

1091670

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Distribution block, Basic terminal block with feed-in without protective conductor function, nom. voltage: 450 V, nominal current: 24 A, number of connections: 19, connection method: Push-in connection, Rated cross section: 2.5 mm $^2$ , Load contact, cross section: 0.14 mm $^2$  - 4 mm $^2$ , Push-in connection, Line contact, Rated cross section: 6 mm $^2$ , cross section: 0.5 mm $^2$  - 10 mm $^2$ , mounting type: Free-hanging

### Your advantages

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

#### Commercial data

Item number	1091670
Packing unit	8 pc
Minimum order quantity	8 pc
Sales key	BE09
Product key	BEA124
GTIN	4055626905532
Weight per piece (including packing)	39.75 g
Weight per piece (excluding packing)	40 g
Customs tariff number	85369010
Country of origin	PL



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### Technical data

#### Notes

Notes on connection	Connection in accordance with IEC 60998-2-2 (no protective conductor function terminal)
General	
Note	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
Potentials	1
roteritials	l l
Insulation characteristics	
Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	0.77 W

#### Connection data

Service Entrance	yes
Number of connections per level	19
Nominal cross section	2.5 mm²
Rated cross section AWG	14

#### Load contact

Load contact	
Connection method	Push-in connection
Stripping length	8 mm 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60998-2-2
Conductor cross-section rigid	0.14 mm² 4 mm²
Cross section AWG	26 12 (converted acc. to IEC)
Conductor cross-section flexible	0.14 mm² 4 mm²
Conductor cross-section, flexible [AWG]	26 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm² 2.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm² 2.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm²
Nominal current	24 A
Maximum load current	32 A (with 4 mm² conductor cross-section)



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Maximum total current	57 A (The maximum load current of the individual terminal poi must not be exceeded.)
Nominal voltage	450 V
Nominal cross section	2.5 mm²
ne 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	0.5 mm² 10 mm²
Cross section AWG	20 8 (converted acc. to IEC)
Conductor cross-section flexible	0.5 mm² 10 mm²
Conductor cross-section, flexible [AWG]	20 8 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm² 6 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.5 mm² 6 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm² 1.5 mm²
Nominal current	41 A
Maximum load current	57 A (with 10 mm² conductor cross-section)
Maximum total current	57 A (The maximum load current of the individual terminal poi must not be exceeded.)
Nominal voltage	450 V
Nominal cross section	6 mm²
oad contact Connection cross sections directly pluggable	
Conductor cross-section rigid	0.34 mm² 4 mm²
Conductor cross-section, rigid [AWG]	24 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm² 2.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.34 mm² 2.5 mm²
ne contact Connection cross sections directly pluggable	
Conductor cross-section rigid	1 mm² 10 mm²
Conductor cross-section flexible (ferrule without plastic sleeve)	1 mm² 6 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	1 mm² 6 mm²
ensions	
Width	56.5 mm
Height	28.6 mm
Depth	21.7 mm
erial specifications	
Color	green-yellow
Flammability rating according to UL 94	V0
Insulating material group	1
Insulating material	PA
Static insulating material application in cold	-60 °C



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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

### Mechanical properties

#### Mechanical data

### Mechanical tests

#### Attachment on the carrier

DIN rail/fixing support	NS 35/NS 15
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.

### Environmental and real-life conditions

### Needle-flame test Time of exposure

Result	Test passed
Oscillation/broadband noise	
Specification	DIN EN 50155 (VDE 0115-200):2008-03
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/s²)²/Hz
Acceleration	3.12g

30 s

5 h

Test duration per axis	
Test directions	

Test directions	X-, Y- and Z-axis
Result	Test passed

### Shocks

Chocks		
Specification	DIN EN 50155 (VDE 0115-200):2008-03	
Pulse shape	Half-sine	
Acceleration	30g	



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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 %
tandards and regulations	
Connection in acc. with standard	IEC 60998-2-2
	IEC 60998-2-2
ounting	
Mounting type	Free-hanging

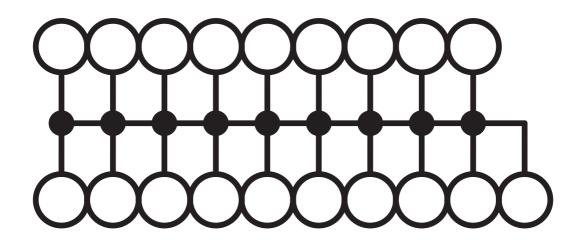


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## Drawings

Circuit diagram





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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1091670



CSA

Approval ID: 158887



EAC

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

CB scrieme	IECEE CB Scheme Approval ID: DE1-63086				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		450 V	41 A	-	- 6

	VDE Zeichengenehmigung Approval ID: 40047798				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		450 V	41 A	-	-

<b>DNV</b> Approval ID: TAE00002TT-05				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine				
	500 V	24 A	-	-

EHC	EAC
LIIL	Approval ID: KZ7500651131219505



cULus Recognized

Approval ID: E60425



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## Classifications

### **ECLASS**

	ECLASS-13.0	27250118		
	ECLASS-15.0	27250118		
ETIM				
	ETIM 9.0	EC000897		
U	NSPSC			
	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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