

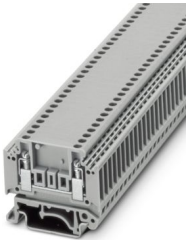
# MTKD - Feed-through terminal block



3100017

<https://www.phoenixcontact.com/gb/products/3100017>

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.



Feed-through terminal block, nom. voltage: 400 V, nominal current: 13.5 A, number of connections: 2, number of positions: 1, connection method: Screw connection, Rated cross section: 1 mm<sup>2</sup>, cross section: 0.2 mm<sup>2</sup> - 4 mm<sup>2</sup>, mounting type: NS 35/7,5, NS 35/15, NS 32, color: gray

## Your advantages

- High current carrying capacity of up to 16 A
- Space-saving design

## Commercial data

Item number	3100017
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE1211
Product key	BE1211
GTIN	4017918092436
Weight per piece (including packing)	8.787 g
Weight per piece (excluding packing)	8.787 g
Customs tariff number	85369010
Country of origin	PL

# MTKD - Feed-through terminal block



3100017

<https://www.phoenixcontact.com/gb/products/3100017>

## Technical data

### Product properties

Product type	Feed-through terminal block
Product family	MTK
Number of positions	1
Number of connections	2
Number of rows	1
Potentials	1

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	0.77 W

### Connection data

Number of connections per level	2
Nominal cross section	1 mm <sup>2</sup>
Connection method	Screw connection
Screw thread	M3
Tightening torque	0.5 ... 0.6 Nm
Stripping length	7 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Cross section AWG	24 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	24 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.25 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Cross-section with insertion bridge, rigid	4 mm <sup>2</sup>
Cross-section with insertion bridge, flexible	2.5 mm <sup>2</sup>
2 conductors with same cross section, rigid	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> ... 1.5 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>
Nominal cross section	1 mm <sup>2</sup>
Nominal current	13.5 A
Maximum load current	16 A (with 4 mm <sup>2</sup> conductor cross-section)

# MTKD - Feed-through terminal block



3100017

<https://www.phoenixcontact.com/gb/products/3100017>

Nominal voltage	400 V
-----------------	-------

## Dimensions

Width	5.2 mm
End cover width	1 mm
Height	46.2 mm
Depth on NS 32	44.9 mm
Depth on NS 35/7,5	39.9 mm
Depth on NS 35/15	47.4 mm

## Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Smoke gas toxicity NFPA 130 (SMP 800C)	passed

## Electrical tests

### Surge voltage test

Test voltage setpoint	7.3 kV
Result	Test passed

### Temperature-rise test

Requirement temperature-rise test	Increase in temperature $\leq$ 45 K
Result	Test passed
	Test passed
Short-time withstand current 2.5 mm <sup>2</sup>	0.3 kA
Result	Test passed

### Power-frequency withstand voltage

Test voltage setpoint	1.89 kV
Result	Test passed

## Mechanical properties

### Mechanical data

Open side panel	Yes
-----------------	-----

## Mechanical tests

### Mechanical strength

Result	Test passed
--------	-------------

### Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Test force setpoint	1 N
Result	Test passed

### Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross-section/weight	0.2 mm <sup>2</sup> / 0.2 kg
	1 mm <sup>2</sup> / 0.4 kg
	4 mm <sup>2</sup> / 0.9 kg
Result	Test passed

## Environmental and real-life conditions

### Needle-flame test

Time of exposure	30 s
Result	Test passed

### Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2018-05
Spectrum	Long life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

### Shocks

Pulse shape	Semi-sinusoidal
Acceleration	5g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

### Ambient conditions

Ambient temperature (operation)	-60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)

# MTKD - Feed-through terminal block



3100017

<https://www.phoenixcontact.com/gb/products/3100017>

Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

## Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
----------------------------------	---------------

## Mounting

Mounting type	NS 35/7,5
	NS 35/15
	NS 32

# MTKD - Feed-through terminal block

3100017

<https://www.phoenixcontact.com/gb/products/3100017>



## Drawings

### Circuit diagram



# MTKD - Feed-through terminal block





3100017


<https://www.phoenixcontact.com/gb/products/3100017>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/3100017>

 <b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	600 V	20 A	28 - 12	-
C	600 V	20 A	28 - 12	-

 <b>EAC</b> Approval ID: KZ7500651131219505				
---	--	--	--	--

 <b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
B	250 V	10 A	28 - 12	-
D	300 V	10 A	28 - 12	-

# MTKD - Feed-through terminal block



3100017

<https://www.phoenixcontact.com/gb/products/3100017>

## Classifications

### ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	27250101

### ETIM

ETIM 10.0	EC000897
-----------	----------

### UNSPSC

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

# MTKD - Feed-through terminal block



3100017

<https://www.phoenixcontact.com/gb/products/3100017>

## 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%
-------------------------------------	----------------------------

### EF3.1 Climate Change

CO2e kg	0.039 kg CO2e
---------	---------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

PHOENIX CONTACT Ltd  
Halesfield 13, Telford  
Shropshire, TF7 4PG  
01952 681700  
[info@phoenixcontact.co.uk](mailto:info@phoenixcontact.co.uk)