

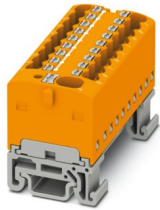
PTFIX 4/18X1,5-NS15A OG - Distribution block



1047451

<https://www.phoenixcontact.com/us/products/1047451>

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Distribution block, nom. voltage: 500 V, nominal current: 17.5 A, number of connections: 19, connection method: Push-in connection, Load contact, cross section: 0.14 mm² - 2.5 mm², Push-in connection, Line contact, Rated cross section: 4 mm², cross section: 0.2 mm² - 6 mm², mounting type: NS 15, color: orange

Your advantages

- Convenient test options, thanks to test openings at every terminal point
- Space-saving potential distribution, thanks to compact micro potential distributors
- Flexible use, thanks to DIN rail and direct mounting
- Space-saving, thanks to the compact design
- Clear arrangement thanks to marking of all terminal points

Commercial data

Item number	1047451
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	BE09
Product key	BEA124
GTIN	4055626665566
Weight per piece (including packing)	20.34 g
Weight per piece (excluding packing)	20.34 g
Customs tariff number	85369010
Country of origin	PL

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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	19
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	19
Nominal cross section	1.5 mm ²
Rated cross section AWG	14

Load contact

Connection method	Push-in connection
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 ... 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 ... 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

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Line contact

Connection method	Push-in connection
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 ... 6 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 cross section	4 mm ²
Nominal current	41 A
Maximum load current	41 A (with 6 mm ² conductor cross-section)
Maximum total current	41 A

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	43.9 mm
Height	21.6 mm
Depth on NS 15	27.4 mm

Material specifications

Color	orange (RAL 2003)
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

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Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 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	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
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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/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

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Rotation speed	10 rpm
Revolutions	135
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	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 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, 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

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Connection in acc. with standard	IEC 60947-7-1
	IEC 60998-2-2

Mounting

Mounting type	NS 15
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Drawings

Circuit diagram



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Classifications

ECLASS

ECLASS-13.0	27250118
ECLASS-15.0	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
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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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