

Data Sheet | Item Number: 727-231/021-000

4-level terminal block for matrix patching; with locking clips; one potential per level; with 2.3 mm Ø test port; marking: 0-1-2-3--3-2-1-0; for 35 x 15 mounting rail; 1.5 mm²; white

<https://www.wago.com/727-231/021-000>



Color: ■ white

Similar to illustration

Terminal block for matrix patching, 727 Series, operating tool

This terminal block for matrix patching (item number 727-231/021-000) simplifies electrical installations. Conductors can only be connected to this terminal block for matrix patching if their strip length is between 8 and 10 mm. Featuring conductor terminals along with CAGE CLAMP®, this product delivers reliable performance. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. Depending on the conductor type, this terminal block for matrix patching is ideal for conductor cross sections ranging from 0.08 mm² to 1.5 mm².

Electrical data

Ratings per IEC/EN

| | |
|---|---|
| Nominal voltage (III/3) | 250 V |
| Rated impulse withstand voltage (III / 3) | 4 kV |
| Rated current | 12 A |
| Legend (ratings) | (III / 3) ≙ Overvoltage category III / Pollution degree 3 |

General information

| | |
|------------------|--------------------|
| Wiring direction | Front-entry wiring |
|------------------|--------------------|

Connection data

| | |
|----------------------------|----|
| Clamping units | 16 |
| Total number of potentials | 4 |
| Number of levels | 4 |

Connection 1

| | |
|---------------------------------|--|
| Connection technology | CAGE CLAMP® |
| Actuation type | Operating tool |
| Connectable conductor materials | Copper |
| Solid conductor | 0.08 ... 1.5 mm ² / 28 ... 16 AWG |
| Fine-stranded conductor | 0.08 ... 1.5 mm ² / 28 ... 16 AWG |
| Strip length | 8 ... 10 mm / 0.31 ... 0.39 inches |
| Wiring direction | Front-entry wiring |

Physical data

| | |
|-----------------------------------|-----------------------|
| Width | 7.62 mm / 0.3 inches |
| Height | 126 mm / 4.961 inches |
| Depth from upper-edge of DIN-rail | 62 mm / 2.441 inches |

Mechanical data

| | |
|---------------|------------------|
| Marking | 0-1-2-3--3-2-1-0 |
| Design | horizontal type |
| Mounting type | DIN-35 rail |
| Marking level | Center marking |

Material data

| | |
|------------------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | white |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.538 MJ |
| Weight | 33.9 g |

Environmental requirements

| | |
|----------------------------------|-----------------|
| Processing temperature | -35 ... +85 °C |
| Continuous operating temperature | -60 ... +105 °C |

Commercial data

| | |
|-----------------------|---------------|
| PU (SPU) | 50 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4045454189501 |
| Customs tariff number | 85369010000 |

Product Classification

| | |
|-------------|----------------------|
| UNSPSC | 39121410 |
| eCl@ss 10.0 | 27-14-11-20 |
| eCl@ss 9.0 | 27-14-11-20 |
| ETIM 9.0 | EC000897 |
| ETIM 10.0 | EC000897 |
| ECCN | NO US CLASSIFICATION |

Environmental Product Compliance

| | |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

Approvals / Certificates

General approvals



| Approval | Standard | Certificate Name |
|---------------------------------------|---------------|------------------|
| CCA DEKRA Certification B.V. | EN 60947 | NTR NL 7485 |
| CSA DEKRA Certification B.V. | C22.2 No. 158 | 70048845 |
| KEMA/KEUR DEKRA Certification B.V. | EN 60947 | 2192101.01 |

Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|----------|------------------|
| EU-Declaration of Confor- mity WAGO GmbH & Co. KG | - | - |
| UK-Declaration of Confor- mity WAGO GmbH & Co. KG | - | - |

Downloads

Environmental Product Compliance

| Compliance Search |
|--|
| Environmental Product Compliance 727-231/021-000 |

CAD/CAE-Data

| CAD data |
|---------------------------------|
| 2D/3D Models 727-231/021-000 |

| CAE data |
|--------------------------------------|
| EPLAN Data Portal 727-231/021-000 |
| WSCAD Universe 727-231/021-000 |
| ZUKEN Portal 727-231/021-000 |

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



[Item No.: 727-265](#)
4-level end plate; marking:
0-1-2-3--3-2-1-0; 7.62 mm thick; blue



[Item No.: 727-255](#)
4-level end plate; marking:
0-1-2-3--3-2-1-0; 7.62 mm thick; gray



[Item No.: 727-205](#)
4-level end plate; marking:
0-1-2-3--3-2-1-0; 7.62 mm thick; orange

