

## Marshalling patchboard - PTMC 1,5-2 /VT - 3270435

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Marshalling patchboard, Nom. voltage: 500 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: 1, Number of connections: 4, Width: 11 mm, Length: 8.6 mm, Color: gray, Color of connection elements: violet, Assembly: for snapping onto a DIN rail adapter, for snapping onto a cover flange

Image shows the version in gray

### Why buy this product

- ✓ High contact quality thanks to push-in technology as a replacement for Wire-Wrap®, TERMI-POINT®, etc.
- ✓ Individual color assignment of cable and terminal point to ensure error-free, safe operation
- ✓ Color configuration possible according to VDE 0812, VDE 0815, DIN 47100 or unlimited.
- ✓ Tool-free wiring in a confined space thanks to compact size
- ✓ Individual setup thanks to modular principle
- ✓ Suitable for DIN rail mounting and panel cutouts with corresponding accessories

### Key Commercial Data

|                        |                     |
|------------------------|---------------------|
| Packing unit           | 1 STK               |
| Minimum order quantity | 10 STK              |
| GTIN                   | <br>4 055626 114194 |
| GTIN                   | 4055626114194       |
| Custom tariff number   | 85369010            |
| Country of origin      | Poland              |

### Technical data

#### General

|                       |   |
|-----------------------|---|
| Number of positions   | 1 |
| Number of levels      | 1 |
| Number of connections | 4 |

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## Technical data

### General

|   |  |
|---|--|
| Nominal cross section   | 1.5 mm <sup>2</sup>  |
| Color   | gray   |
| Color of connection elements  | violet   |
| 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   | 0.56 W   |
| Maximum load current  | 24 A (in case of a 2.5 mm <sup>2</sup> conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.) |
| Nominal current I <sub>N</sub>  | 17.5 A   |
| Nominal voltage U <sub>N</sub>  | 500 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   | 7.3 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   | 0.14 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   |

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### General

|   |   |
|---|---|
| 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  |
| 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  |
| 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 1, class B, body mounted |
| Test frequency  | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz    |
| ASD level   | 0.964 (m/s <sup>2</sup> ) <sup>2</sup> /Hz          |
| Acceleration  | 0.58 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  | 5 g   |
| Shock duration  | 30 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   |

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## Technical data

### General

|   |             |
|---|-------------|
| 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  | 11 mm  |
| Length | 8.6 mm |
| Height | 30 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       |
| Internal cylindrical gage  | A1                   |

### 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 |
|------------|---|

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## Technical data

### Environmental Product Compliance

|  |  |
|--|--|
|  | No hazardous substances above threshold values |
|--|--|

## Drawings

### Circuit diagram



## Approvals


### Approvals


#### Approvals

UL Recognized / cUL Recognized / cULus Recognized

#### Ex Approvals

### Approval details

|                                |   |   |              |
|--------------------------------|---|---|--------------|
| 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   |              |
| mm <sup>2</sup> /AWG/kcmil     | 24-16   | 24-16   |              |
| Nominal current I <sub>N</sub> | 10 A  | 10 A  |              |
| Nominal voltage U <sub>N</sub> | 300 V   | 300 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 |
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### Approvals

cULus Recognized



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