**PHŒNIX CONTACT**

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

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, 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: 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 mm² |
| 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 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 mm² conductor cross section) |
| Maximum total current | 37 A (per potential distributor) |
| Nominal current $I_N$ | 17.5 A (with 1.5 mm² 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 mm² / 0.2 kg |
| | 1.5 mm² / 0.4 kg |
| | 2.5 mm² / 0.7 kg |
| Tensile test result | Test passed |
| Conductor cross section tensile test | 0.14 mm² |
| Tractive force setpoint | 10 N |
| Conductor cross section tensile test | 1.5 mm² |
| Tractive force setpoint | 40 N |
| Conductor cross section tensile test | 2.5 mm² |
| Tractive force setpoint | 50 N |
| Result of tight fit on support | Test passed |
| Tight fit on carrier | NS 35 |
| Setpoint | 1 N |

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

## Technical data

### General

| | |
|---|---|
| Result of voltage-drop test | Test passed |
| Requirements, voltage drop | $\leq$ 6,4 mV |
| Result of temperature-rise test | Test passed |
| Short circuit stability result | Test passed |
| Conductor cross section short circuit testing | 1.5 mm² |
| Short-time current | 0.18 kA |
| Conductor cross section short circuit testing | 2.5 mm² |
| 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 | $f_1$ = 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 |

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

## Technical data

### General

| 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 |
| 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 mm² |
| Conductor cross section solid max. | 2.5 mm² |
| Conductor cross section AWG min. | 26 |
| Conductor cross section AWG max. | 14 |
| Conductor cross section flexible min. | 0.14 mm² |
| Conductor cross section flexible max. | 1.5 mm² |
| 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 mm² |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 1.5 mm² |
| Conductor cross section flexible, with ferrule with plastic sleeve min. | 0.14 mm² |
| Conductor cross section flexible, with ferrule with plastic sleeve max. | 1.5 mm² |
| Stripping length | 8 mm ... 10 mm |

### Standards and Regulations

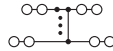| Connection in acc. with standard | IEC 60947-7-1 |
| Flammability rating according to UL 94 | V0 |

### Environmental Product Compliance

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

## Drawings

**PHŒNIX CONTACT**

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

Circuit diagram

## Approvals

### Approvals

Approvals

DNV GL / UL Recognized / cUL Recognized / CSA / 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 |
|---|---|---|---|
| | B | D | |
| mm²/AWG/kcmil | 26-14 | 26-14 | |
| Nominal current IN | 10 A | 10 A | |
| Nominal voltage UN | 300 V | 300 V | |

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

| CSA | | http://www.csagroup.org/services/testing-and-certification/certified-product-listing/ | 13631 |
|---|---|---|---|
| | B | D | |
| mm²/AWG/kcmil | 26-14 | 26-14 | |
| Nominal current IN | 10 A | 10 A | |

PHŒNIX
CONTACT

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

## Approvals

|  | B | D |
|---|---|---|
| Nominal voltage UN | 300 V | 300 V |

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

## 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

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

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

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

## Accessories

---

### 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

---

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

---

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

DIN rail 35 mm (NS 35)

---

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

DIN rail 35 mm (NS 35)

---

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

---

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

### Accessories

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

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

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

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

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

### Documentation

Mounting material - PT-IL - 3208090

Operating decal for the push-in Technology

**PHŒNIX CONTACT**

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

## Accessories

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

### 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

### End clamp - E/NS 35 N - 0800886

End clamp, width: 9.5 mm, color: gray

### End clamp - E/UK - 1201442

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

### 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

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

## Accessories

End cover

End cover - D-PTRV 8 WH - 3270154

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

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

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

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

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

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

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

**PHŒNIX CONTACT**

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

## Accessories

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

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

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

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

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

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

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

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

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

## Accessories

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

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

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

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

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

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

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

**PHŒNIX CONTACT**

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

## Accessories

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

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

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

## Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, Color: white

Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, Color: red

Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, Color: blue

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

## Accessories

Insulating sleeve - MPS-IH YE - 0201692

Insulating sleeve, Color: yellow

---

Insulating sleeve - MPS-IH GN - 0201702

Insulating sleeve, Color: green

---

Insulating sleeve - MPS-IH GY - 0201728

Insulating sleeve, Color: gray

---

Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, Color: black

---

## 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

---

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

## Accessories

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

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

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

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

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

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

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

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

**PHŒNIX CONTACT**

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

## Accessories

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

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

## Mounting material

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

## Partition plate

Spacer plate - DP-PTRV 8 - 3270166

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

## Screwdriver tools

Screwdriver - ST-BW 0 - 1200135

Actuation tool, for all 1.5 mm² spring cages from PT 1,5/S and FT 1,5/S

## Terminal marking

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

## Accessories

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

## Test plug terminal block

Reducing plug - RPS - 0201647

Reducing plug, Color: gray

Test plugs - MPS-MT - 0201744

Test plugs, with solder connection up to 1 mm² conductor cross section, Color: silver