

## Distribution block - PTFIX 6/18X2,5-NS15A-FE - 3274230

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Distribution block, Block with horizontal alignment and integrated supply, nom. voltage: 690 V, nominal current: 24 A, connection method: Push-in connection, Push-in connection, number of connections: 19, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, AWG: 26 - 12, width: 56.5 mm, color: black/yellow, mounting type: NS 15

### Your advantages

- ✓ Time savings of up to 80%, thanks to ready-to-mount blocks without manual bridging
- ✓ Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- ✓ Clear wiring, thanks to eleven different color variants
- ✓ Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- ✓ Space savings of up to 50% on the DIN rail, thanks to transverse mounting



### Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 8 pc  |
| Minimum order quantity               | 8 pc  |
| GTIN                                 | <br>4 055626 394121 |
| GTIN                                 | 4055626394121   |
| Weight per Piece (excluding packing) | 9.990 g   |
| Custom tariff number                 | 85369010  |
| Country of origin                    | Poland  |

### Technical data

#### General

|                               |   |
|-------------------------------|---|
| Note                          | Notes on operation The blocks can be bridged with one another via the conductor shaft. For corresponding plug-in bridges, see accessories |
| Number of levels              | 1   |
| Number of connections         | 19  |
| Potentials                    | 1   |
| Nominal cross section         | 2.5 mm <sup>2</sup>   |
| Nominal cross section feed-in | 6 mm <sup>2</sup>   |
| Color                         | black/yellow  |

# Distribution block - PTFIX 6/18X2,5-NS15A-FE - 3274230

## Technical data

### General

|   |   |
|---|---|
| Insulating material   | PA  |
| Flammability rating according to UL 94  | V0  |
| Rated surge voltage   | 6 kV  |
| Degree of pollution   | 3   |
| Overvoltage category  | III   |
| Insulating material group   | I   |
| Maximum power dissipation for nominal condition   | 1.31 W (the value is based on one connection block and is multiplied according to the pin assignment) |
| Maximum load current  | 57 A  |
| Nominal current $I_N$   | 24 A  |
| Nominal voltage $U_N$   | 690 V   |
| Maximum load current  | 57 A (with 10 mm <sup>2</sup> conductor cross section)  |
| Nominal current $I_N$   | 41 A (with 6 mm <sup>2</sup> conductor cross section)   |
| Nominal voltage $U_N$   | 690 V   |
| Open side panel   | No  |
| 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   | 9.8 kV  |
| Result of power-frequency withstand voltage test  | Test passed   |
| Power frequency withstand voltage setpoint  | 1.89 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   | 0.5 mm <sup>2</sup> / 0.3 kg  |
|   | 6 mm <sup>2</sup> / 1.4 kg  |
|   | 10 mm <sup>2</sup> / 2 kg   |
|   | 0.14 mm <sup>2</sup> / 0.2 kg   |
|   | 2.5 mm <sup>2</sup> / 0.7 kg  |
|   | 4 mm <sup>2</sup> / 0.9 kg  |
| Tensile test result   | Test passed   |
| Conductor cross section tensile test  | 0.5 mm <sup>2</sup>   |
| Tractive force setpoint   | 20 N  |
| Conductor cross section tensile test  | 6 mm <sup>2</sup>   |
| Tractive force setpoint   | 80 N  |
| Conductor cross section tensile test  | 10 mm <sup>2</sup>  |
| Tractive force setpoint   | 90 N  |
| Result of tight fit on support  | Test passed   |

