

## PCB terminal block - GMKDS 1,5/ 2 - 1717020

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PCB terminal block, nominal current: 17.5 A, nom. voltage: 630 V, pitch: 7.5 mm, number of positions: 2, connection method: Screw connection with tension sleeve, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: green. The article can be aligned to create different nos. of positions!

### Why buy this product

- ✓ Well-known connection principle allows worldwide use
- ✓ Low temperature rise, thanks to maximum contact force
- ✓ Allows connection of two conductors
- ✓ Larger pitch for increased voltage requirements
- ✓ The latching on the side enables various numbers of positions to be combined



### Key Commercial Data

Packing unit	250 STK
GTIN	 4 017918 024253
GTIN	4017918024253
Weight per Piece (excluding packing)	3.090 g
Custom tariff number	85369010
Country of origin	Germany

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	GMKDS 1,5
Pitch	7.5 mm
Number of positions	2
Connection method	Screw connection with tension sleeve
Drive form screw head	Slotted (L)
Screw thread	M3
Mounting type	Wave soldering

# PCB terminal block - GMKDS 1,5/ 2 - 1717020

## Technical data

### Item properties

Pin layout	Linear pinning
Number of levels	1

### Electrical parameters

Rated current	17.5 A
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV

### Connection capacity

Conductor cross section solid	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	26 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 1 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 1 mm <sup>2</sup>
2 conductors with same cross section, solid	0.14 mm <sup>2</sup> ... 1 mm <sup>2</sup>
2 conductors with same cross section, flexible	0.14 mm <sup>2</sup> ... 0.75 mm <sup>2</sup>
2 conductors with same cross section, stranded, ferrules without plastic sleeve	0.25 mm <sup>2</sup> ... 0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, with TWIN ferrules with plastic sleeve	0.5 mm <sup>2</sup> ... 1 mm <sup>2</sup>

### 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 (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

### Dimensions for the product

Caption	Schematic representation – for additional information, see product range drawing in the Download Center
Length [ l ]	9.8 mm
Width [ w ]	15 mm
Height [ h ]	17.3 mm
Pitch	7.5 mm
Height (without solder pin)	13.8 mm
Solder pin [P]	3.5 mm

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## Technical data

### Dimensions for the product

Pin dimensions	0.9 x 0.9 mm
Dimension a	7.5 mm

### Dimensions for PCB design

Hole diameter	1.3 mm
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### Packaging information

Type of packaging	packed in cardboard
Pieces per package	250
Denomination packing units	Pcs.

### Processing notes

Process	Wave soldering
Specification	Following IEC 61760-1:2006-04
	Following IEC 60068-2-54:2006-04

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 70 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C

### Termination and connection method

### Pull-out test

Pull-out test	Test passed IEC 60998-2-1:1990-04
	IEC 60998-2-1:1990-04
	Test passed
Conductor cross section / conductor type / tensile force	0.14 mm² solid 10 N > 0.14 mm² / solid / > 10 N

### Mechanical tests according to standard

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

Rated current	17.5 A
Rated insulation voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV

### Air clearances and creepage distances

Insulating material group	I
Comparative tracking index (IEC 60112:2003-01)	CTI 600
Voltage	500 V
Rated insulation voltage (III/3)	500 V
Rated insulation voltage (III/2)	630 V
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (III/3)	6 kV
Rated surge voltage (III/2)	6 kV

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### Technical data

#### Air clearances and creepage distances

Rated surge voltage (II/2)	6 kV
Minimum clearance - inhomogeneous field (III/3)	5.5 mm
Minimum clearance - inhomogeneous field (III/2)	5.5 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	6.3 mm
Minimum creepage distance value (III/2)	5.5 mm
Minimum creepage distance value (II/2)	5.5 mm
Note on connection cross section	With connected conductor 1.5 mm <sup>2</sup> (solid).

