

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

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.



Distribution block, nom. voltage: 500 V, nominal current: 17.5 A, number of connections: 7, connection method: Push-in connection, Load contact, cross section: 0.14 mm² - 2.5 mm², Line contact, Rated cross section: 4 mm², cross section: 0.2 mm² - 6 mm², mounting type: NS 15, color: blue

Commercial data

Item number	1047491
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	BE09
Product key	BEA122
Catalog page	Page 437 (C-1-2019)
GTIN	4055626665962
Weight per piece (including packing)	10.84 g
Weight per piece (excluding packing)	10.695 g
Customs tariff number	85369010
Country of origin	PL

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

Technical data

Notes

General

Note	The maximum load current of a single clamping unit must not be exceeded.
	For power distribution applications, IEC 60364-4-43:2008; modified + corrigendum Okt. 2008 (DIN VDE 0100-430:2010-10) section 433.2 ff must be observed!

Product properties

Product type	Distributor terminal block
Number of connections	7
Number of rows	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

Service Entrance	yes
Number of connections per level	7
Nominal cross section	1.5 mm ²
Rated cross section AWG	14

Load contact

Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.14 mm ² ... 2.5 mm ²
Cross section AWG	26 ... 14 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section, flexible [AWG]	26 ... 16 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm ² ... 1.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 1.5 mm ²
Nominal current	17.5 A
Maximum load current	22 A (with a 2.5 mm ² conductor cross section)
Maximum total current	32 A
Nominal voltage	500 V

Line contact

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

Stripping length	10 mm ... 12 mm
Connection in acc. with standard	IEC 60998-2-2
Conductor cross section rigid	0.2 mm ² ... 6 mm ²
Cross section AWG	24 ... 10 (converted acc. to IEC)
Conductor cross section flexible	0.2 mm ² ... 4 mm ²
Conductor cross section, flexible [AWG]	24 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.2 mm ² ... 4 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.2 mm ² ... 4 mm ²
Nominal current	41 A
Maximum load current	41 A (with 6 mm ² conductor cross section)
Maximum total current	41 A
Nominal cross section	4 mm ²

Load contact Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm ² ... 2.5 mm ²
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm ² ... 1.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm ² ... 1.5 mm ²

Line contact Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm ² ... 6 mm ²
Conductor cross section, rigid [AWG]	24 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.34 mm ² ... 4 mm ²
Conductor cross-section flexible (ferrule without plastic sleeve)	0.2 mm ² ... 4 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.2 mm ² ... 4 mm ²

Dimensions

Width	19 mm
Height	21.6 mm
Depth on NS 15	27.4 mm

Material specifications

Color	blue
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °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)	27,5 MJ/kg
Surface flammability NFPA 130 (ASTM E 162)	passed

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

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 ≤ 45 K
Result	Test passed
Short-time withstand current 4 mm ²	0.48 kA
Short-time withstand current 6 mm ²	0.72 kA
Short-time withstand current 1.5 mm ²	0.18 kA
Short-time withstand current 2.5 mm ²	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	5 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.2 mm ² / 0.2 kg
	4 mm ² / 0.9 kg
	6 mm ² / 1.4 kg
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

Conductor cross section/weight	0.14 mm ² / 0.2 kg
	1.5 mm ² / 0.4 kg
	2.5 mm ² / 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	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s ²) ² /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

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
	IEC 60998-2-2

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

Mounting

Mounting type	NS 15
---------------	-------

PTFIX 4/6X1,5-NS15A BU - Distribution block

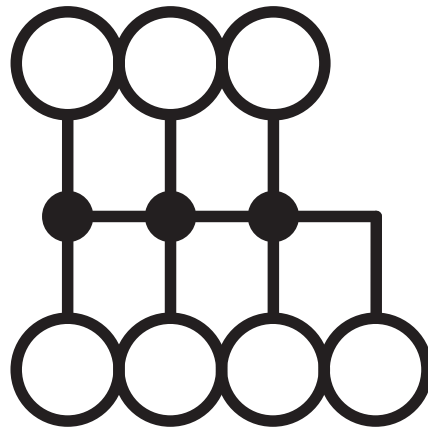
1047491

<https://www.phoenixcontact.com/us/products/1047491>



Drawings

Circuit diagram



PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1047491>

DNV Approval ID: TAE00002TT-04				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	500 V	24 A	-	-

CSA Approval ID: 13631				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
Output	300 V	20 A	26 - 12	-
Input	300 V	30 A	24 - 10	-
Use group C				
Output	150 V	20 A	26 - 12	-
Input	150 V	30 A	24 - 10	-

CB IECEE CB Scheme Approval ID: DE1-62701				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	500 V	32 A	-	- 4

EAC Approval ID: RU C-DE.BL08.B.00644				
--	--	--	--	--

LR Approval ID: LR2002627TA				
--------------------------------	--	--	--	--

BV Approval ID: 59146/A0 BV				
--------------------------------	--	--	--	--

VDE Zeichengenehmigung Approval ID: 40047797				
---	--	--	--	--

cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

Output	300 V	20 A	26 - 12	-
Input	300 V	30 A	24 - 10	-
Use group C				
Output	150 V	20 A	26 - 12	-
Input	150 V	30 A	24 - 10	-

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250118

ETIM

ETIM 9.0	EC000897
----------	----------

UNSPSC

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

1047491

<https://www.phoenixcontact.com/us/products/1047491>

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%
-------------------------------------	----------------------------

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

Accessories

i Note: Applying some accessories below might limit this product.