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### Technical data

#### General

|   |  |
|---|--|
| Tight fit on carrier  | NS 35  |
| Setpoint  | 5 N  |
| Result of voltage-drop test   | Test passed                                      |
| Requirements, voltage drop  | ≤ 1.6 mV   |
| Result of temperature-rise test   | Test passed                                      |
| Short circuit stability result  | Test passed                                      |
| Conductor cross section short circuit testing                           | 6 mm <sup>2</sup>                                |
| Short-time current  | 0.72 kA  |
| Conductor cross section short circuit testing                           | 10 mm <sup>2</sup>                               |
| Short-time current  | 1.2 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)) | 130 °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)       | 28 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        | 56.5 mm |
| Length       | 28.6 mm |
| Height NS 15 | 31.4 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.   | 4 mm <sup>2</sup>    |
| Conductor cross section AWG min.   | 26                   |
| Conductor cross section AWG max.   | 12                   |
| Conductor cross section flexible min.                                      | 0.14 mm <sup>2</sup> |
| Conductor cross section flexible max.                                      | 2.5 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. | 2.5 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.    | 2.5 mm <sup>2</sup>  |
| Stripping length   | 8 mm ... 10 mm       |
| Internal cylindrical gage  | A3                   |
| Connection method  | Push-in connection   |
| Connection in acc. with standard   | IEC 60947-7-1        |
| Conductor cross section solid min.   | 0.5 mm <sup>2</sup>  |
| Conductor cross section solid max.   | 10 mm <sup>2</sup>   |
| Conductor cross section AWG min.   | 20                   |
| Conductor cross section AWG max.   | 8                    |
| Conductor cross section flexible min.                                      | 0.5 mm <sup>2</sup>  |
| Conductor cross section flexible max.                                      | 6 mm <sup>2</sup>    |
| Min. AWG conductor cross section, flexible                                 | 20                   |
| Max. AWG conductor cross section, flexible                                 | 10                   |
| Conductor cross section flexible, with ferrule without plastic sleeve min. | 0.5 mm <sup>2</sup>  |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 6 mm <sup>2</sup>    |
| Conductor cross section flexible, with ferrule with plastic sleeve min.    | 0.5 mm <sup>2</sup>  |

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## Technical data

### Connection data

|   |                     |
|---|---------------------|
| Conductor cross section flexible, with ferrule with plastic sleeve max.                 | 6 mm <sup>2</sup>   |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min. | 0.5 mm <sup>2</sup> |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 1.5 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 | 27141121 |
| eCl@ss 4.1 | 27141121 |
| eCl@ss 5.0 | 27141120 |
| eCl@ss 5.1 | 27141120 |
| 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 |

# Distribution block - PTFIX 6/18X2,5-NS15A-FE - 3274230

## Classifications

### UNSPSC

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

## Approvals

### Approvals

#### Approvals

DNV GL / CSA / EAC

#### Ex Approvals

### Approval details

|                    |  |   |            |
|--------------------|--|---|------------|
| DNV GL             |  | <a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a> | TAE00002TT |
| Nominal voltage UN |  | 500 V   |            |
| Nominal current IN |  | 24 A  |            |

|                            |       |   |       |
|----------------------------|-------|---|-------|
| CSA                        |       | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 13631 |
|                            | D     | B   | C     |
| Nominal voltage UN         | 600 V | 300 V   | 300 V |
| Nominal current IN         | 5 A   | 50 A  | 50 A  |
| mm <sup>2</sup> /AWG/kcmil | 20-8  | 20-8  | 20-8  |

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

## Accessories

### Accessories

DIN rail

## Distribution block - PTFIX 6/18X2,5-NS15A-FE - 3274230

### Accessories

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

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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

---

## Distribution block - PTFIX 6/18X2,5-NS15A-FE - 3274230

### Accessories

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

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DIN rail perforated - NS 35/15 PERF 2000MM - 1201730



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

---



## Distribution block - PTFIX 6/18X2,5-NS15A-FE - 3274230

### Accessories

DIN rail, unperforated - NS 35/15 UNPERF 2000MM - 1201714



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

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DIN rail perforated - NS 35/15 WH PERF 2000MM - 0806602



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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DIN rail, unperforated - NS 35/15 WH UNPERF 2000MM - 1204135