#### Current carrying capacity / derating curves

Specification	IEC 60998-2-1 (in parts)
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#### Vibration test

Resistance to ageing, to humidity conditions, to ingress of solid objects and to harmful ingress of water	Test passed IEC 60998-2-1:1990-04 168 h/100°C 48 h/25 °C/92%
Test result	Test passed
Test specification	IEC 60998-2-1:1990-04
Dry heat	168 h/100°C
Humid heat	48 h/25 °C/92%

#### Resistance to ageing, humidity and penetration of solids

Test result	Test passed
Test specification	IEC 60998-2-1:1990-04
Dry heat	168 h/100°C
Humid heat	48 h/25 °C/92%

#### Standards and Regulations

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

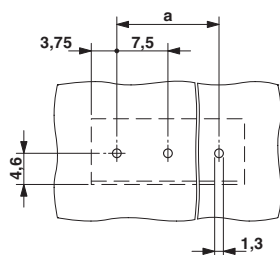
#### Environmental Product Compliance

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

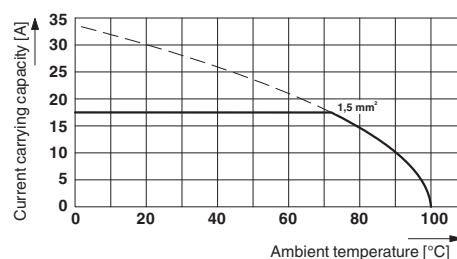
### Drawings

## PCB terminal block - GMKDS 1,5/ 2 - 1717020

Drilling diagram

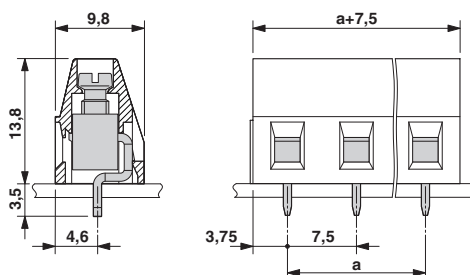


Diagram



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

Dimensional drawing



### Classifications

#### eCl@ss

eCl@ss 4.0	27141109
eCl@ss 4.1	27141109
eCl@ss 5.0	27141190
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

#### UNSPSC

UNSPSC 6.01	30211801
UNSPSC 7.0901	39121432
UNSPSC 11	39121432

## PCB terminal block - GMKDS 1,5/ 2 - 1717020

### Classifications

#### UNSPSC

UNSPSC 12.01	39121432
UNSPSC 13.2	39121432

### Approvals

#### Approvals


#### Approvals


CSA / UL Recognized / SEV / cUL Recognized / CCA / EAC / DNV GL / cULus Recognized

#### Ex Approvals

#### Approval details


CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm²/AWG/kcmil	28-14	28-14	

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm²/AWG/kcmil	30-14	30-14	


SEV		<a href="https://www.electrosuisse.ch/en/meta/shop/product-certificates.html">https://www.electrosuisse.ch/en/meta/shop/product-certificates.html</a>	IK-4199
Nominal voltage UN	500 V		
Nominal current IN	17.5 A		
mm²/AWG/kcmil	1.5		

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### Approvals

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	10 A	
mm²/AWG/kcmil	30-14	30-14	

CCA	IK-3249
Nominal voltage UN	500 V
mm²/AWG/kcmil	1.5

EAC		B.01742
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DNV GL	<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAE00001EV
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cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>
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### Accessories

#### Accessories

##### Labeled terminal marker

Marker card - SK 7,5/5:FORTL.ZAHLEN - 0804468



Marker card, Card, white, labeled, Horizontal: consecutive numbers 1 - 10, 11 - 20, etc. up to 91 - 100, mounting type: adhesive, for terminal block width: 7.5 mm, lettering field size: 7.5 x 5 mm

##### Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

## PCB terminal block - GMKDS 1,5/ 2 - 1717020

### Accessories

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#### 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

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