

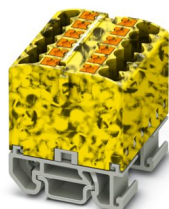
PTFIX 12X2,5-NS15A-FE - Distribution block



3274142

<https://www.phoenixcontact.com/us/products/3274142>

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Distribution block, Block with horizontal alignment, nom. voltage: 690 V, nominal current: 24 A, number of connections: 12, connection method: Push-in connection, cross section: 0.14 mm² - 4 mm², mounting type: NS 15, color: black/yellow

Your advantages

- Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- Clear wiring, thanks to eleven different color variants
- Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- Time savings of up to 80 %, thanks to ready-to-mount blocks without manual bridging
- Space savings of up to 50 % on the DIN rail, thanks to transverse mounting

Commercial data

Item number	3274142
Packing unit	8 pc
Minimum order quantity	8 pc
Sales key	BE09
Product key	BEA114
Catalog page	Page 441 (C-1-2019)
GTIN	4055626393643
Weight per piece (including packing)	25.15 g
Weight per piece (excluding packing)	25.15 g
Customs tariff number	85369010
Country of origin	PL

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Technical data

Notes

Notes on operation	the blocks can be bridged with one another via the conductor shaft, for corresponding plug-in bridges, see accessories
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General

Note	The maximum load current of a single clamping unit must not be exceeded.
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Product properties

Product type	Distributor terminal block
Number of connections	12
Number of rows	1
Potentials	1

Data management status

Article revision	05
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Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	0.77 W

Connection data

Number of connections per level	12
Nominal cross section	2.5 mm ²
Rated cross section AWG	14
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 ... 4 mm ²
Cross section AWG	26 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm ² ... 2.5 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 ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 2.5 mm ²
Nominal current	24 A
Maximum load current	32 A
Maximum total current	48 A
Nominal voltage	690 V

Connection cross sections directly pluggable

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Conductor cross section rigid	0.34 mm ² ... 4 mm ²
Conductor cross section, rigid [AWG]	24 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm ² ... 2.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm ² ... 2.5 mm ²

Dimensions

Width	31.5 mm
Height	28.6 mm
Depth on NS 15	31.4 mm

Material specifications

Color	black/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))	130 °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)	28 MJ/kg
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	9.8 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 2.5 mm ²	0.3 kA
Short-time withstand current 4 mm ²	0.48 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.89 kV
Result	Test passed

Mechanical properties

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Mechanical data

Open side panel	No
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Mechanical tests

Mechanical strength

Result	Test passed
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Attachment on the carrier

DIN rail/fixing support	NS 35
Test force setpoint	1 N
Result	Test passed
Note	When aligning several blocks, it is recommended to either place a DIN rail adapter underneath the connection point or a flange element between the blocks. For versions with 6 or 7 connections, it is enough to place one DIN rail adapter centrally per block and place flange elements after every other block. When using the DIN rail adapter PTFIX-NS35, an aligned block must not protrude by more than a half.

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.14 mm ² / 0.2 kg
	2.5 mm ² / 0.7 kg
	4 mm ² / 0.9 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):2008-03
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

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Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
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
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Mounting

Mounting type	NS 15
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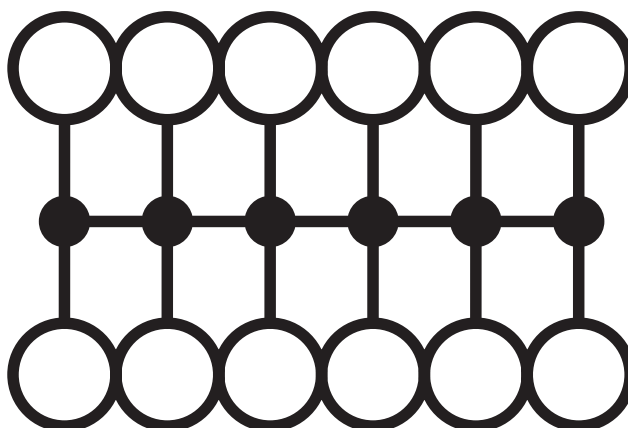
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Drawings

Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3274142>

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				
	300 V	20 A	26 - 12	-
Use group C				
	300 V	20 A	26 - 12	-
Use group D				
	600 V	5 A	26 - 12	-

CB IECEE CB Scheme Approval ID: DE1-62701				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	690 V	24 A	-	-

EAC Approval ID: RU C-DE.BL08.B.00644				
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LR Approval ID: LR2002627TA				
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BV Approval ID: 59146/A0 BV				
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VDE Zeichengenehmigung Approval ID: 40047797				
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cULus Recognized Approval ID: E60425				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				

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	300 V	20 A	26 - 12	-
Use group C				
	300 V	20 A	26 - 12	-
Use group D				
	600 V	5 A	26 - 12	-

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Classifications

ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250118

ETIM

ETIM 9.0	EC000897
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UNSPSC

UNSPSC 21.0	39121400
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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%

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Accessories



Note: Applying some accessories below might limit this product.

