

Marshalling patchboard - PTMC 1,5/48-3 /BU 19Z - 3270321

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Marshalling patchboard, nom. voltage: 500 V, nominal current: 17.5 A, cross section: 0.14 mm² - 2.5 mm², AWG: 14 - 26, connection method: Push-in connection, number of positions: 8, number of connections: 288, width: 66 mm, length: 111 mm, color: gray, color of connection elements: blue, mounting: Wall mounting, 19" rack

Your advantages

- ✓ Clear representation of actuation and terminal points through vertical conductor routing
- ✓ Tool-free wiring in a confined space thanks to compact size
- ✓ High contact quality thanks to push-in technology as a replacement for Wire-Wrap®, TERMI-POINT®, etc.
- ✓ For mounting in 19" racks
- ✓ Blue version for using in intrinsically safe circuits in potentially explosive areas (type of protection Ex i)



Key Commercial Data

| | |
|--------------|---------------|
| Packing unit | 10 pc |
| GTIN | |
| GTIN | 4055626058405 |

Technical data

General

| | |
|--|---------------------|
| Note | Labeled from 1 - 48 |
| Number of positions | 8 |
| Number of levels | 1 |
| Number of connections | 288 |
| Nominal cross section | 1.5 mm ² |
| Color | gray |
| Color of connection elements | blue |
| Insulating material | PA |
| Flammability rating according to UL 94 | V0 |
| Rated surge voltage | 6 kV |
| Degree of pollution | 3 |

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Technical data

General

| | |
|---|--|
| Overvoltage category | III |
| Insulating material group | I |
| Maximum power dissipation for nominal condition | 0.56 W (the value is based on one connection block and is multiplied according to the pin assignment) |
| Maximum load current | 24 A (in case of a 2.5 mm ² conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.) |
| | 12 A (in case of a 2.5 mm ² conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.) |
| Nominal current I _N | 17.5 A |
| Nominal voltage U _N | 500 V |
| Open side panel | No |
| Ambient temperature (operation) | -60 °C ... 85 °C |
| Ambient temperature (storage/transport) | -25 °C ... 55 °C (For a short time, not exceeding 24 h, -60 to +70 °C) |
| Permissible humidity (storage/transport) | 30 % ... 70 % |
| Ambient temperature (assembly) | -5 °C ... 70 °C |
| Ambient temperature (actuation) | -5 °C ... 70 °C |
| 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 |
| 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 ² / 0.2 kg |
| | 1.5 mm ² / 0.4 kg |
| | 2.5 mm ² / 0.7 kg |
| Tensile test result | Test passed |
| Result of tight fit on support | Test passed |
| Tight fit on carrier | NS 35 |
| Setpoint | 1 N |
| Result of voltage-drop test | Test passed |
| Result of temperature-rise test | Test passed |
| Requirement temperature-rise test | Increase in temperature ≤ 45 K |
| Short circuit stability result | Test passed |
| Conductor cross section short circuit testing | 1.5 mm ² |
| Short-time current | 0.18 kA |

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Technical data

General

| | |
|---|---|
| Conductor cross section short circuit testing | 2.5 mm ² |
| 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 1, class B, body mounted |
| Test frequency | f ₁ = 5 Hz to f ₂ = 150 Hz |
| ASD level | 0.964 (m/s ²) ² /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 | 5g |
| 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 |
| Surface flammability NFPA 130 (ASTM E 162) | passed |
| Specific optical density of smoke NFPA 130 (ASTM E 662) | passed |
| Calorimetric heat release NFPA 130 (ASTM E 1354) | 27,5 MJ/kg |
| Smoke gas toxicity NFPA 130 (SMP 800C) | passed |
| 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 | 66 mm |
| Length | 111 mm |
| Height | 30 mm |

Connection data

| | |
|-------------------|--------------------|
| Connection method | Push-in connection |
| Stripping length | 8 mm ... 10 mm |