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

---

DIN rail, unperforated - NS 35/15 AL UNPERF 2000MM - 1201756



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

---

DIN rail perforated - NS 35/15 ZN PERF 2000MM - 1206599



DIN rail perforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

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## Distribution block - PTFIX 6/18X2,5-NS15A-FE - 3274230

### Accessories

DIN rail, unperforated - NS 35/15 ZN UNPERF 2000MM - 1206586



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Steel, galvanized, length: 2000 mm, color: silver

DIN rail, unperforated - NS 35/15 CU UNPERF 2000MM - 1201895



DIN rail, unperforated, Standard profile, width: 35 mm, height: 15 mm, similar to EN 60715, material: Copper, uncoated, length: 2000 mm, color: copper-colored

End cap - NS 35/15 CAP - 1206573



DIN rail end piece, for DIN rail NS 35/15

### Filler plug

Filler plugs - CEC 2,5 - 3062757



Cover for conductor shaft, 10-pos., for spring cage terminal blocks (ST) and terminal blocks with push-in technology (PT) with a width of 5.2 mm

### Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, color: white



## Distribution block - PTFIX 6/18X2,5-NS15A-FE - 3274230

### Accessories

Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, color: red



Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, color: blue



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



## Distribution block - PTFIX 6/18X2,5-NS15A-FE - 3274230

### Accessories

Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, color: black



Insulating sleeve - ISH 2,5/0,2 - 3002843

Insulating sleeve, color: white



Insulating sleeve - ISH 2,5/0,5 - 3002856

Insulating sleeve, color: gray



Insulating sleeve - ISH 2,5/1,0 - 3002869

Insulating sleeve, color: black



### Jumper

Plug-in bridge - FBS 2-5 - 3030161



Plug-in bridge, pitch: 5.2 mm, length: 22.7 mm, width: 9 mm, number of positions: 2, color: red

## Distribution block - PTFIX 6/18X2,5-NS15A-FE - 3274230

### Accessories

Plug-in bridge - FBS 2-5 GN - 3032143



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: green

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Plug-in bridge - FBS 2-5 BU - 3036877



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: blue

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Plug-in bridge - FBS 2-5 GY - 3038969



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: gray

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### Labeled terminal marker

Marker card - SK 5/3,8:FORTL.ZAHLEN - 0804183



Marker card, Card, white, labeled, Horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: 5 x 3.8 mm

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Marker card - SK 3,8 REEL P5 WH CUS - 0825124



Marker card, can be ordered: By card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5 mm, lettering field size: continuous x 3.8 mm

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### Marker carriers

## Distribution block - PTFIX 6/18X2,5-NS15A-FE - 3274230

### Accessories

Terminal strip marker carrier - KLM 2 - 0807575



Terminal strip marker carrier, gray, unlabeled, mounting type: Plug in, lettering field size: 20 mm x 8 mm

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Terminal strip marker carrier - KLM 3-L - 0814788



Terminal strip marker carrier, height-adjustable, for end brackets CLIPFIX 15, CLIPFIX 35 and CLIPFIX 35-5, can be labeled with BMK...20 x 8 labels, or directly with the M-PEN or X-PEN

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### Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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### Terminal marking

Marking foil for zack marker strip - TML (EX3,8)R - 0801837



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: 30,000 x 3.8 mm

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Marking foil for zack marker strip - TML (104X3,8)R - 0801833



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 3.8 mm

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### Test plug terminal block

## Distribution block - PTFIX 6/18X2,5-NS15A-FE - 3274230

### Accessories

Test plugs - MPS-MT SN - 3212251



Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, tin-plated surface, color: silver

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Test plugs - MPS-MT 1-S - 1944372



Test plug, consisting of 1.0 mm Ø test pin and 2.0 mm Ø socket

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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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Test socket

Test adapter - PAI-4-N GY - 3032871



4 mm test adapter, for terminal blocks with 5.2 mm, 6.2 mm and 8.2 mm pitch

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