

## Potential distributors - PTRVB 4-PV /BU - 3270223

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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 method: Push-in connection, number of positions: 2, number of connections: 16, width: 8.3 mm, length: 64 mm, color: gray, color of connection elements: blue, mounting: NS 35/7,5, NS 35/15

### Your advantages

- ✔ Distributor terminal block in blue for 24 V DC power supplies
- ✔ 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

### Key Commercial Data

|                                      |               |
|--------------------------------------|---------------|
| Packing unit                         | 10 pc         |
| Minimum order quantity               | 10 pc         |
| GTIN                                 |               |
| GTIN                                 | 4055626186399 |
| Weight per Piece (excluding packing) | 21.730 g      |
| Custom tariff number                 | 85369010      |
| Country of origin                    | Poland        |

### Technical data

#### General

|                              |                     |
|------------------------------|---------------------|
| Number of positions          | 2                   |
| Number of levels             | 4                   |
| Number of connections        | 16                  |
| Potentials                   | 1                   |
| Nominal cross section        | 1.5 mm <sup>2</sup> |
| Color                        | gray                |
| Color of connection elements | blue                |
| Insulating material          | PA                  |

## Potential distributors - PTRVB 4-PV /BU - 3270223

### Technical data

#### General

|   |   |
|---|---|
| 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 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   |
| 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   |

## Potential distributors - PTRVB 4-PV /BU - 3270223

### Technical data

#### General

|   |  |
|---|--|
| Conductor cross section short circuit testing                           | 2.5 mm <sup>2</sup>                              |
| Short-time current  | 0.3 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 <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   |
| 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 |
|-------|--------|

## Potential distributors - PTRVB 4-PV /BU - 3270223

### Technical data

#### Dimensions

|                  |         |
|------------------|---------|
| Length           | 64 mm   |
| Height NS 35/7,5 | 55.5 mm |
| Height NS 35/15  | 63 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

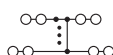
|  |               |
|--|---------------|
| Connection in acc. with standard                       | IEC 60947-7-1 |
| Flammability rating according to UL 94                 | V0            |
| Fire protection for rail vehicles (DIN EN 45545-2) R22 | HL 1 - HL 3   |
| Fire protection for rail vehicles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

#### Environmental Product Compliance

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

### Drawings

#### Circuit diagram



### Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27141120 |
|------------|----------|

## Potential distributors - PTRVB 4-PV /BU - 3270223

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.1 | 27141120 |
| eCl@ss 5.0 | 27141120 |
| eCl@ss 5.1 | 27141100 |
| eCl@ss 6.0 | 27141100 |
| eCl@ss 7.0 | 27141120 |
| eCl@ss 8.0 | 27141120 |
| eCl@ss 9.0 | 27141120 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 3.0 | EC000897 |
| ETIM 4.0 | EC000897 |
| ETIM 5.0 | EC000897 |
| ETIM 6.0 | EC000897 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211811 |
| UNSPSC 7.0901 | 39121410 |
| UNSPSC 11     | 39121410 |
| UNSPSC 12.01  | 39121410 |
| UNSPSC 13.2   | 39121410 |

### Approvals

#### Approvals

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#### Approvals

DNV GL / UL Recognized / KEMA-KEUR / cUL Recognized / IECCEB Scheme / EAC / EAC / cULus Recognized

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#### Ex Approvals

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#### Approval details

|        |  |   |            |
|--------|--|---|------------|
| DNV GL |  | <a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a> | TAE000016Y |
|--------|--|---|------------|

## Potential distributors - PTRVB 4-PV /BU - 3270223

### Approvals

|                            |       |   |              |
|----------------------------|-------|---|--------------|
| 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 |
|                            | D     | B   |              |
| Nominal voltage UN         | 300 V | 300 V   |              |
| Nominal current IN         | 10 A  | 10 A  |              |
| mm <sup>2</sup> /AWG/kcmil | 26-14 | 26-14   |              |

|                            |          |   |           |
|----------------------------|----------|---|-----------|
| KEMA-KEUR                  |          | <a href="http://www.dekra-certification.com">http://www.dekra-certification.com</a> | 71-102890 |
| Nominal voltage UN         | 250 V    |   |           |
| Nominal current IN         | 17.5 A   |   |           |
| mm <sup>2</sup> /AWG/kcmil | 0.14-2.5 |   |           |

|                            |       |   |              |
|----------------------------|-------|---|--------------|
| 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 |
|                            | D     | B   |              |
| Nominal voltage UN         | 300 V | 300 V   |              |
| Nominal current IN         | 10 A  | 10 A  |              |
| mm <sup>2</sup> /AWG/kcmil | 26-14 | 26-14   |              |

|                    |        |   |          |
|--------------------|--------|---|----------|
| IECEE CB Scheme    |        | <a href="http://www.iecee.org/">http://www.iecee.org/</a> | NL-50733 |
| Nominal voltage UN | 250 V  |   |          |
| Nominal current IN | 17.5 A |   |          |

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

|     |  |                          |
|-----|--|--------------------------|
| EAC |  | RU C-<br>DE.AI30.B.01102 |
|-----|--|--------------------------|