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Technical data

Connection data

| | |
|--|--|
| Connection in acc. with standard | IEC 60947-7-1 |
| Conductor cross section solid min. | 0.14 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section AWG min. | 26 |
| Conductor cross section AWG max. | 14 |
| Conductor cross section flexible min. | 0.14 mm ² |
| Conductor cross section flexible max. | 1.5 mm ² |
| 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 ² |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 1.5 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve min. | 0.14 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve max. | 1.5 mm ² |
| Connection cross sections directly pluggable | 0.34 mm ² 2.5 mm ² 20 14 |
| Conductor cross section solid min. | 0.34 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section flexible, with ferrule without plastic sleeve min. | 0.34 mm ² |
| Conductor cross section flexible, with ferrule without plastic sleeve max. | 1.5 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve min. | 0.34 mm ² |
| Conductor cross section flexible, with ferrule with plastic sleeve max. | 1.5 mm ² |
| Internal cylindrical gage | A1 |

Standards and Regulations

| | |
|--|---------------|
| Connection in acc. with standard | IEC 60947-7-1 |
| Flammability rating according to UL 94 | V0 |

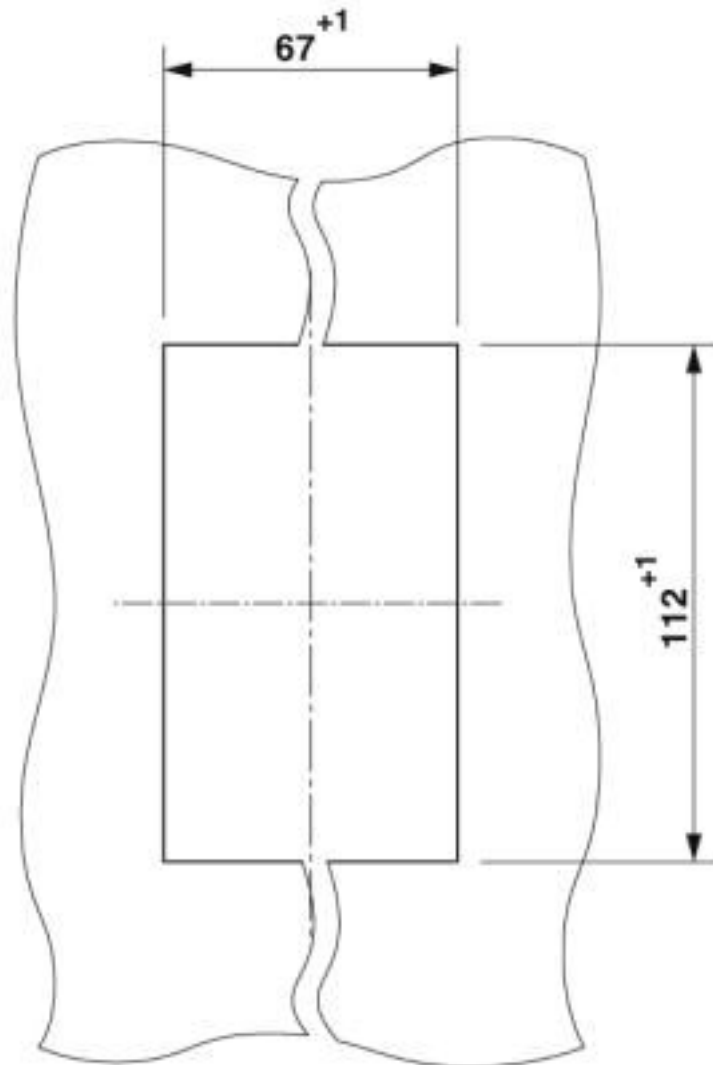
Environmental Product Compliance

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

Drawings

Marshalling patchboard - PTMC 1,5/48-3 /BU 19Z - 3270321

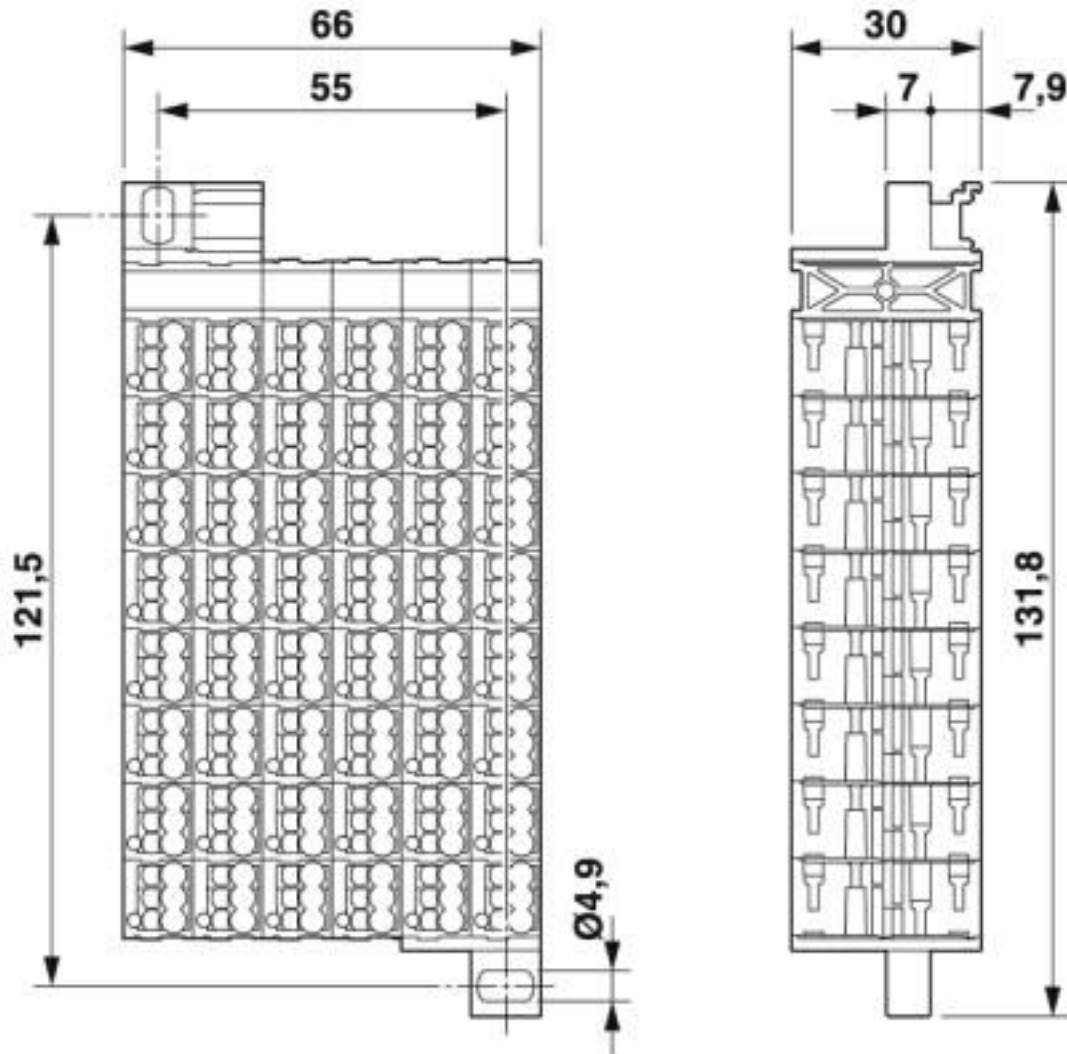
Dimensional drawing



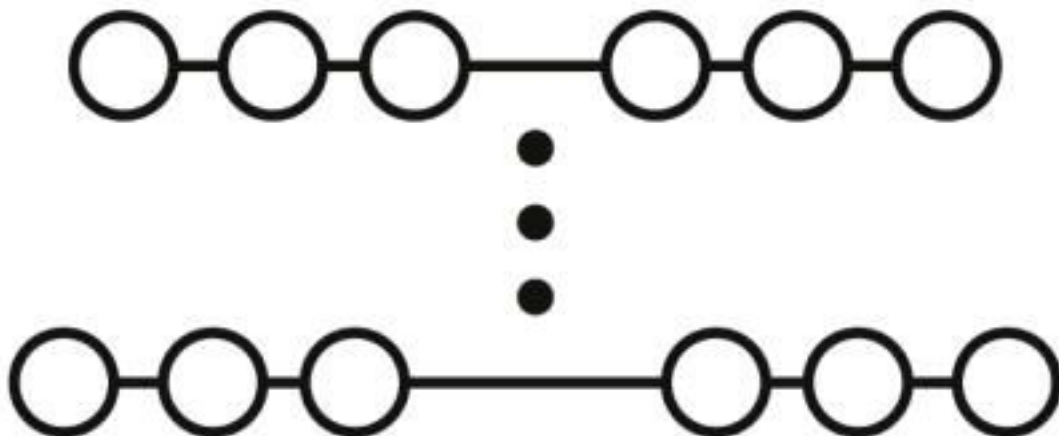
Panel cutout

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Dimensional drawing



Circuit diagram



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Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27141120 |
| eCl@ss 4.0 | 27141100 |
| eCl@ss 4.1 | 27141100 |
| eCl@ss 5.0 | 27141100 |
| 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 5.0 | EC000897 |
| ETIM 6.0 | EC000897 |
| ETIM 7.0 | EC000897 |

