

## Potential distributors - PTRVB 8-PV /BK - 3270159

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Potential distributors, Nom. voltage: 250 V, Nominal current: 17.5 A, Cross section: 0.14 mm<sup>2</sup> - 2.5 mm<sup>2</sup>, AWG: 14 - 26, Connection type: Push-in connection, Number of positions: 2, Number of connections: 32, Width: 8.3 mm, Length: 100 mm, Color: gray, Color of connection elements: black, Assembly: NS 35/7,5, NS 35/15

### Why buy this product

- ✓ Bridgeable potential distributor
- ✓ 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

RoHS

### Key Commercial Data

Packing unit	1 STK
Minimum order quantity	10 STK
GTIN	 4 046356 963411
GTIN	4046356963411
Weight per Piece (excluding packing)	56.000 g
Custom tariff number	85369010
Country of origin	Poland

### Technical data

#### General

Number of positions	2
Number of levels	8
Number of connections	32
Potentials	1
Nominal cross section	1.5 mm <sup>2</sup>
Color	gray

# Potential distributors - PTRVB 8-PV /BK - 3270159

## Technical data

### General

Color of connection elements	black
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	4 kV
Overvoltage category	III
Insulating material group	I
Maximum load current	24 A (per chamber with 2.5 mm <sup>2</sup> conductor cross section)
Maximum total current	37 A (per potential distributor)
Nominal current I <sub>N</sub>	17.5 A (with 1.5 mm <sup>2</sup> conductor cross section)
Nominal voltage U <sub>N</sub>	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 <sup>2</sup> / 0.2 kg
	1.5 mm <sup>2</sup> / 0.4 kg
	2.5 mm <sup>2</sup> / 0.7 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.14 mm <sup>2</sup>
Tractive force setpoint	10 N
Conductor cross section tensile test	1.5 mm <sup>2</sup>
Tractive force setpoint	40 N
Conductor cross section tensile test	2.5 mm <sup>2</sup>
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

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## Technical data

### General

Requirements, voltage drop	≤ 6,4 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	1.5 mm <sup>2</sup>
Short-time current	0.18 kA
Conductor cross section short circuit testing	2.5 mm <sup>2</sup>
Short-time current	0.3 kA
Result of aging test	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 250 Hz
ASD level	6.12 (m/s <sup>2</sup> ) <sup>2</sup> /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

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### Technical data

#### General

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
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

Connection method	Push-in connection
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	26
Conductor cross section AWG max.	14
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	1.5 mm <sup>2</sup>
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 <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	1.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	1.5 mm <sup>2</sup>
Stripping length	8 mm ... 10 mm

#### Standards and Regulations

Connection in acc. with standard	IEC 60947-7-1
Flammability rating according to UL 94	V0

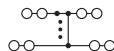
#### Environmental Product Compliance

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

### Drawings

## Potential distributors - PTRVB 8-PV /BK - 3270159

### Circuit diagram



### Classifications

#### eCl@ss

eCl@ss 5.1	27141120
eCl@ss 6.0	27141120
eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

#### ETIM

ETIM 4.0	EC000897
ETIM 5.0	EC000897
ETIM 6.0	EC000897

#### UNSPSC

UNSPSC 13.2	39121410
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### Approvals

#### Approvals


#### Approvals

DNV GL / UL Recognized / cUL Recognized / cULus Recognized

#### Ex Approvals


### Approval details

DNV GL	<a href="https://www.dnvgl.com/">https://www.dnvgl.com/</a>	TAE000016Y
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UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	D	
mm²/AWG/kcmil	26-14	26-14	
Nominal current I <sub>N</sub>	10 A	10 A	
Nominal voltage U <sub>N</sub>	300 V	300 V	

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### Approvals

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	D	
mm²/AWG/kcmil	26-14	26-14	
Nominal current IN	10 A	10 A	
Nominal voltage UN	300 V	300 V	

cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>
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### Accessories

#### Accessories

#### Bridge

Continuous plug-in bridge - FBST 500-PLC RD - 2966786



Continuous plug-in bridge, Length: 500 mm, Color: red

Continuous plug-in bridge - FBST 500-PLC GY - 2966838



Continuous plug-in bridge, Length: 500 mm, Color: gray

Continuous plug-in bridge - FBST 500-PLC BN - 2967976



Continuous plug-in bridge, Length: 500 mm, Color: brown

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### Accessories

Continuous plug-in bridge - FBST 500-PLC BU - 2966692



Continuous plug-in bridge, Length: 500 mm, Color: blue

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### DIN rail

DIN rail perforated - NS 35/ 7,5 PERF 2000MM - 0801733



DIN rail, material: steel galvanized and passivated with a thick layer, perforated, height 7.5 mm, width 35 mm, length: 2000 mm

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DIN rail, unperforated - NS 35/ 7,5 UNPERF 2000MM - 0801681



DIN rail, material: Steel, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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DIN rail perforated - NS 35/ 7,5 WH PERF 2000MM - 1204119



DIN rail 35 mm (NS 35)

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DIN rail - NS 35/ 7,5 WH UNPERF 2000MM - 1204122



DIN rail 35 mm (NS 35)