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories



Item No.: 210-196

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item No.: 210-198

Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



Item No.: 210-508

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored



Item No.: 210-197

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



Item No.: 210-506

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored



Item No.: 210-114

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item No.: 210-118

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



Item No.: 210-115

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored



Item No.: 210-112

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored



Item No.: 210-504

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored



Item No.: 210-113

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



Item No.: 210-505

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

1.2.2 Ferrule

1.2.2.1 Ferrule



Item No.: 216-301

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-302

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-201

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-101

Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored



Item No.: 216-202

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-102

Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored



Item No.: 216-203

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-103

Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated



Item No.: 216-204

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-104

Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored

1.2.3 Installation

1.2.3.1 Mounting accessories



Item No.: 249-109

Wire harness support; gray

1.2.4 Insulation stop

1.2.4.1 Insulation stop



Item No.: 727-197
 Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 8 pieces/strip; white



Item No.: 727-199
 Insulation stop; 0.25 - 0.5 mm² "s+f-st"; 8 pieces/strip; dark gray



Item No.: 727-198
 Insulation stop; 0.25 mm² "s"; 0.14 - 0.25 mm² "f-st"; 8 pieces/strip; light gray

1.2.5 Jumper

1.2.5.1 Jumper



Item No.: 709-107
 Wire commoning chain; 0.5 mm²; insulated; gray

1.2.6 Marking

1.2.6.1 Double marker carrier



Item No.: 209-128
 Adaptor; gray

1.2.6.2 Marker



Item No.: 793-5501/000-006
 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue



Item No.: 793-5501/000-007
 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray



Item No.: 793-5501/000-023
 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green



Item No.: 793-5501/000-017
 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green



Item No.: 793-5501/000-012
 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange



Item No.: 793-5501/000-005
 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red



Item No.: 793-5501/000-024
 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet



Item No.: 793-5501
 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



Item No.: 793-5501/000-002
 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



Item No.: 793-501/000-006
 WMB marking card; as card; not stretchable; plain; snap-on type; blue



Item No.: 793-501/000-007
 WMB marking card; as card; not stretchable; plain; snap-on type; gray



Item No.: 793-501/000-023
 WMB marking card; as card; not stretchable; plain; snap-on type; green



Item No.: 793-501/000-017
 WMB marking card; as card; not stretchable; plain; snap-on type; light green



Item No.: 793-501/000-012
 WMB marking card; as card; not stretchable; plain; snap-on type; orange



Item No.: 793-501/000-005
 WMB marking card; as card; not stretchable; plain; snap-on type; red



Item No.: 793-501/000-024
 WMB marking card; as card; not stretchable; plain; snap-on type; violet



Item No.: 793-501
 WMB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 793-501/000-002
 WMB marking card; as card; not stretchable; plain; snap-on type; yellow



Item No.: 2009-115/000-006
 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



Item No.: 2009-115/000-007
 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray

1.2.6.2 Marker



Item No.: 2009-115/000-023

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

Item No.: 2009-115/000-017

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green

Item No.: 2009-115/000-012

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

Item No.: 2009-115/000-024

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



Item No.: 2009-115

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

Item No.: 2009-115/000-002

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.2.7 Test and measurement

1.2.7.1 Testing accessories



Item No.: 210-297

Step-down test plug; from 4mm socket to 2mm plug; red

1.2.8 Tool

1.2.8.1 Operating tool



Item No.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Item No.: 210-647

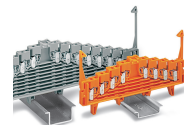
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

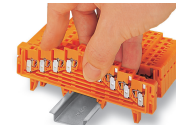
Installation



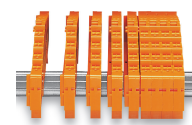
Example of matrix patching assembly
 Left: Main cables fed through locking clips on the field side
 Right: Control cables fed between locking clips
 Center: Wiring of both patching sides



Terminal blocks for DIN-35 x 7.5 mm or DIN-35 x 15 mm rails are available.



Snap individual 4- or 8-level terminal blocks onto the DIN-rail.

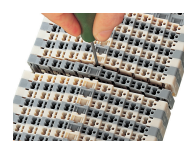


Slide terminal blocks together.

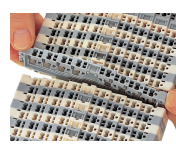


Grip end plate at both sides and:

- push down (assembly)
- pull up (removal)

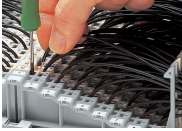


Open the assembly by laterally sliding a block via operating tool (2.5 x 0.4 mm blade).



Slide terminal block and remove from the rail with a levering action.

Conductor termination

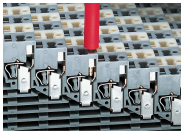


CAGE CLAMP® connection

Inserting a conductor via 210-719 Operating Tool (2.5 x 0.4 mm blade).

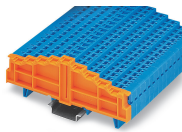
Max. cross-section for uninsulated ferrules 1 mm² (18 AWG), for insulated ferrules 0.75 mm² (20 AWG)

Testing



Special test contact for step-down test plug; from 4 mm socket to 2 mm plug; max. 42 V

Ex application



Blue terminal blocks for matrix patching are suitable for Ex i applications.



Using terminal blocks with locking clips, the wiring space between the terminal strips can be covered with a wiring duct cover.

Marking



Connection points identified via factory-direct printing



Marking coordinates via WMB Multi Marking System.

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at: www.wago.com