

PTFIX 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

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, nominal current: 41 A, number of connections: 13, connection method: Push-in connection, Line contact, Rated cross section: 4 mm², cross section: 0.2 mm² - 6 mm², Load contact, cross section: 0.14 mm² - 2.5 mm², mounting type: NS 15, color: yellow

Commercial data

Item number	1046990
Packing unit	1 pc
Minimum order quantity	20 pc
Sales key	BE09
Product key	BEA123
Catalog page	Page 437 (C-1-2019)
GTIN	4055626669151
Weight per piece (including packing)	15.71 g
Weight per piece (excluding packing)	15.5 g
Customs tariff number	85369010
Country of origin	PL

PTFIX 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

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	13
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	13
Nominal cross section	1.5 mm ²
Rated cross section AWG	14

Line contact

Stripping length	10 mm ... 12 mm
Connection in acc. with standard	IEC 60947-7-1
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

Stripping length	8 mm ... 10 mm
------------------	----------------

PTFIX 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

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 ... 14 (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 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

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

Dimensions

Width	31.4 mm
Height	21.6 mm
Depth on NS 15	27.4 mm

Material specifications

Color	yellow
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 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

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 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 slacking

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 slacking

Rotation speed	10 rpm
Revolutions	135

PTFIX 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

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 ... 105 °C (max. short-term operating temperature 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 (storage/transport)	30 % ... 70 %

Standards and regulations

Connection in acc. with standard	IEC 60947-7-1
	IEC 60947-7-1

PTFIX 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

Mounting

Mounting type

NS 15

PTFIX 4/12X1,5-NS15A YE - Distribution block

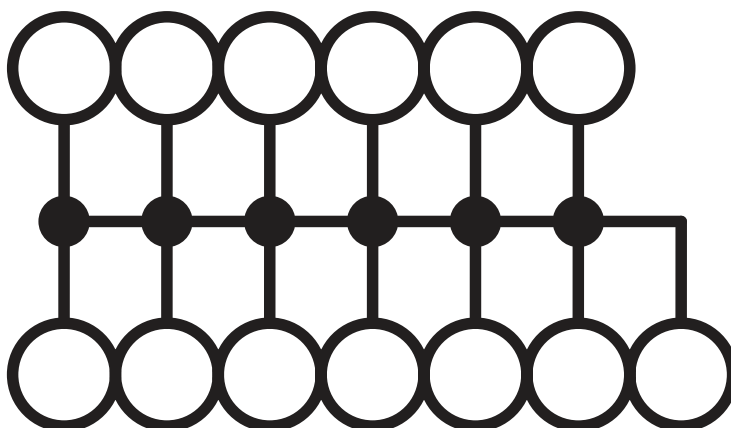


1046990

<https://www.phoenixcontact.com/us/products/1046990>

Drawings

Circuit diagram



PTFIX 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1046990>

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 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

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 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250118

ETIM

ETIM 8.0	EC000897
----------	----------

UNSPSC

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

PTFIX 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

Environmental product compliance

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

PTFIX 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

Accessories

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

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

PTFIX 4/12X1,5-NS15A YE - Distribution block

1046990

<https://www.phoenixcontact.com/us/products/1046990>



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

MPS-MT 1-S4-B RD - Accessories

1982800

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



Test plug terminal block, Accessories

PTFIX 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

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 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

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: 30000 x 3.8 mm, Number of individual labels: 12

PTFIX 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

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 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

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: 30000 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 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

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 4/12X1,5-NS15A YE - Distribution block



1046990

<https://www.phoenixcontact.com/us/products/1046990>

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 4/12X1,5-NS15A YE - Distribution block

1046990

<https://www.phoenixcontact.com/us/products/1046990>



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

Phoenix Contact 2023 © - 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