FBS 2-4 - Plug-in bridge

3030116

<https://www.phoenixcontact.com/us/products/3030116>



Plug-in bridge, pitch: 4.2 mm, number of positions: 2, color: red

i Max. current carrying capacity: 17.5 A

FBS 2-4 GY - Plug-in bridge

3030118

<https://www.phoenixcontact.com/us/products/3030118>



Plug-in bridge, pitch: 4.2 mm, number of positions: 2, color: gray

i Max. current carrying capacity: 17.5 A

PTFIX 4/6X1,5-NS15A BU - Distribution block

1047491

<https://www.phoenixcontact.com/us/products/1047491>



FBS 2-4 BU - Plug-in bridge

3030117

<https://www.phoenixcontact.com/us/products/3030117>



Plug-in bridge, pitch: 4.2 mm, number of positions: 2, color: blue

 Max. current carrying capacity: 17.5 A

PTFIX 1,5-RZ - Mounting adapter

1632415

<https://www.phoenixcontact.com/us/products/1632415>



Securing pin adapter, for direct mounting of 1.5 mm² FIX blocks, color: gray

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

ISH 1,5/0,2 - Insulating sleeve

3206131

<https://www.phoenixcontact.com/us/products/3206131>

Insulating sleeve, color: white



ISH 1,5/0,5 - Insulating sleeve

3031034

<https://www.phoenixcontact.com/us/products/3031034>

Insulating sleeve, color: gray



PTFIX 4/6X1,5-NS15A BU - Distribution block

1047491

<https://www.phoenixcontact.com/us/products/1047491>



SK 3,8 REEL P4,15 WH CUS - Marker card

0825990

<https://www.phoenixcontact.com/us/products/0825990>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 4.15 mm, lettering field size: continuous x 3.8 mm

TML (EX3,8)R - Marker strip

0801837

<https://www.phoenixcontact.com/us/products/0801837>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: continuous x 3.8 mm, Number of individual labels: 12

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

TML (104X3,8)R - Marker strip

0801833

<https://www.phoenixcontact.com/us/products/0801833>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 3.8 mm, Number of individual labels: 2500

TML (104X2,8)R - Marker strip

0801832

<https://www.phoenixcontact.com/us/products/0801832>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 2.8 mm, Number of individual labels: 2500

PTFIX 4/6X1,5-NS15A BU - Distribution block

1047491

<https://www.phoenixcontact.com/us/products/1047491>



TML (EX2,8)R - Marker strip

0801836

<https://www.phoenixcontact.com/us/products/0801836>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: continuous x 2.8 mm, Number of individual labels: 14

SK 2,8 REEL P4,15 WH CUS - Marker card

8199987

<https://www.phoenixcontact.com/us/products/8199987>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 4.15 mm, lettering field size: continuous x 2.8 mm

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

US-TML (104X3,8) - Marker for terminal blocks

0830768

<https://www.phoenixcontact.com/us/products/0830768>



Marker for terminal blocks, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 104 x 3.8 mm, Number of individual labels: 22

US-TML (104X2,8) - Marker for terminal blocks

0830767

<https://www.phoenixcontact.com/us/products/0830767>



Marker for terminal blocks, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 104 x 2.8 mm, Number of individual labels: 26

PTFIX 4/6X1,5-NS15A BU - Distribution block



1047491

<https://www.phoenixcontact.com/us/products/1047491>

SK U/3,8 WH:UNBEDRUCKT - Marker card

0803906

<https://www.phoenixcontact.com/us/products/0803906>



Marker card, Din A4, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 3.8 mm, Number of individual labels: 1440

SK U/2,8 WH:UNBEDRUCKT - Marker card

0803883

<https://www.phoenixcontact.com/us/products/0803883>



Marker card, Din A4, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm, Number of individual labels: 3600

PTFIX 4/6X1,5-NS15A BU - Distribution block

1047491

<https://www.phoenixcontact.com/us/products/1047491>



MM-TML (EX3,8)R C1 WH/BK - Label

1092026

<https://www.phoenixcontact.com/us/products/1092026>



Label, Roll, white/black, unlabeled, can be labeled with: THERMOFOX, THERMOMARK GO, THERMOMARK GO.K, mounting type: adhesive, lettering field size: continuous x 2.8 mm, Number of individual labels: 1

MPS-MT 1-S4-B RD - Accessories

1982800

<https://www.phoenixcontact.com/us/products/1982800>

Test plug terminal block



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