

Data Sheet | Item Number: 727-224/024-000

4-level terminal block for matrix patching; without locking clips; one potential per level; with 2.3 mm Ø test port; marking: d-c-b-a--a-b-c-d; for 35 x 7.5 mounting rail; 1.5 mm²; blue

<https://www.wago.com/727-224/024-000>



Color: ■ blue

Similar to illustration

Terminal block for matrix patching, 727 Series, blue

Seamless electrical installations are guaranteed with this terminal block for matrix patching (item number 727-224/024-000). Ensure that the strip lengths are between 8 and 10 mm when connecting conductors to this terminal block for matrix patching. Featuring conductor terminals along with CAGE CLAMP®, this product outperforms the competition. Our CAGE CLAMP® connection offers a convenient and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. This terminal block for matrix patching is suitable for conductor cross sections ranging from 0.08 mm² to 1.5 mm².

Notes

Safety Information	60V Ex i application = peak value (table 4, EN 50020)
Safety information 2	When approved by the manufacturer's authorized inspection representative

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
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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

Connection 1

Wiring direction	Front-entry wiring
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Physical data

Width	7.62 mm / 0.3 inches
Height	126 mm / 4.961 inches
Depth from upper-edge of DIN-rail	44.5 mm / 1.752 inches

Mechanical data

Marking	d-c-b-a--a-b-c-d
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	blue
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.413 MJ
Weight	32.3 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	4045454188986
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			Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL 7485	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CSA DEKRA Certification B.V.	C22.2 No. 158	70048845	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2192101.01			

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 727-224/024-000	↓

CAD/CAE-Data

CAD data		CAE data	
2D/3D Models 727-224/024-000	↓	EPLAN Data Portal 727-224/024-000	↓
		WSCAD Universe 727-224/024-000	↓
		ZUKEN Portal 727-224/024-000	↓

1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



<p>Item No.: 727-268 4-level end plate; marking: d-c-b-a--a-b-c-d; 7.62 mm thick; blue</p>	<p>Item No.: 727-258 4-level end plate; marking: d-c-b-a--a-b-c-d; 7.62 mm thick; gray</p>	<p>Item No.: 727-208 4-level end plate; marking: d-c-b-a--a-b-c-d; 7.62 mm thick; orange</p>
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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



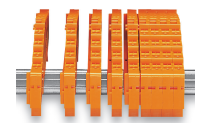
Example of matrix patching assembly
Left: Main cables fed through locking clips on the field side
Right: Control cables fed between locking clips
Center: Wiring of both patching sides



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.