AWG/kcmil	4		

## Accessories

### Accessories

#### Labeled terminal marker

Marker card - SK 6,2/3,8:FORTL.ZAHLEN - 0804374



Marker card, 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

Marker card - SK 3,8 REEL P6,2 WH CUS - 0825126



Marker card, 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

### 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



## PCB terminal block - MKDS 5N HV/ 3-ZB-6,35 - 1777558

### Accessories

Screwdriver - SZS 0,8X4,0 VDE - 1212508



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

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### 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