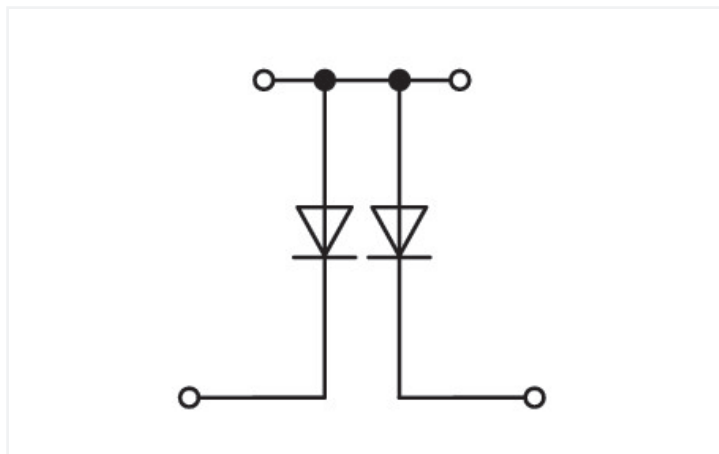
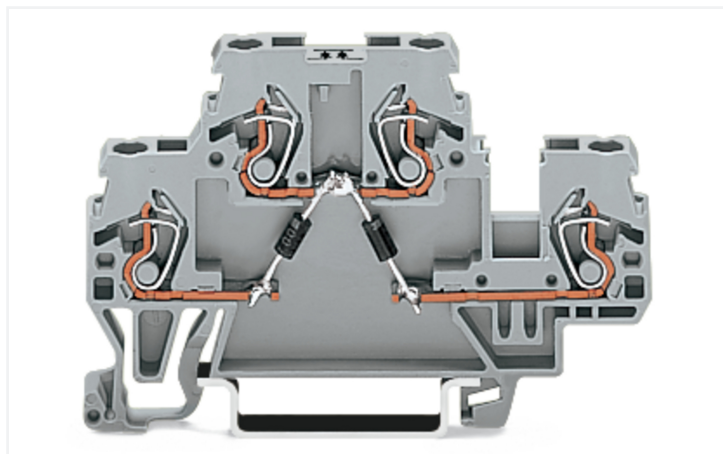


## Data Sheet | Item Number: 870-541/281-490

Component terminal block; double-deck; with 2 diodes 1N4007; Top anode; for DIN-rail 35 x 15 and 35 x 7.5; 2.5 mm<sup>2</sup>; CAGE CLAMP®; gray

<https://www.wago.com/870-541/281-490>



Color: ■ gray

Similar to illustration

### Double-deck terminal block, 870 Series, operating tool

This double-deck terminal block (item number 870-541/281-490) provides fault-free electrical installations. Ensure that the strip lengths are between 6 and 7 mm when connecting conductors to this double-deck terminal block. The double-deck terminal block also serves as a component terminal block with diode. Featuring conductor terminals along with CAGE CLAMP®, this product is highly versatile. Our CAGE CLAMP® connection provides a dependable 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 double-deck terminal block is suitable for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.

### Notes

Safety Information

Max. insulation diameter: 4.4 mm

### Electrical data

Ratings per	IEC/EN 60947-7-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	-	-	-
Rated impulse withstand voltage	-	-	-
Rated current	-	-	-

### General information

Nominal voltage	250 V
Reverse voltage	1000 V
Number/type of diode/LED	with 2 1N4007 diodes
Wiring direction	Front-entry wiring

### Connection data

Clamping units	4
Total number of potentials	1
Number of levels	2

### Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 14 AWG
Strip length	6 ... 7 mm / 0.24 ... 0.28 inches
Wiring direction	Front-entry wiring

### Physical data

Width	5 mm / 0.197 inches
Height	70 mm / 2.756 inches
Depth from upper-edge of DIN-rail	40 mm / 1.575 inches

### Mechanical data

Design	horizontal type
Mounting type	DIN-35 rail
Marking level	Side marking

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.193 MJ
Weight	9.8 g

### Environmental requirements

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

### Commercial data

Product Group	16 (Rail Mounted Terminal Blocks with CCC)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454198619
Customs tariff number	85369010000

### Product Classification

UNSPSC	39121410
eCl@ss 10.0	27-14-11-27
eCl@ss 9.0	27-14-11-27
ETIM 9.0	EC000903
ETIM 10.0	EC000903
ECCN	NO US CLASSIFICATION