UNSPSC

| | |
|-------------|----------|
| UNSPSC 13.2 | 39121410 |
| UNSPSC 18.0 | 39121410 |
| UNSPSC 19.0 | 39121410 |
| UNSPSC 20.0 | 39121410 |
| UNSPSC 21.0 | 39121410 |

Approvals


Approvals

Approvals

CSA / UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

Ex Approvals

Approval details

| | | | |
|----------------------------|---|---|-------|
| CSA |  | http://www.csagroup.org/services-industries/product-listing/ | 13631 |
| | B | C | D |
| Nominal voltage UN | 300 V | 300 V | 300 V |
| Nominal current IN | 10 A | 10 A | 10 A |
| mm ² /AWG/kcmil | 24-16 | 24-16 | 24-16 |

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Approvals

| | | | |
|----------------------------|-------|---|--------------|
| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 60425 |
| | B | C | |
| Nominal voltage UN | 300 V | 300 V | |
| Nominal current IN | 10 A | 10 A | |
| mm ² /AWG/kcmil | 24-16 | 24-16 | |

| | | | |
|----------------------------|-------|---|--------------|
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 60425 |
| | B | C | |
| Nominal voltage UN | 300 V | 300 V | |
| Nominal current IN | 10 A | 10 A | |
| mm ² /AWG/kcmil | 24-16 | 24-16 | |

| | | |
|-----|--|--------------------------|
| EAC | | RU C- DE.AI30.B.01102 |
|-----|--|--------------------------|

| | | |
|-----|--|--------------------------|
| EAC | | RU C- DE.BL08.B.00682 |
|-----|--|--------------------------|

| | |
|------------------|--|
| cULus Recognized | |
|------------------|--|

Accessories

Accessories

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, color: white



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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



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Accessories

Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, color: black



Loop bridge

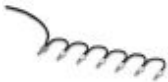
Wire bridge - DB 50- 90 BU - 2821180

Flexible wire loop bridge, 50-pos., conductor cross-section: 0.5 mm^2 , loop length: 90 mm, ferrule length: 8 mm, color: blue



Wire bridge - DB 50- 90 BK - 2820916

Flexible wire loop bridge, 50-pos., conductor cross-section: 0.5 mm^2 , loop length: 90 mm, ferrule length: 8 mm, color: black



Wire bridge - DB 50- 90 GY - 2820929

Flexible wire loop bridge, 50-pos., conductor cross-section: 0.5 mm^2 , loop length: 90 mm, ferrule length: 8 mm, color: gray



Wire bridge - DB 50- 90 RD - 2864639

Flexible wire loop bridge, 50-pos., conductor cross-section: 0.5 mm^2 , loop length: 90 mm, ferrule length: 8 mm, color: red



Mounting material

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Accessories

Flange cover - DF-PTMC-O - 3270400



Flange cover, for direct mounting on top and for accommodating the marking, length: 30 mm, width: 22 mm, height: 13 mm, color: gray

Flange cover - DF-PTMC-U - 3270401



Flange cover, for direct mounting below, length: 29.1 mm, width: 22 mm, height: 12.8 mm, color: gray

Adapter - DF-PTMC-NS - 3270403



Adapter, for mounting on a DIN rail, length: 64 mm, width: 22 mm, color: gray

Marker adapter - DF-PTMC-ZB - 3270410



Marker adapter, for direct mounting on top and for accommodating the marking, length: 30 mm, width: 11 mm, height: 13 mm, color: gray

Screwdriver tools

Screwdriver - SZF 0-0,4X2,5 - 1204504



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

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Accessories

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

Test plug terminal block

Reducing plug - RPS - 0201647



Reducing plug, color: gray

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm² conductor cross section, color: gray

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PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

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