

## Ground modular terminal block - PT 16 N-PE - 3212147

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Ground modular terminal block, Connection method: Push-in connection, Cross section: 0.5 mm<sup>2</sup> - 25 mm<sup>2</sup>, AWG: 20 - 4, Width: 12.2 mm, Color: green-yellow, Mounting type: NS 35/7,5, NS 35/15

### Why buy this product

- ✓ The Push-in connection terminal blocks are characterized by the system features of the CLIPLINE complete system and by easy and tool-free wiring of conductors with ferrules or solid conductors
- ✓ The compact design and front connection enable wiring in a confined space
- ✓ In addition to the testing facility in the double function shaft, all terminal blocks provide an additional test connection
- ✓ Tested for railway applications

RoHS

### Key Commercial Data

|                                      |          |
|--------------------------------------|----------|
| Packing unit                         | 1 STK    |
| Minimum order quantity               | 50 STK   |
| Weight per Piece (excluding packing) | 47.600 g |
| Custom tariff number                 | 85369010 |
| Country of origin                    | Poland   |

### Technical data

#### General

|  |                    |
|--|--------------------|
| Number of levels                       | 1                  |
| Number of connections                  | 2                  |
| Potentials                             | 1                  |
| Nominal cross section                  | 16 mm <sup>2</sup> |
| Color                                  | green-yellow       |
| Insulating material                    | PA                 |
| Flammability rating according to UL 94 | V0                 |
| Area of application                    | Railway industry   |

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## Technical data

### General

|   |  |
|---|--|
|   | Machine building                               |
|   | Plant engineering                              |
| Rated surge voltage   | 8 kV   |
| Degree of pollution   | 3  |
| Overvoltage category  | III  |
| Insulating material group   | I  |
| 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                                     |
| 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  | $f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$ |
| ASD level   | $6.12 \text{ (m/s}^2\text{)}^2/\text{Hz}$      |
| 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   |
| Calorimetric heat release NFPA 130 (ASTM E 1354)                        | 28 MJ/kg                                       |

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## Technical data

### General

|  |             |
|--|-------------|
| 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            | 12.2 mm |
| End cover width  | 2.2 mm  |
| Length           | 75.4 mm |
| Height NS 35/7,5 | 52.6 mm |
| Height NS 35/15  | 60.1 mm |

### Connection data

|   |  |
|---|--|
| Note  | Please observe the current carrying capacity of the DIN rails. |
| Connection method   | Push-in connection   |
| Connection in acc. with standard  | IEC 60947-7-2  |
| Conductor cross section solid min.  | 0.5 mm <sup>2</sup>  |
| Conductor cross section solid max.  | 25 mm <sup>2</sup>   |
| Conductor cross section AWG min.  | 20   |
| Conductor cross section AWG max.  | 4  |
| Conductor cross section flexible min.   | 0.5 mm <sup>2</sup>  |
| Conductor cross section flexible max.   | 16 mm <sup>2</sup>   |
| Min. AWG conductor cross section, flexible  | 20   |
| Max. AWG conductor cross section, flexible  | 6  |
| 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.              | 16 mm <sup>2</sup>   |
| Conductor cross section flexible, with ferrule with plastic sleeve min.                 | 0.5 mm <sup>2</sup>  |
| Conductor cross section flexible, with ferrule with plastic sleeve max.                 | 16 mm <sup>2</sup>   |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min. | 1.5 mm <sup>2</sup>  |
| 2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max. | 4 mm <sup>2</sup>  |
| Stripping length  | 18 mm  |
| Internal cylindrical gage   | A7   |

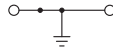
### Standards and Regulations

|  |               |
|--|---------------|
| Connection in acc. with standard       | IEC 60947-7-2 |
| Flammability rating according to UL 94 | V0            |

## Drawings

# Ground modular terminal block - PT 16 N-PE - 3212147

Circuit diagram



## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27141118 |
| eCl@ss 4.1 | 27141118 |
| eCl@ss 5.0 | 27141118 |
| eCl@ss 5.1 | 27141118 |
| eCl@ss 6.0 | 27141141 |
| eCl@ss 7.0 | 27141141 |
| eCl@ss 8.0 | 27141141 |
| eCl@ss 9.0 | 27141141 |