FBS 2-5 - Plug-in bridge

3030161

<https://www.phoenixcontact.com/us/products/3030161>



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, length: 23 mm, color: red



Max. current carrying capacity: 24 A

FBS 2-5 BU - Plug-in bridge

3036877

<https://www.phoenixcontact.com/us/products/3036877>



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: blue



Max. current carrying capacity: 24 A

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FBS 2-5 GY - Plug-in bridge

3038969

<https://www.phoenixcontact.com/us/products/3038969>



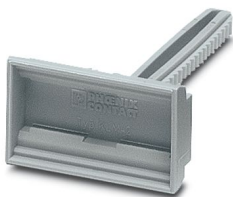
Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: gray

 Max. current carrying capacity: 24 A

KLM 2 - Terminal strip marker carrier

0807575

<https://www.phoenixcontact.com/us/products/0807575>



Terminal strip marker carrier, adjustable height, for CLIPFIX 15, CLIPFIX 35, and CLIPFIX 35-5 end brackets, can be marked using snap-in labels

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KLM 3-L - Terminal strip marker carrier

0814788

<https://www.phoenixcontact.com/us/products/0814788>



Terminal strip marker carrier, adjustable height, for CLIPFIX 15, CLIPFIX 35, and CLIPFIX 35-5 end brackets, can be marked using labels in 20 x 8 mm format

MPS-MT 1-S - Test plug

1944372

<https://www.phoenixcontact.com/us/products/1944372>

Test plug, consisting of 1.0 mm Ø test pin and 2.0 mm Ø socket



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PTFIX 2,5-RZ - Mounting adapter

1632417

<https://www.phoenixcontact.com/us/products/1632417>

Securing pin adapter, for direct mounting of 2.5 mm², 4 mm², and 10 mm² FIX blocks, color: gray



PAI-4-N GY - Test adapter

3032871

<https://www.phoenixcontact.com/us/products/3032871>

4 mm test adapter, for terminal blocks with 5.2 mm, 6.2 mm and 8.2 mm pitch



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MPS-MT - Test plug

0201744

<https://www.phoenixcontact.com/us/products/0201744>



Test plug, with solder connection up to 1 mm² conductor cross section, number of positions: 1, color: gray

MPS-IH WH - Insulating sleeve

0201663

<https://www.phoenixcontact.com/us/products/0201663>

Insulating sleeve, color: white



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MPS-IH RD - Insulating sleeve

0201676

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Insulating sleeve, color: red

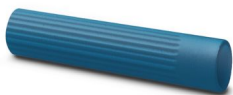


MPS-IH BU - Insulating sleeve

0201689

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Insulating sleeve, color: blue



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MPS-IH YE - Insulating sleeve

0201692

<https://www.phoenixcontact.com/us/products/0201692>

Insulating sleeve, color: yellow



MPS-IH GN - Insulating sleeve

0201702

<https://www.phoenixcontact.com/us/products/0201702>

Insulating sleeve, color: green



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MPS-IH GY - Insulating sleeve

0201728

<https://www.phoenixcontact.com/us/products/0201728>

Insulating sleeve, color: gray



MPS-IH BK - Insulating sleeve

0201731

<https://www.phoenixcontact.com/us/products/0201731>

Insulating sleeve, color: black



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ISH 2,5/0,2 - Insulating sleeve

3002843

<https://www.phoenixcontact.com/us/products/3002843>

Insulating sleeve, color: white



ISH 2,5/0,5 - Insulating sleeve

3002856

<https://www.phoenixcontact.com/us/products/3002856>

Insulating sleeve, color: gray



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ISH 2,5/1,0 - Insulating sleeve

3002869

<https://www.phoenixcontact.com/us/products/3002869>



Insulating sleeve, color: black

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

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<https://www.phoenixcontact.com/us/products/3274142>

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

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TML (EX2,8)R - Marker strip

0801836

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

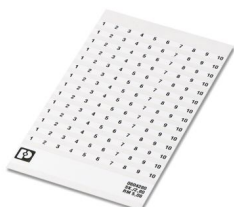


Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMaster 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: continuous x 2.8 mm, Number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

SK 2,8 REEL P5,2 WH CUS - Marker card

8199986

<https://www.phoenixcontact.com/us/products/8199986>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 2.8 mm

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SK 3,8 REEL P5,2 WH CUS - Marker card

8199989

<https://www.phoenixcontact.com/us/products/8199989>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 3.8 mm

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

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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

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

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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

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

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MPS-MT SN - Test plug

3212251

<https://www.phoenixcontact.com/us/products/3212251>



Test plug, with solder connection up to 1 mm² conductor cross section, tin-plated surface, number of positions: 1, color: silver

SZF 1-0,6X3,5 - Screwdriver

1204517

<https://www.phoenixcontact.com/us/products/1204517>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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