

# PTFIX 2X1,5 VT - Monoblock



1045940

<https://www.phoenixcontact.com/us/products/1045940>

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.



Monoblock, Basic terminal block, nom. voltage: 450 V, nominal current: 17.5 A, number of connections: 2, connection method: Push-in connection, cross section: 0.14 mm<sup>2</sup> - 2.5 mm<sup>2</sup>, mounting type: for snapping onto a DIN rail adapter, Direct mounting with flange, Free-hanging, color: violet

## Commercial data

Item number	1045940
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE09
Product key	BEA111
GTIN	4055626639482
Weight per piece (including packing)	1.92 g
Weight per piece (excluding packing)	1.888 g
Customs tariff number	85369010
Country of origin	PL

# PTFIX 2X1,5 VT - Monoblock



1045940

<https://www.phoenixcontact.com/us/products/1045940>

## Technical data

### Product properties

Product type	Distributor terminal block
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	0.56 W

### Connection data

Number of connections per level	2
Nominal cross section	1.5 mm <sup>2</sup>
Rated cross section AWG	14
Connection method	Push-in connection
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A1 / B1
Connection in acc. with standard	IEC 60998-2-2
Conductor cross-section rigid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Cross section AWG	26 ... 14 (converted acc. to IEC)
Conductor cross-section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, flexible [AWG]	26 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Nominal current	17.5 A
Maximum load current	21 A (with a 2.5 mm <sup>2</sup> conductor cross-section)
Maximum total current	21 A
Nominal voltage	450 V

### Connection cross sections directly pluggable

Conductor cross-section rigid	0.34 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section, rigid [AWG]	26 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Flexible conductor cross-section (ferrule with plastic sleeve)	0.34 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>

### Dimensions

Width	4.2 mm
Height	21.6 mm

# PTFIX 2X1,5 VT - Monoblock



1045940

<https://www.phoenixcontact.com/us/products/1045940>

Depth	17.7 mm
-------	---------

## Material specifications

Color	violet (RAL 4005)
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
Short-time withstand current 1.5 mm <sup>2</sup>	0.18 kA
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	No
-----------------	----

## Mechanical tests

### Mechanical strength

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

### Attachment on the carrier

DIN rail/fixing support	NS 35/NS 15
Test force setpoint	1 N

# PTFIX 2X1,5 VT - Monoblock



1045940

<https://www.phoenixcontact.com/us/products/1045940>

Result	Test passed
Note	When aligning several blocks, the foot elements should be placed in a way that maximum 2 blocks are free-hanging in between. Flange elements should be placed after every 9 blocks and with engagement pins after every 12 blocks. Depending on the application case and mechanical load, other arrangements of the mounting accessory can also be chosen. One PTFIX 1,5-NS35 DIN rail adapter is suitable for a maximum of 13 blocks.

## Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross-section/weight	0.14 mm <sup>2</sup> / 0.2 kg 1.5 mm <sup>2</sup> / 0.4 kg 2.5 mm <sup>2</sup> / 0.7 kg
Result	Test passed

## Environmental and real-life conditions

### Aging

Temperature cycles	192
Result	Test passed

### 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

Specification	DIN EN 50155 (VDE 0115-200):2018-05
Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

### Ambient conditions

# PTFIX 2X1,5 VT - Monoblock



1045940

<https://www.phoenixcontact.com/us/products/1045940>

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)
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 60998-2-2
----------------------------------	---------------

## Mounting

Mounting type	for snapping onto a DIN rail adapter
	Direct mounting with flange
	Free-hanging

# PTFIX 2X1,5 VT - Monoblock

1045940

<https://www.phoenixcontact.com/us/products/1045940>



## Drawings

### Circuit diagram



# PTFIX 2X1,5 VT - Monoblock



1045940

<https://www.phoenixcontact.com/us/products/1045940>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1045940>

<b>DNV</b> Approval ID: TAE00002TT-05				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine				
	500 V	24 A	-	-

<b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B				
	300 V	20 A	26 - 12	-
C				
	150 V	20 A	26 - 12	-
D				
	300 V	10 A	26 - 12	-

<b>IECEE CB Scheme</b> Approval ID: DE1-63083				
--	--	--	--	--

<b>EAC</b> Approval ID: RU C-DE.BL08.B.00644				
---	--	--	--	--

<b>VDE Zeichengenehmigung</b> Approval ID: 40047798				
--	--	--	--	--

<b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
B				
	300 V	20 A	26 - 12	-
C				
	150 V	20 A	26 - 12	-
F				
	500 V	20 A	26 - 12	-
D				
	300 V	10 A	26 - 12	-

# PTFIX 2X1,5 VT - Monoblock

1045940

<https://www.phoenixcontact.com/us/products/1045940>



# PTFIX 2X1,5 VT - Monoblock



1045940

<https://www.phoenixcontact.com/us/products/1045940>

## Classifications

### ECLASS

ECLASS-13.0	27250118
ECLASS-15.0	27250118

### ETIM

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

### UNSPSC

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

# PTFIX 2X1,5 VT - Monoblock



1045940

<https://www.phoenixcontact.com/us/products/1045940>

## 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 2026 © - 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](mailto:info@phoenixcon.com)