### Environmental Product Compliance

CAS-No.	7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(a)
SCIP notification number (Austria)	23363c90-fb7e-4502-840f-555da8229fd3
SCIP notification number (Belgium)	c6e6c778-f017-4faf-b909-2ae226340886
SCIP notification number (Bulgaria)	c6cc175a-1462-4418-baba-c9032032bc8f
SCIP notification number (Czech Republic)	ed795c8c-9402-4948-af62-bfd37b015e07
SCIP notification number (Denmark)	6d47dc61-29ec-4e2a-bbfc-b11b337a4a3d
SCIP notification number (Finland)	e2e67656-f3fc-4ec5-a9a4-226d611cf263

**Environmental Product Compliance**

SCIP notification number (France)	3a43cb96-6c13-4876-abc7-26206a51e0cb
SCIP notification number (Germany)	dc855098-9189-4db5-8e56-52556b9d5b66
SCIP notification number (Hungary)	42eb193a-d109-4ea0-839e-2ebd35bb5472
SCIP notification number (Italy)	b6087fb4-b706-44cb-a9a9-df907f6c3a6d
SCIP notification number (Netherlands)	5eb6a1f6-b00e-4038-81a9-cfd371df2764
SCIP notification number (Poland)	9f9960f5-c126-4ed0-a5d4-c87193a9cef1
SCIP notification number (Romania)	83b592b2-844c-41d0-969d-6de183c45f30
SCIP notification number (Sweden)	1e285cb3-57bc-4602-906d-14ea039fece0

**Approvals / Certificates**

**Declarations of conformity and manufacturer's declarations**

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

**Downloads**

**Environmental Product Compliance**

**Compliance Search**

Environmental Product Compliance 870-541/281-490	↓
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**Documentation**

**Bid Text**

870-541/281-490	19.02.2019	xml 3.23 KB	↓
870-541/281-490	31.05.2017	doc 24.50 KB	↓

**CAD/CAE-Data**

**CAD data**

2D/3D Models 870-541/281-490	↓
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**CAE data**

EPLAN Data Portal 870-541/281-490	↓
WSCAD Universe 870-541/281-490	↓
ZUKEN Portal 870-541/281-490	↓

## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 End plate

##### 1.1.1.1 End plate



**Item No.: 870-518**

End and intermediate plate; 2 mm thick; gray

**Item No.: 870-519**

End and intermediate plate; 2 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.: 216-321**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

**Item No.: 216-131**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored

**Item No.: 216-322**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise

**Item No.: 216-132**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



**Item No.: 216-221**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white

**Item No.: 216-121**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored

**Item No.: 216-222**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray

**Item No.: 216-122**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-223**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

**Item No.: 216-123**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored

**Item No.: 216-224**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

**Item No.: 216-124**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated

### 1.2.3 Installation

#### 1.2.3.1 Mounting accessories



**Item No.: 209-106**

Mounting carrier; for isolated mounting on DIN 35 rails; gray



**Item No.: 249-117**

Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray



**Item No.: 249-116**

Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

### 1.2.4 Insulation stop

#### 1.2.4.1 Insulation stop



**Item No.: 280-470**

Insulation stop; 0.08 - 0.2 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "f-st"); 5 pieces/strip; white



