

Potential distributors - PTRVB 8-FI /RD - 3270224

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Potential distributors, with option to supply up to 6 mm², nom. voltage: 250 V, nominal current: 17.5 A, cross section: 0.14 mm² - 2.5 mm², AWG: 14 - 26, connection method: Push-in connection, number of positions: 2, number of connections: 29, width: 8.3 mm, length: 100 mm, color: gray, color of connection elements: red, mounting: NS 35/7,5, NS 35/15

Why buy this product

- ✓ Distributor terminal block in red for 24 V DC power supplies
- ✓ Bridgeable potential distributor with option to supply up to 6 mm²
- ✓ High contact quality thanks to push-in technology as a replacement for Wire-Wrap®, TERMI-POINT®, etc.
- ✓ Tool-free wiring in a confined space thanks to compact size

Key Commercial Data

Packing unit	10 STK
GTIN	 4 055626 239750
GTIN	4055626239750

Technical data

General

Number of positions	2
Number of levels	8
Number of connections	29
Potentials	1
Nominal cross section	1.5 mm ²
Nominal cross section feed-in	4 mm ²
Color	gray
Color of connection elements	red
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	4 kV
Overvoltage category	III

Potential distributors - PTRVB 8-FI /RD - 3270224

Technical data

General

Insulating material group	I
Maximum power dissipation for nominal condition	0.56 W (the value is multiplied when connecting multiple levels)
Maximum load current	24 A (per chamber with 2.5 mm ² conductor cross section)
Maximum total current	37 A (per potential distributor)
Nominal current I _N	17.5 A (with 1.5 mm ² conductor cross section)
Nominal voltage U _N	250 V
Maximum load current	37 A (Service Entrance)
Nominal current I _N	32 A (Supply, for 4 mm ² conductor cross section)
Nominal voltage U _N	250 V
Open side panel	Yes
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Surge voltage test setpoint	4.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	1.5 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test 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
Tensile test result	Test passed
Conductor cross section tensile test	0.14 mm ²
Tractive force setpoint	10 N
Conductor cross section tensile test	1.5 mm ²
Tractive force setpoint	40 N
Conductor cross section tensile test	2.5 mm ²
Tractive force setpoint	50 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	1 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 3.2 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	1.5 mm ²
Short-time current	0.18 kA

Potential distributors - PTRVB 8-FI /RD - 3270224

Technical data

General

Conductor cross section short circuit testing	2.5 mm ²
Short-time current	0.3 kA
Conductor cross section short circuit testing	4 mm ²
Short-time current	0.48 kA
Conductor cross section short circuit testing	6 mm ²
Short-time current	0.72 kA
Result of thermal test	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Proof of thermal characteristics (needle flame) effective duration	30 s
Result of aging test	Test passed
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 2, bogie-mounted
Test frequency	f ₁ = 5 Hz to f ₂ = 250 Hz
ASD level	6.12 (m/s ²) ² /Hz
Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Static insulating material application in cold	-60 °C
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
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
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
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

Potential distributors - PTRVB 8-FI /RD - 3270224

Technical data

General

Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3
--	-------------

Dimensions

Width	8.3 mm
Length	100 mm
Height NS 35/7,5	87.5 mm
Height NS 35/15	95 mm

Connection data

Feed-in connection	Feed-in stage
Connection method	Push-in connection
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.14 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section AWG min.	26
Conductor cross section AWG max.	14
Conductor cross section flexible min.	0.14 mm ²
Conductor cross section flexible max.	1.5 mm ²
Min. AWG conductor cross section, flexible	26
Max. AWG conductor cross section, flexible	14
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve max.	1.5 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve max.	1.5 mm ²
Stripping length	8 mm ... 10 mm
Note	Only the "CRIMPFOX 6" crimping pliers may be used for crimping with 6 mm ² stranded and ferrule.
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	6 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	10
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	6 mm ²
Min. AWG conductor cross section, flexible	24
Max. AWG conductor cross section, flexible	10
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.2 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.2 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm ²
Stripping length	10 mm ... 12 mm

Standards and Regulations

Potential distributors - PTRVB 8-FI /RD - 3270224

Technical data

Standards and Regulations

Connection in acc. with standard	IEC 60947-7-1
	IEC 60947-7-1
Flammability rating according to UL 94	V0
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3 HL 1 - HL 3

Environmental Product Compliance

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

Drawings

Circuit diagram



Approvals

Approvals

Approvals

DNV GL / UL Recognized / cUL Recognized / EAC / cULus Recognized

Ex Approvals

Approval details

DNV GL	http://exchange.dnv.com/tari/	TAE000016Y
--------	---	------------

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	25 A	25 A	
mm²/AWG/kcmil	12-10	12-10	

Potential distributors - PTRVB 8-FI /RD - 3270224

Approvals

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	25 A	25 A	
mm ² /AWG/kcmil	12-10	12-10	

EAC		B.01742
-----	--	---------

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm
------------------	--	---

Phoenix Contact 2018 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>