

## Knife disconnect terminal block - PT 2,5-TWIN-MTB - 3210170

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>)



Knife disconnect terminal block, Connection type: Push-in connection, Cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 26 - 12, Nominal current: 16 A, Nominal voltage: 400 V, Length: 81.9 mm, Width: 5.2 mm, Color: gray, Assembly: NS 35/7,5, NS 35/15

### Why buy this product

- The Push-in connection terminal blocks are characterized by the system features of the CLIPLINE complete system and by easy and tool-free wiring of conductors with ferrules or solid conductors
- The compact design and front connection enable wiring in a confined space
- In addition to the testing facility in the double function shaft, all terminal blocks provide an additional test connection
- Tested for railway applications

### Key Commercial Data

Packing unit	50 STK
GTIN	 4 046356 693745
Weight per Piece (excluding packing)	11.478 g
Weight per piece (including packing)	11.478 g
Country of origin	Poland

### Technical data

#### General

Number of levels	1
Number of connections	3
Potentials	1
Nominal cross section	2.5 mm <sup>2</sup>
Color	gray
Insulating material	PA
Flammability rating according to UL 94	V0
Area of application	Railway industry
	Machine building
	Plant engineering
Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III

# Knife disconnect terminal block - PT 2,5-TWIN-MTB - 3210170

## Technical data

### General

Insulating material group	I
Maximum load current	16 A (with 4 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	16 A
Nominal voltage U <sub>N</sub>	400 V
Open side panel	Yes
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Surge voltage test setpoint	7.3 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	1.89 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.14 mm <sup>2</sup> / 0.2 kg
	2.5 mm <sup>2</sup> / 0.7 kg
	4 mm <sup>2</sup> / 0.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.14 mm <sup>2</sup>
Tractive force setpoint	10 N
Conductor cross section tensile test	2.5 mm <sup>2</sup>
Tractive force setpoint	50 N
Conductor cross section tensile test	4 mm <sup>2</sup>
Tractive force setpoint	60 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	1 N
Result of voltage-drop test	Test passed
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	2.5 mm <sup>2</sup>
Short-time current	0.3 kA
Result of aging test	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03

# Knife disconnect terminal block - PT 2,5-TWIN-MTB - 3210170

## Technical data

### General

Test spectrum	Service life test category 2, bogie mounted
Test frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C

### Dimensions

Width	5.2 mm
End cover width	2.2 mm
Length	81.9 mm
Height	35.20 mm
Height NS 35/7,5	36.7 mm
Height NS 35/15	44.2 mm

### Connection data

Connection method	Push-in connection
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	26
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	26
Max. AWG conductor cross section, flexible	14
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>

# Knife disconnect terminal block - PT 2,5-TWIN-MTB - 3210170

## Technical data

### Connection data

2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	0.5 mm <sup>2</sup>
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3

### Standards and Regulations

Connection in acc. with standard	CSA
	IEC 60947-7-1
Flammability rating according to UL 94	V0

## Classifications

### eCl@ss

eCl@ss 4.0	27141126
eCl@ss 4.1	27141126
eCl@ss 5.0	27141126
eCl@ss 5.1	27141120
eCl@ss 6.0	27141120
eCl@ss 7.0	27141120
eCl@ss 8.0	27141126
eCl@ss 9.0	27141126

### ETIM

ETIM 3.0	EC000902
ETIM 4.0	EC000902
ETIM 5.0	EC000902

### UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

## Approvals

### Approvals

#### Approvals

UL Recognized / cUL Recognized / VDE Zeichengenehmigung / IECCE CB Scheme / CSA / GL / BV / LR / EAC / cULus Recognized


# Knife disconnect terminal block - PT 2,5-TWIN-MTB - 3210170

## Approvals


Ex Approvals

Approvals submitted


## Approval details

UL Recognized 


	B	C	D
mm <sup>2</sup> /AWG/kcmil	26-12	26-12	26-12
Nominal current I <sub>N</sub>	16 A	16 A	5 A
Nominal voltage U <sub>N</sub>	300 V	300 V	600 V

cUL Recognized 

	B	C	D
mm <sup>2</sup> /AWG/kcmil	26-12	26-12	26-12
Nominal current I <sub>N</sub>	16 A	16 A	5 A
Nominal voltage U <sub>N</sub>	300 V	300 V	600 V

VDE Zeichengenehmigung 

mm <sup>2</sup> /AWG/kcmil	0.2-2.5
Nominal current I <sub>N</sub>	16 A
Nominal voltage U <sub>N</sub>	400 V

IECEE CB Scheme 

mm <sup>2</sup> /AWG/kcmil	2.5
Nominal current I <sub>N</sub>	16 A
Nominal voltage U <sub>N</sub>	400 V

# Knife disconnect terminal block - PT 2,5-TWIN-MTB - 3210170

## Approvals

CSA	B	C	D	
	mm <sup>2</sup> /AWG/kcmil	26-12	26-12	26-12
	Nominal current I <sub>N</sub>	16 A	16 A	5 A
	Nominal voltage U <sub>N</sub>	300 V	300 V	600 V

GL

BV

LR

EAC

cULus Recognized

## Drawings

Circuit diagram



Phoenix Contact 2016 © - 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>



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.