# Data Sheet | Item Number: 727-138

8-level same potential terminal block; without locking clips; all clamping units internally commoned; with 2.3 mm Ø test port; for 35 x 15 mounting rail; 1.5 mm²; light gray

https://www.wago.com/727-138



Color: light gray

Similar to illustration

Common potential terminal block, 727 Series, operating tool

This common potential terminal block (item number 727-138) streamlines wire connections, making them both quick and easy. Conductors can only be connected to this common potential terminal block if their strip length is between 8 and 10 mm . This product features conductor terminals and utilizes CAGE CLAMP®. Our trusted universal connection known as CAGE CLAMP® is industry-leading when it comes to connection technology and electrical interconnections. Depending on the conductor type, this common potential terminal block 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 | 18 A |
| Legend (ratings) | (III / 3) ≙ Overvoltage category III / Pollution degree 3 |

### General information

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

## Connection Data

| | |
|---|---|
| Clamping units | 32 |
| Total number of potentials | 1 |
| Number of levels | 8 |

### Connection 1

| | |
|---|---|
| Connection technology | CAGE CLAMP® |
| Actuation type | Operating tool |
| Connectable conductor materials | Copper |
| Solid conductor | 0.08 … 1.5 mm² / 28 … 16 AWG |
| Fine-stranded conductor | 0.08 … 1.5 mm² / 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 | 226 mm / 8.898 inches |
| Depth from upper-edge of DIN-rail | 58.5 mm / 2.303 inches |

## Mechanical data

| | |
|---|---|
| Marking | plain |
| 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 | light gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 1.069 MJ |
| Weight | 61.7 g |

## Environmental requirements

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

## Commercial data

| | |
|---|---|
| PU (SPU) | 25 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4045454188399 |
| 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 |


Continued on next page

## Approvals / Certificates

### General approvals

| Approval | Standard | Certificate Name |
|---|---|---|
| CCA<br>DEKRA Certification B.V. | EN 60947 | NTR NL 7485 |
| CSA<br>DEKRA Certification B.V. | C22.2 No. 158 | 70048845 |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947 | 2192101.01 |
| UL<br>Underwriters Laboratories Inc. | UL 1059 | UL-US-L45172-618717-50402891-1 |

### Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 727-138

### Documentation

**Bid Text**

| | | |
|---|---|---|
| 727-138 | 19.02.2019 | xml<br>3.59 KB |
| 727-138 | 21.02.2019 | docx<br>15.56 KB |

## CAD/CAE-Data

**CAD data**

2D/3D Models 727-138

**CAE data**

EPLAN Data Portal 727-138

WSCAD Universe 727-138

ZUKEN Portal 727-138


Continued on next page

# 1 Compatible Products

## 1.1 Required Accessories

### 1.1.1 End plate

#### 1.1.1.1 End plate



Item No.: 727-114
8-level end plate; plain; 7.62 mm thick; blue



Item No.: 727-113
8-level end plate; plain; 7.62 mm thick; gray



Item No.: 727-116
8-level end plate; plain; 7.62 mm thick; light gray



Item No.: 727-117
8-level end plate; plain; 7.62 mm thick; orange



Item No.: 727-115
8-level end plate; plain; 7.62 mm thick; white

## 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; uninsulated; 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 / 18 AWG; uninsulated; 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; uninsulated; 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; uninsulated; electro-tin plated; silver-colored


Continued on next page

## 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


Continued on next page

### 1.2.6.2 Marker



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



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



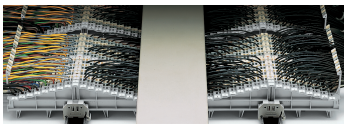
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



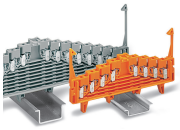
Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

## Installation Notes

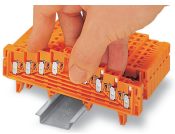
### Installation



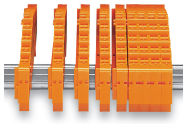
Example of matrix patching assembly
Left: Main cables fed through locking clips on the field side
Right: Control cables fed between locking clips
Center: Wiring of both patching sides



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



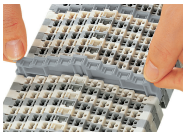
Snap individual 4- or 8-level terminal blocks onto the DIN-rail.



Slide terminal blocks together.

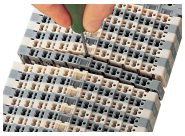

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## Installation

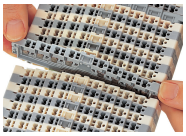


Grip end plate at both sides and:

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

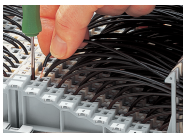


Open the assembly by laterally sliding a block via operating tool (2.5 x 0.4 mm blade).



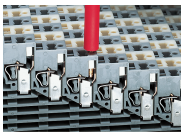
Slide terminal block and remove from the rail with a levering action.

## Conductor termination



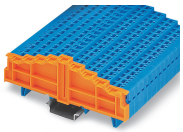
**CAGE CLAMP® connection**
Inserting a conductor via 210-719 Operating Tool (2.5 x 0.4 mm blade).
Max. cross-section for uninsulated ferrules 1 mm² (18 AWG), for insulated ferrules 0.75 mm² (20 AWG)

## Testing

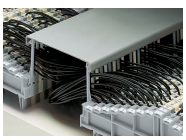


Special test contact for step-down test plug; from 4 mm socket to 2 mm plug; max. 42 V

## Ex application



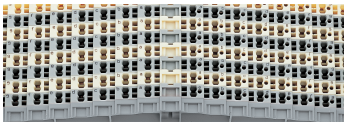
Blue terminal blocks for matrix patching are suitable for Ex i applications.



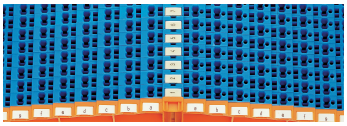
Using terminal blocks with locking clips, the wiring space between the terminal strips can be covered with a wiring duct cover.


Continued on next page

## Marking



Connection points identified via factory-direct printing



Marking coordinates via WMB Multi Marking System.