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### Accessories

DIN rail, unperforated - NS 35/ 7,5 AL UNPERF 2000MM - 0801704



DIN rail, unperforated, Width: 35 mm, Height: 7.5 mm, Length: 2000 mm, Color: silver

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DIN rail perforated - NS 35/ 7,5 ZN PERF 2000MM - 1206421



DIN rail, material: Galvanized, perforated, height 7.5 mm, width 35 mm, length: 2 m

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DIN rail, unperforated - NS 35/ 7,5 ZN UNPERF 2000MM - 1206434



DIN rail, material: Galvanized, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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DIN rail, unperforated - NS 35/ 7,5 CU UNPERF 2000MM - 0801762



DIN rail, material: Copper, unperforated, height 7.5 mm, width 35 mm, length: 2 m

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End cap - NS 35/ 7,5 CAP - 1206560



DIN rail end piece, for DIN rail NS 35/7.5

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### Documentation



## Potential distributors - PTRVB 8-PV /BK - 3270159

### Accessories

Mounting material - PT-IL - 3208090

Operating decal for the push-in Technology



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### End block

End clamp - CLIPFIX 35 - 3022218



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

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End clamp - CLIPFIX 35-5 - 3022276



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray

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End clamp - E/NS 35 N - 0800886



End clamp, width: 9.5 mm, color: gray

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End clamp - E/UK - 1201442



End clamp, Width: 9.5 mm, Height: 35.3 mm, Length: 50.5 mm, Color: gray

## Potential distributors - PTRVB 8-PV /BK - 3270159

### Accessories

End clamp - E/UK 1 - 1201413



End clamps, for supporting the ends of double-level and three-level terminal blocks, width: 10 mm, color: gray

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End cover

End cover - D-PTRV 8 WH - 3270154



End cover, Length: 100 mm, Width: 3.8 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH 1-8 - 3270155



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH 1-8 LGS - 3270240



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH 8-1 - 3270242



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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## Potential distributors - PTRVB 8-PV /BK - 3270159

### Accessories

End cover - D-PTRV 8 WH 8-1 LGS - 3270244



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH 1-16 - 3270228



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH 1-16 LGS - 3270229



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH 9-16 - 3270211



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH 9-16 LGS - 3270212



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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## Potential distributors - PTRVB 8-PV /BK - 3270159

### Accessories

End cover - D-PTRV 8 WH 17-24 - 3270213



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH 17-24 LGS - 3270214



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH 25-32 - 3270215



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH 25-32 LGS - 3270216



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH A-H - 3270156



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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## Potential distributors - PTRVB 8-PV /BK - 3270159

### Accessories

End cover - D-PTRV 8 WH A-H LGS - 3270241



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH H-A - 3270243



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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End cover - D-PTRV 8 WH H-A LGS - 3270245



End cover, Length: 100 mm, Width: 2.2 mm, Height: 80.8 mm, Color: white

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### Labeled terminal marker

Zack marker strip - ZB 8,3,LGS:FORTL.ZAHLEN - 0803480



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Mounting type: Snap into tall marker groove, Lettering field: 10.5 x 8.3 mm

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Zack marker strip - ZB 8,3,QR:FORTL.ZAHLEN - 0803479



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Mounting type: Snap into tall marker groove, Lettering field: 10.5 x 8.3 mm

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## Potential distributors - PTRVB 8-PV /BK - 3270159

### Accessories

Zack marker strip - ZB 8,3 CUS - 8191573



Zack marker strip, Strip, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 8.3 mm, Lettering field: 10.5 x 8.3 mm

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Marker for terminal blocks - TM-PTRV 8,QR:1-8 - 0803468



Marker for terminal blocks, white, labeled, Lettering field: 2,4x 9,2 mm

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Marker for terminal blocks - TM-PTRV 8,QR:8-1 - 0803470



Marker for terminal blocks, white, labeled, Lettering field: 2,4x 9,2 mm

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Marker for terminal blocks - TM-PTRV 8,QR:A-H - 0803471



Marker for terminal blocks, white, labeled, Lettering field: 2,4x 9,2 mm

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Marker for terminal blocks - TM-PTRV 8,QR:H-A - 0803473



Marker for terminal blocks, white, labeled, Lettering field: 2,4x 9,2 mm

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### Mounting material

## Potential distributors - PTRVB 8-PV /BK - 3270159

### Accessories

Retaining bracket - CDC-PTRV - 3270167



Retaining bracket, via four PTRV single modules, Pitch: 8.3 mm, Width: 35.6 mm, Height: 71.5 mm, Color: gray

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### Partition plate

Spacer plate - DP-PTRV 8 - 3270166



Spacer plate, Length: 100 mm, Width: 8.3 mm, Height: 86 mm, Color: gray

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### Screwdriver tools

Screwdriver - ST-BW 0 - 1200135



Actuation tool, for all 1.5 mm<sup>2</sup> spring cages from PT 1,5/S and FT 1,5/S

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### Terminal marking

Zack marker strip - ZB 8,3:UNBEDRUCKT - 0803444



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into tall marker groove, Lettering field: 10.5 x 8.3 mm