

MTKD-NICR/CUNI - Thermoelectric voltage terminal block pair

3100075

<https://www.phoenixcontact.com/us/products/3100075>

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.



Thermoelectric voltage terminal block pair, TC type E, nom. voltage: 400 V, nominal current: 1 A, number of connections: 4, number of positions: 2, connection method: Screw connection, 1 level, cross section: 0.2 mm² - 4 mm², mounting type: NS 35/7,5, NS 35/15, NS 32, color: gray

Your advantages

- These special terminal blocks are used to extend thermocouple equalizing conductors in corresponding measuring circuits
- The equalizing conductors are made from materials which, up to temperatures of 200°C, have the same thermal characteristics as the corresponding thermocouples

Commercial data

Item number	3100075
Packing unit	50 pc
Minimum order quantity	1 pc
Sales key	BE12
Product key	BE1211
Catalog page	Page 532 (C-1-2019)
GTIN	4017918092481
Weight per piece (including packing)	16.47 g
Weight per piece (excluding packing)	16.4 g
Customs tariff number	85369010
Country of origin	PL

MTKD-NICR/CUNI - Thermoelectric voltage terminal block pair



3100075

<https://www.phoenixcontact.com/us/products/3100075>

Technical data

Product properties

Product type	Feed-through terminal block
Number of positions	2
Number of connections	4
Number of rows	1
Potentials	1

Data management status

Article revision	04
------------------	----

Electrical properties

Maximum power dissipation for nominal condition	0.77 W
---	--------

Connection data

Number of connections per level	4
Nominal cross section	2.5 mm ²

1 level

Screw thread	M3
Tightening torque	0.6 ... 0.8 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 ² ... 4 mm ²
Cross section AWG	24 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section, flexible [AWG]	24 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.2 mm ² ... 1.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.2 mm ² ... 1.5 mm ²
Nominal current	1 A
Maximum load current	1 A (with 4 mm ² conductor cross section)
Nominal voltage	400 V (Voltage to the neighboring feed-through terminal block MTK.)

Dimensions

Width	10.4 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

MTKD-NICR/CUNI - Thermoelectric voltage terminal block pair



3100075

<https://www.phoenixcontact.com/us/products/3100075>

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material	PA
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

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

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
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 35
Test force setpoint	1 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
	0.2 mm ² / 0.2 kg

MTKD-NICR/CUNI - Thermoelectric voltage terminal block pair



3100075

<https://www.phoenixcontact.com/us/products/3100075>

Conductor cross section/weight	2.5 mm ² / 0.7 kg
	4 mm ² / 0.9 kg
Result	Test passed

Environmental and real-life conditions

Needle-flame test

Time of exposure	30 s
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, no longer than 24 h, -60°C to +70°C)
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-NICR/CUNI - Thermoelectric voltage terminal block pair



3100075

<https://www.phoenixcontact.com/us/products/3100075>

Drawings

Circuit diagram



MTKD-NICR/CUNI - Thermoelectric voltage terminal block pair



3100075

<https://www.phoenixcontact.com/us/products/3100075>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3100075>



EAC

Approval ID: RU C-DE.BL08.B.00534



cULus Recognized

Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	250 V	10 A	28 - 12	-
Use group D				
	300 V	10 A	28 - 12	-



CSA

Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	300 V	1 A	28 - 12	-
Use group D				
	300 V	1 A	28 - 12	-

MTKD-NICR/CUNI - Thermoelectric voltage terminal block pair



3100075
<https://www.phoenixcontact.com/us/products/3100075>

Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250115

ETIM

ETIM 9.0	EC000904
----------	----------

UNSPSC

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

MTKD-NICR/CUNI - Thermoelectric voltage terminal block pair



3100075
<https://www.phoenixcontact.com/us/products/3100075>

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%

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com