

## Feed-through terminal block - PT 6 BK - 3211814

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>)




Feed-through terminal block, nom. voltage: 1000 V, nominal current: 41 A, connection method: Push-in connection, number of connections: 2, cross section: 0.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, AWG: 20 - 8, width: 8.2 mm, height: 42.2 mm, color: black, mounting type: NS 35/7,5, NS 35/15

### Your advantages

- ✓ 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



### Key Commercial Data

Packing unit	50 pc
GTIN	 4 046356 879842
GTIN	4046356879842

### Technical data

#### General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	6 mm <sup>2</sup>
Color	black
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	1.31 W
Designation	Level 1 above 1 below 1

# Feed-through terminal block - PT 6 BK - 3211814

## Technical data

### General

Maximum load current	52 A (with 10 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	41 A
Nominal voltage U <sub>N</sub>	1000 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	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2.2 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	0.5 mm <sup>2</sup> / 0.3 kg
	6 mm <sup>2</sup> / 1.4 kg
	10 mm <sup>2</sup> / 2 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.5 mm <sup>2</sup>
Tractive force setpoint	20 N
Conductor cross section tensile test	0.5 mm <sup>2</sup>
Tractive force setpoint	20 N
Conductor cross section tensile test	6 mm <sup>2</sup>
Tractive force setpoint	80 N
Conductor cross section tensile test	6 mm <sup>2</sup>
Tractive force setpoint	80 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	5 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	U <sub>1</sub> ≤ 3.2 mV; U <sub>2</sub> ≤ 1.5 x U <sub>1</sub>
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	6 mm <sup>2</sup>
Short-time current	0.72 kA AC
Conductor cross section short circuit testing	10 mm <sup>2</sup>
Short-time current	1.2 kA AC
Result of thermal test	Test passed
Ageing test for screwless modular terminal block temperature cycles	192

# Feed-through terminal block - PT 6 BK - 3211814

## Technical data

### General

Proof of thermal characteristics (needle flame) effective duration	30 s
Result of aging test	Test passed
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
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
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

### Dimensions

Width	8.2 mm
End cover width	2.2 mm
Length	57.7 mm
Height	42.2 mm
Height NS 35/7,5	43.5 mm
Height NS 35/15	51 mm

### Connection data

Connection	1 level
Connection method	Push-in connection
Stripping length	12 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	10 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	8
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	6 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	20
Max. AWG conductor cross section, flexible	10
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.5 mm <sup>2</sup>

# Feed-through terminal block - PT 6 BK - 3211814

## Technical data

### Connection data

Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	1.5 mm <sup>2</sup>
Internal cylindrical gage	A5

### Standards and Regulations

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

### Environmental Product Compliance

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

## Drawings

Circuit diagram



## Approvals

### Approvals

#### Approvals

DNV GL / CSA / PRS / BV / LR / NK / ABS / UL Recognized / cUL Recognized / IECCEB Scheme / VDE Zeichengenehmigung / EAC / EAC / RS / cULus Recognized

#### Ex Approvals

EAC Ex / IECEx / ATEX / UL Recognized / cUL Recognized / EAC Ex / cULus Recognized

### Approval details

# Feed-through terminal block - PT 6 BK - 3211814

## Approvals

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE000010T
--------	--	---	------------

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	40 A	40 A	
mm <sup>2</sup> /AWG/kcmil	20-8	20-8	

PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2107/880590/16
-----	--	---	-------------------

BV		<a href="http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials">http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials</a>	37796/B0 BV
----	--	---	-------------

LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	12/20038 (E3)
----	--	---	---------------

NK		<a href="http://www.classnk.or.jp/hp/en/">http://www.classnk.or.jp/hp/en/</a>	14ME0913
----	--	---	----------

ABS		<a href="http://www.eagle.org/eagleExternalPortalWEB/">http://www.eagle.org/eagleExternalPortalWEB/</a>	16-HG1591536-PDA
-----	--	---	------------------

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
	B	C	
Nominal voltage UN	600 V	600 V	
Nominal current IN	40 A	40 A	
mm <sup>2</sup> /AWG/kcmil	20-8	20-8	

# Feed-through terminal block - PT 6 BK - 3211814

## 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
		B	C
Nominal voltage UN		600 V	600 V
Nominal current IN		40 A	40 A
mm <sup>2</sup> /AWG/kcmil		20-8	20-8

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DE1-57203
Nominal voltage UN		1000 V	
Nominal current IN		41 A	
mm <sup>2</sup> /AWG/kcmil		0.5-6	

VDE Zeichengenehmigung		<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>	40035239
Nominal voltage UN		1000 V	
Nominal current IN		41 A	
mm <sup>2</sup> /AWG/kcmil		0.5-6	

EAC			EAC-Zulassung
-----	--	--	---------------

EAC			RU C- DE.AI30.B.01102
-----	--	--	--------------------------

RS		<a href="http://www.rs-head.spb.ru/en/index.php">http://www.rs-head.spb.ru/en/index.php</a>	17.00013.272
----	--	---	--------------

cULus Recognized			
------------------	--	--	--

Phoenix Contact 2019 © - all rights reserved  
<http://www.phoenixcontact.com>

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