

## PCB terminal block - FKDSO 2,5/ 4-R KMGY - 2200320

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: 22 A, rated voltage (III/2): 250 V, nominal cross section: 2.5 mm<sup>2</sup>, pitch: 5 mm, number of positions: 4, connection method: Push-in spring connection, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3.5 mm. Article with lateral pin exit

### Your advantages

- ✔ Spring-cage PCB terminal block for ME/ME MAX electronics housing
- ✔ Push-in Technology simplifies connection
- ✔ 5 mm pitch
- ✔ Time saving push-in connection, tools not required
- ✔ Intuitive use through colour coded actuation lever
- ✔ Defined contact force ensures that contact remains stable over the long term



### Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4046356563857

### Technical data

#### Item properties

Brief article description	PCB terminal block
Range of articles	FKDSO 2,5/..-R
Pitch	5 mm
Number of positions	4
Connection method	Push-in spring connection
Mounting type	Wave soldering
Pin layout	Linear pinning
Number of levels	1
Number of connections	4
Number of potentials	4

# PCB terminal block - FKDSO 2,5/ 4-R KMGY - 2200320

## Technical data

### Electrical parameters

Nominal current	22 A
Nom. voltage	250 V
Rated voltage	250 V
Rated voltage (III/2)	250 V
Rated voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV

### Connection capacity

Connection method	Push-in spring connection
Conductor cross section solid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG / kcmil	24 ... 14
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Stripping length	10 mm

### 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 µm Sn)
Metal surface soldering area (top layer)	Tin (5 - 7 µm Sn)

### Material data - housing

Housing color	light gray (7035)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

### Dimensions for the product

Length [ l ]	18.8 mm
Width [ w ]	20 mm
Height [ h ]	14.85 mm
Pitch	5 mm
Solder pin [P]	3.5 mm
Pin dimensions	0.8 x 1 mm

### Dimensions for PCB design

# PCB terminal block - FKDSO 2,5/ 4-R KMGY - 2200320

## Technical data

### Dimensions for PCB design

Hole diameter	1.4 mm
---------------	--------

### Packaging information

Pieces per package	50
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 ... 55 °C
Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (operation)	-40 °C ... 105 °C (Depending on the current carrying capacity/derating curve)

### Termination and connection method

Test for conductor damage and slackening	IEC 60999-1:1999-11
	Test passed

### Pull-out test

Pull-out test	IEC 60999-1:1999-11
	Test passed
Conductor cross section / conductor type / tensile force	0.2 mm <sup>2</sup> / solid / > 10 N
	2.5 mm <sup>2</sup> / solid / > 50 N
	0.2 mm <sup>2</sup> / flexible / > 10 N
	4 mm <sup>2</sup> / flexible / > 60 N

### Mechanical tests according to standard

Test specification	IEC 60947-7-4
--------------------	---------------

### Electrical tests

Rated current	22 A
Conductor cross section	2.5 mm <sup>2</sup>
Rated voltage (III/2)	250 V
Rated surge voltage (III/2)	4 kV

### Air clearances and creepage distances

Clearances and creepage distances	IEC 60947-1:2007-06 + A1:2010-12
Specification	IEC 60947-1:2007-06 + A1:2010-12
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	3.2 mm
Minimum creepage distance value (III/2)	1.25 mm

# PCB terminal block - FKDSO 2,5/ 4-R KMGY - 2200320

## Technical data

### Air clearances and creepage distances

Minimum creepage distance value (II/2)	3.2 mm
--	--------

### Temperature-rise test

Result	Test passed
Specification	IEC 60947-7-4:2013-08

### Current carrying capacity / derating curves

Specification	IEC 60947-7-4
---------------	---------------

### Vibration test

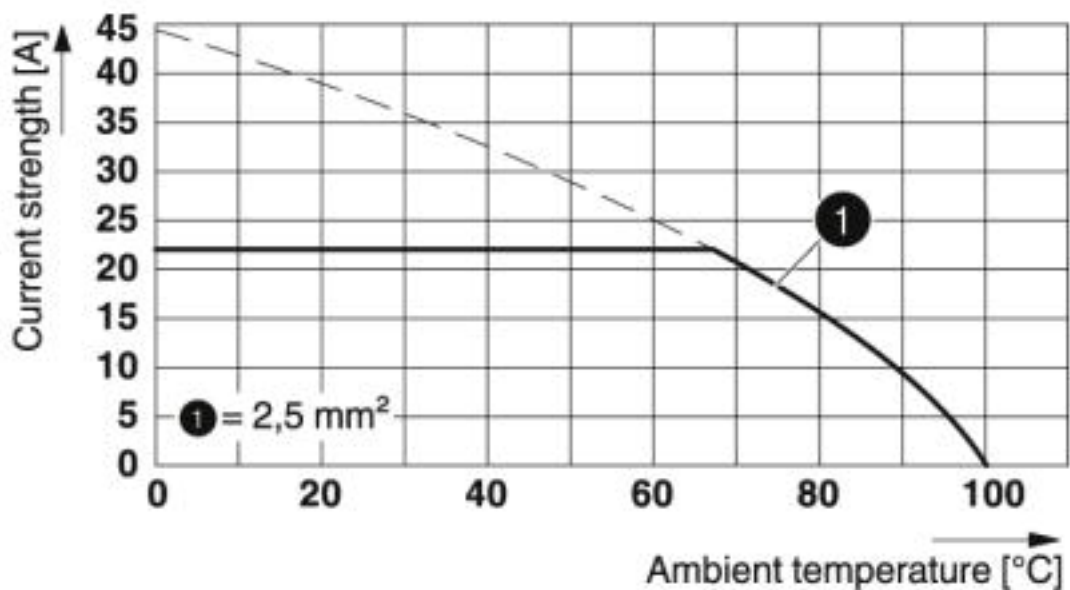
Specification	IEC 60068-2-6:2007-12
Result	Test passed
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Acceleration	5 g (60.1 - 150 Hz)
Test duration per axis	2.5 h

### Environmental Product Compliance

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

## Drawings

Diagram



Type: FKDSO 2,5/...-L(R)  
 Tested according to DIN EN 60512-5-2:2003-01  
 Reduction factor = 1

# PCB terminal block - FKDSO 2,5/ 4-R KMGY - 2200320

Number of positions: 4

## Classifications

### eCl@ss

eCl@ss 10.0.1	27440401
eCl@ss 4.0	27180400
eCl@ss 4.1	27180400
eCl@ss 5.0	27180500
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 2.0	EC001031
ETIM 3.0	EC001031
ETIM 4.0	EC002643
ETIM 5.0	EC002643
ETIM 6.0	EC002643
ETIM 7.0	EC002643

### UNSPSC

UNSPSC 6.01	31261501
UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
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 / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

---


#### Ex Approvals


---

### Approval details


# PCB terminal block - FKDSO 2,5/ 4-R KMGY - 2200320

## Approvals

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-59403
Nominal voltage UN	250 V		
Nominal current IN	22 A		
mm <sup>2</sup> /AWG/kcmil	0.2-2.5		

VDE Gutachten mit Fertigungsüberwachung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40033478
Nominal voltage UN	250 V		
Nominal current IN	22 A		
mm <sup>2</sup> /AWG/kcmil	0.2-2.5		

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

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>	E60425-20110930
	B	D	
Nominal voltage UN	300 V	300 V	
Nominal current IN	10 A	5 A	
mm <sup>2</sup> /AWG/kcmil	24-14	24-14	

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
 Flachsmarktstr. 8  
 32825 Blomberg  
 Germany  
 Tel. +49 5235 300  
 Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>