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000901 |
| ETIM 3.0 | EC000901 |
| ETIM 4.0 | EC000901 |
| ETIM 5.0 | EC000901 |

### UNSPSC

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

## Approvals

### Approvals

#### Approvals

VDE Zeichengenehmigung / IECEx CB Scheme / UL Recognized / cUL Recognized / EAC / CSA / EAC / BV / LR / DNV GL / PRS / cULus Recognized


#### Ex Approvals


ATEX / IECEx


### Approval details


## Ground modular terminal block - PT 16 N-PE - 3212147

### Approvals

|   |        |
|---|--------|
| VDE Zeichengenehmigung  <a href="http://www.vde.de">http://www.vde.de</a> 40040916 |        |
| mm²/AWG/kcmil   | 0.5-16 |

|   |        |
|---|--------|
| IECEE CB Scheme  <a href="http://www.iecee.org/">http://www.iecee.org/</a> DE1-54728 |        |
| mm²/AWG/kcmil   | 0.5-16 |

|  |       |       |
|--|-------|-------|
| 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     | C     |
| mm²/AWG/kcmil  | 20-4  | 20-4  |
| Nominal voltage UN   | 600 V | 600 V |

|   |       |       |
|---|-------|-------|
| 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     | C     |
| mm²/AWG/kcmil   | 20-4  | 20-4  |
| Nominal voltage UN  | 600 V | 600 V |

|                   |
|-------------------|
| EAC EAC-Zulassung |
|-------------------|

|   |      |      |
|---|------|------|
| CSA  <a href="http://www.csagroup.org/us/en/services/testing-and-certification/certified-product-listing">http://www.csagroup.org/us/en/services/testing-and-certification/certified-product-listing</a> 13631 |      |      |
|   | B    | C    |
| mm²/AWG/kcmil   | 20-4 | 20-4 |

|                         |
|-------------------------|
| EAC 7500651.22.01.00246 |
|-------------------------|

|  |
|--|
| BV <a href="http://www.veristar.com/wps/portal/lut/p/_s.7_0_A/7_0_RIM">http://www.veristar.com/wps/portal/lut/p/_s.7_0_A/7_0_RIM</a> 37796/A2 BV |
|--|

## Ground modular terminal block - PT 16 N-PE - 3212147

### Approvals

LR <http://www.lr.org/en/12/20038> (E2)

DNV GL <https://www.dnvgl.com/> TAE000010T

PRS <http://www.prs.pl/> TE/2107/880590/16

cULus Recognized  <http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

### Accessories

#### 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)

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### Accessories

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



DIN rail 35 mm (NS 35)

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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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### Accessories

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, material: steel galvanized and passivated with a thick layer, perforated, height 15 mm, width 35 mm, length: 2000 mm

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



DIN rail, material: Steel, unperforated, height 15 mm, width 35 mm, length: 2 m

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



DIN rail 35 mm (NS 35)

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



DIN rail 35 mm (NS 35)

## Ground modular terminal block - PT 16 N-PE - 3212147

### Accessories

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



DIN rail, deep drawn, high profile, unperforated, 1.5 mm thick, material: aluminum, height 15 mm, width 35 mm, length 2000 mm

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



DIN rail, material: Galvanized, perforated, height 15 mm, width 35 mm, length: 2 m

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



DIN rail, material: Galvanized, unperforated, height 15 mm, width 35 mm, length: 2 m

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



DIN rail, material: Copper, unperforated, 1.5 mm thick, height 15 mm, width 35 mm, length: 2 m

End cap - NS 35/15 CAP - 1206573



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

## Ground modular terminal block - PT 16 N-PE - 3212147

### Accessories

DIN rail, unperforated - NS 35/15-2,3 UNPERF 2000MM - 1201798



DIN rail, material: Steel, unperforated, 2.3 mm thick, height 15 mm, width 35 mm, length: 2 m

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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 - E/UK - 1201442



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

## Ground modular terminal block - PT 16 N-PE - 3212147

### Accessories

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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 cover