## Potential distributors - PTRVB 4-PV /BU - 3270223

### Approvals

cULus Recognized



### Accessories

#### Accessories

#### Bridge

Plug-in bridge - FBST 50-PLC RD - 1081050



Plug-in bridge, length: 50 mm, color: red

Plug-in bridge - FBST 50-PLC BU - 1081051



Plug-in bridge, length: 50 mm, color: blue

Plug-in bridge - FBST 50-PLC GY - 1081053



Plug-in bridge, length: 50 mm, color: gray

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



Continuous plug-in bridge, length: 500 mm, color: red

## Potential distributors - PTRVB 4-PV /BU - 3270223

### Accessories

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



Continuous plug-in bridge, length: 500 mm, color: gray

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



Continuous plug-in bridge, length: 500 mm, color: brown

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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 perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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## Potential distributors - PTRVB 4-PV /BU - 3270223

### Accessories

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



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

---

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

---

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

---

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



DIN rail perforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

---

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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## Potential distributors - PTRVB 4-PV /BU - 3270223

### Accessories

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



DIN rail, unperforated, Standard profile, width: 35 mm, height: 7.5 mm, acc. to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

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

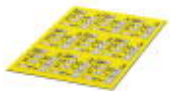


DIN rail end piece, for DIN rail NS 35/7.5

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### Documentation

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

## Potential distributors - PTRVB 4-PV /BU - 3270223

### Accessories

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, material: PA, length: 50.5 mm, Mounting on a DIN rail NS 32 or NS 35, color: gray

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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 4 WH - 3270151



End cover, length: 63.6 mm, width: 3.8 mm, height: 48.9 mm, color: white

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End cover - D-PTRV 4 WH 1-4 - 3270152



End cover, length: 63.6 mm, width: 2.2 mm, height: 48.9 mm, color: white

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## Potential distributors - PTRVB 4-PV /BU - 3270223

### Accessories

End cover - D-PTRV 4 WH 1-4 LGS - 3270234



End cover, length: 63.6 mm, width: 2.2 mm, height: 48.9 mm, color: white

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End cover - D-PTRV 4 WH 4-1 - 3270236



End cover, length: 63.6 mm, width: 2.2 mm, height: 48.9 mm, color: white

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End cover - D-PTRV 4 WH 4-1 LGS - 3270238



End cover, length: 63.6 mm, width: 2.2 mm, height: 48.9 mm, color: white

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End cover - D-PTRV 4 WH A-D - 3270153



End cover, length: 63.6 mm, width: 2.2 mm, height: 48.9 mm, color: white

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End cover - D-PTRV 4 WH A-D LGS - 3270235



End cover, length: 63.6 mm, width: 2.2 mm, height: 48.9 mm, color: white

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## Potential distributors - PTRVB 4-PV /BU - 3270223

### Accessories

End cover - D-PTRV 4 WH D-A - 3270237



End cover, length: 63.6 mm, width: 2.2 mm, height: 48.9 mm, color: white

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End cover - D-PTRV 4 WH D-A LGS - 3270239



End cover, length: 63.6 mm, width: 2.2 mm, height: 48.9 mm, color: white

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### Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663



Insulating sleeve, color: white

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Insulating sleeve - MPS-IH RD - 0201676



Insulating sleeve, color: red

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Insulating sleeve - MPS-IH BU - 0201689



Insulating sleeve, color: blue

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## Potential distributors - PTRVB 4-PV /BU - 3270223

### 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, for terminal block width: 8.3 mm, lettering field size: 10.5 x 8.3 mm

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## Potential distributors - PTRVB 4-PV /BU - 3270223

### 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, for terminal block width: 8.3 mm, lettering field size: 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 size: 10.5 x 8.3 mm

Marker for terminal blocks - TM-PTRV 4,QR:1-4 - 0803464



Marker for terminal blocks, white, labeled, mounting type: snapped, for terminal block width: 4 mm, lettering field size: 2,4x 9,2 mm

Marker for terminal blocks - TM-PTRV 4,QR:4-1 - 0803465



Marker for terminal blocks, white, labeled, mounting type: snapped, for terminal block width: 4 mm, lettering field size: 2,4x 9,2 mm

Marker for terminal blocks - TM-PTRV 4,QR:A-D - 0803466



Marker for terminal blocks, white, labeled, mounting type: snapped, for terminal block width: 4 mm, lettering field size: 2,4x 9,2 mm

## Potential distributors - PTRVB 4-PV /BU - 3270223

### Accessories

Marker for terminal blocks - TM-PTRV 4,QR:D-A - 0803467



Marker for terminal blocks, white, labeled, mounting type: snapped, for terminal block width: 4 mm, lettering field size: 2,4x 9,2 mm

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### 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

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### Partition plate

Spacer plate - DP-PTRV 4 - 3270163



Spacer plate, length: 63.6 mm, width: 8.3 mm, height: 54 mm, color: gray

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### Screwdriver tools

Actuation tool - 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: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 8.3 mm, lettering field size: 10.5 x 8.3 mm



## Potential distributors - PTRVB 4-PV /BU - 3270223

### Accessories

Test plug terminal block

Reducing plug - RPS - 0201647



Reducing plug, color: gray

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Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, color: gray

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