

## Potential distributors - PTRVB 8-FI /RD - 3270224

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Potential distributors, with option to supply up to 6 mm<sup>2</sup>, 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: 29, width: 8.3 mm, length: 100 mm, color: gray, color of connection elements: red, mounting: NS 35/7,5, NS 35/15

### Your advantages

- ✓ Distributor terminal block in red for 24 V DC power supplies
- ✓ Bridgeable potential distributor with option to supply up to 6 mm<sup>2</sup>
- ✓ 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	10 pc
Minimum order quantity	10 pc
GTIN	 4 055626 239750
GTIN	4055626239750
Weight per Piece (excluding packing)	46.000 g
Custom tariff number	85369010
Country of origin	Poland

### Technical data

#### General

Number of positions	2
Number of levels	8
Number of connections	29
Potentials	1
Nominal cross section	1.5 mm <sup>2</sup>
Nominal cross section feed-in	4 mm <sup>2</sup>
Color	gray
Color of connection elements	red

# Potential distributors - PTRVB 8-FI /RD - 3270224

## Technical data

### General

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 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
Maximum load current	37 A (Service Entrance)
Nominal current I <sub>N</sub>	32 A (Supply, for 4 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	≤ 3.2 mV

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## Technical data

### General

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
Conductor cross section short circuit testing	4 mm <sup>2</sup>
Short-time current	0.48 kA
Conductor cross section short circuit testing	6 mm <sup>2</sup>
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 <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

## Potential distributors - PTRVB 8-FI /RD - 3270224

### 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

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 <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
Note	Only the "CRIMPFOX 6" crimping pliers may be used for crimping with 6 mm <sup>2</sup> stranded and ferrule.
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	6 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	10
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	6 mm <sup>2</sup>
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 <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm <sup>2</sup>

## Potential distributors - PTRVB 8-FI /RD - 3270224

### Technical data

#### Connection data

Conductor cross section flexible, with ferrule with plastic sleeve min.	0.2 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm <sup>2</sup>
Stripping length	10 mm ... 12 mm

#### 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
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	27141118
eCl@ss 4.1	27141118
eCl@ss 5.0	27141118
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	EC000901
ETIM 4.0	EC000901
ETIM 5.0	EC000897
ETIM 6.0	EC000897

#### UNSPSC

UNSPSC 6.01	30211811
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### Classifications

#### UNSPSC

UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

### Approvals

#### Approvals


#### Approvals


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

#### Ex Approvals

#### Approval details


DNV GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</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
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	25 A	25 A	
mm²/AWG/kcmil	12-10	12-10	


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		
mm²/AWG/kcmil	0.14-2.5		


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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
	D	B	
Nominal voltage UN	300 V	300 V	
Nominal current IN	25 A	25 A	
mm²/AWG/kcmil	12-10	12-10	

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
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EAC		RU C- DE.AI30.B.01102
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cULus Recognized	
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### Accessories

#### Accessories

#### Bridge

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



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

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### Accessories

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



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

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



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

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



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

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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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## Potential distributors - PTRVB 8-FI /RD - 3270224

### 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 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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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

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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

## Potential distributors - PTRVB 8-FI /RD - 3270224

### Accessories

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

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

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



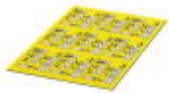
DIN rail end piece, for DIN rail NS 35/7.5

### Documentation

## Potential distributors - PTRVB 8-FI /RD - 3270224

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

## Potential distributors - PTRVB 8-FI /RD - 3270224

### 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-FI /RD - 3270224

### 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-FI /RD - 3270224

### 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-FI /RD - 3270224

### 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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### 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

## Potential distributors - PTRVB 8-FI /RD - 3270224

### Accessories

Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, color: blue



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Insulating sleeve - MPS-IH YE - 0201692

Insulating sleeve, color: yellow



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Insulating sleeve - MPS-IH GN - 0201702

Insulating sleeve, color: green



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Insulating sleeve - MPS-IH GY - 0201728

Insulating sleeve, color: gray



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Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, color: black



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Labeled terminal marker



## Potential distributors - PTRVB 8-FI /RD - 3270224

### Accessories

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

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 8,QR:1-8 - 0803468



Marker for terminal blocks, white, labeled, mounting type: snapped, for terminal block width: 8 mm, lettering field size: 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, for terminal block width: 8 mm, lettering field size: 2,4x 9,2 mm

## Potential distributors - PTRVB 8-FI /RD - 3270224

### Accessories

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



Marker for terminal blocks, white, labeled, mounting type: snapped, for terminal block width: 8 mm, lettering field size: 2,4x 9,2 mm

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



Marker for terminal blocks, white, labeled, mounting type: snapped, for terminal block width: 8 mm, lettering field size: 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

Actuation tool - 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-FI /RD - 3270224

### Accessories

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

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### 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