##### End cover - D-PT 16 N - 3212060



End cover, Length: 75.4 mm, Width: 2.2 mm, Color: gray

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#### Insulating sleeve

##### Insulating sleeve - MPS-IH WH - 0201663



Insulating sleeve, Color: white

## Ground modular terminal block - PT 16 N-PE - 3212147

### 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

## Ground modular terminal block - PT 16 N-PE - 3212147

### Accessories

Insulating sleeve - MPS-IH BK - 0201731



Insulating sleeve, Color: black

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### Jumper

Plug-in bridge - FBS 2-12 - 3005950



Plug-in bridge, Pitch: 12 mm, Number of positions: 2, Color: red

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### Labeled terminal marker

Zack Marker strip, flat - ZBF 12 CUS - 0825018



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 5.15 x 12.15 mm

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Marker for terminal blocks - UC-TMF 12 CUS - 0824670



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 11.45 x 5.1 mm

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Marker for terminal blocks - UCT-TMF 12 CUS - 0829686



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 11.2 x 4.7 mm

## Ground modular terminal block - PT 16 N-PE - 3212147

### Accessories

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#### Zack marker strip - ZB 12 CUS - 0824942



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 12.2 mm, Lettering field: 10.5 x 12.15 mm

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#### Marker for terminal blocks - ZB 12,LGS:L1-N,PE - 0812146



Marker for terminal blocks, Strip, white, labeled, Printed horizontally: L1, L2, L3, N, PE, Mounting type: Snap into tall marker groove, for terminal block width: 12.2 mm, Lettering field: 10.5 x 12.15 mm

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#### Marker for terminal blocks - UC-TM 12 CUS - 0824613



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 12 mm, Lettering field: 11.45 x 10.5 mm

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#### Marker for terminal blocks - UCT-TM 12 CUS - 0829630



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, Mounting type: Snap into tall marker groove, for terminal block width: 12 mm, Lettering field: 10.8 x 9.6 mm

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### Planning and marking software

#### Software - CLIP-PROJECT ADVANCED - 5146040



Multilingual software for convenient configuration of Phoenix Contact products on standard DIN rails.

## Ground modular terminal block - PT 16 N-PE - 3212147

### Accessories

Software - CLIP-PROJECT PROFESSIONAL - 5146053



Multilingual software for terminal strip configuration. A marking module enables the professional marking of markers and labels for identifying terminal blocks, conductors and cables, and devices.

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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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Screwdriver - SZF 3-1,0X5,5 - 1206612



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 1.0 x 5.5 x 150 mm, 2-component grip, with non-slip grip

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### Terminal marking

Zack Marker strip, flat - ZBF 12:UNBEDRUCKT - 0809735



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 5.15 x 12.15 mm

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Marker for terminal blocks - UC-TMF 12 - 0819233



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 11.45 x 5.1 mm

## Ground modular terminal block - PT 16 N-PE - 3212147

### Accessories

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#### Marker for terminal blocks - UCT-TMF 12 - 0829214



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, THERMOMARK PRIME, Mounting type: Snap into flat marker groove, for terminal block width: 12 mm, Lettering field: 11.2 x 4.7 mm

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#### Zack marker strip - ZB 12:UNPRINTED - 0812120



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 12.2 mm, Lettering field: 12 x 10.5 mm

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#### Marker for terminal blocks - UC-TM 12 - 0819194



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 12 mm, Lettering field: 11.45 x 10.5 mm

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#### Marker for terminal blocks - UCT-TM 12 - 0829144



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: THERMOMARK CARD, BLUEMARK CLED, BLUEMARK LED, TOPMARK LASER, THERMOMARK PRIME, Mounting type: Snap into tall marker groove, for terminal block width: 12 mm, Lettering field: 10.8 x 9.6 mm

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#### Marker for terminal blocks - TMT (EX9,5)R - 0828295



Marker for terminal blocks, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK X, Mounting type: Snap into universal marker groove, Snap into tall marker groove, Lettering field: 9.5 x 50000 mm

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## Ground modular terminal block - PT 16 N-PE - 3212147

### Accessories

Marker for terminal blocks - US-TM 100 - 0829255



Marker for terminal blocks, Card, white, unlabeled, can be labeled with: THERMOMARK PRIME, THERMOMARK CARD, Mounting type: Snap into universal marker groove, Lettering field: 104 x 9.8 mm

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### Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, Color: silver

单击下面可查看定价，库存，交付和生命周期等信息

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