**Item No.: 280-471**

Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray



**Item No.: 280-472**

Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/strip; black

### 1.2.5 Jumper

#### 1.2.5.1 Jumper



**Item No.: 870-405/011-000**



**Item No.: 870-407/011-000**



**Item No.: 870-409/011-000**



**Item No.: 870-406/020-000**

Delta jumper; insulated; light gray



**Item No.: 870-410**

Jumper; 10-way; insulated; light gray



**Item No.: 870-402**

Jumper; 2-way; insulated; light gray



**Item No.: 870-403**

Jumper; 3-way; insulated; light gray



**Item No.: 870-404**

Jumper; 4-way; insulated; light gray



**Item No.: 870-405**

Jumper; 5-way; insulated; light gray



**Item No.: 870-406**

Jumper; 6-way; insulated; light gray



**Item No.: 870-407**

Jumper; 7-way; insulated; light gray



**Item No.: 870-408**

Jumper; 8-way; insulated; light gray



**Item No.: 870-409**

Jumper; 9-way; insulated; light gray



**Item No.: 870-440**

Jumper; from 1 to 10; insulated; light gray



**Item No.: 870-433**

Jumper; from 1 to 3; insulated; light gray



**Item No.: 870-434**

Jumper; from 1 to 4; insulated; light gray



**Item No.: 870-435**

Jumper; from 1 to 5; insulated; light gray



**Item No.: 870-436**

Jumper; from 1 to 6; insulated; light gray



**Item No.: 870-437**

Jumper; from 1 to 7; insulated; light gray



**Item No.: 870-438**

Jumper; from 1 to 8; insulated; light gray














































**Item No.: 870-439**

Jumper; from 1 to 9; insulated; light gray

1.2.6 Marking

1.2.6.1 Marker

<p><b>Item No.: 2009-145/000-006</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue</p> 	<p><b>Item No.: 2009-145/000-007</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray</p> 	<p><b>Item No.: 2009-145/000-023</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green</p> 	<p><b>Item No.: 2009-145/000-012</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange</p> 
<p><b>Item No.: 2009-145/000-005</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red</p> 	<p><b>Item No.: 2009-145/000-024</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet</p> 	<p><b>Item No.: 2009-145</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white</p> 	<p><b>Item No.: 2009-145/000-002</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow</p> 
<p><b>Item No.: 248-501/000-006</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue</p> 	<p><b>Item No.: 248-501/000-007</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray</p> 	<p><b>Item No.: 248-501/000-023</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green</p> 	<p><b>Item No.: 248-501/000-017</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green</p> 
<p><b>Item No.: 248-501/000-012</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange</p> 	<p><b>Item No.: 248-501/000-005</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red</p> 	<p><b>Item No.: 248-501/000-024</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet</p> 	<p><b>Item No.: 248-501</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white</p> 
<p><b>Item No.: 248-501/000-002</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow</p> 	<p><b>Item No.: 793-5501/000-006</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue</p> 	<p><b>Item No.: 793-5501/000-007</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray</p> 	<p><b>Item No.: 793-5501/000-023</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green</p> 
<p><b>Item No.: 793-5501/000-017</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green</p> 	<p><b>Item No.: 793-5501/000-012</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange</p> 	<p><b>Item No.: 793-5501/000-005</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red</p> 	<p><b>Item No.: 793-5501/000-024</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet</p> 
<p><b>Item No.: 793-5501</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white</p> 	<p><b>Item No.: 793-5501/000-002</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow</p> 	<p><b>Item No.: 793-501/000-006</b> WMB marking card; as card; not stretchable; plain; snap-on type; blue</p> 	<p><b>Item No.: 793-501/000-007</b> WMB marking card; as card; not stretchable; plain; snap-on type; gray</p> 
<p><b>Item No.: 793-501/000-023</b> WMB marking card; as card; not stretchable; plain; snap-on type; green</p> 	<p><b>Item No.: 793-501/000-017</b> WMB marking card; as card; not stretchable; plain; snap-on type; light green</p> 	<p><b>Item No.: 793-501/000-012</b> WMB marking card; as card; not stretchable; plain; snap-on type; orange</p> 	<p><b>Item No.: 793-501/000-005</b> WMB marking card; as card; not stretchable; plain; snap-on type; red</p> 
<p><b>Item No.: 793-501/000-024</b> WMB marking card; as card; not stretchable; plain; snap-on type; violet</p> 	<p><b>Item No.: 793-501</b> WMB marking card; as card; not stretchable; plain; snap-on type; white</p> 	<p><b>Item No.: 793-501/000-002</b> WMB marking card; as card; not stretchable; plain; snap-on type; yellow</p> 	<p><b>Item No.: 2009-115/000-006</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue</p> 
<p><b>Item No.: 2009-115/000-007</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray</p> 	<p><b>Item No.: 2009-115/000-023</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green</p> 	<p><b>Item No.: 2009-115/000-017</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green</p> 	<p><b>Item No.: 2009-115/000-012</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange</p> 
<p><b>Item No.: 2009-115/000-024</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet</p> 	<p><b>Item No.: 2009-115</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white</p> 	<p><b>Item No.: 2009-115/000-002</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow</p> 	

### 1.2.6.2 Marking strip



**Item No.: 709-196**

Marking strips; for laser printer; translucent



**Item No.: 709-177**

Marking strips; on reel; 7.5 mm wide; not stretchable; plain; snap-on type; translucent



**Item No.: 709-178**

Marking strips; on reel; 7.5 mm wide; not stretchable; plain; snap-on type; white

### 1.2.7 Protective warning marker

#### 1.2.7.1 Cover



**Item No.: 280-405**

Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

### 1.2.8 Tool

#### 1.2.8.1 Operating tool



**Item No.: 210-658**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



**Item No.: 210-720**

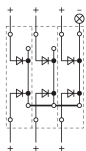
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



**Item No.: 210-657**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

### Installation Notes



Collective fault signals can be created using the following terminal blocks: 870-541/281-489 or 870-541/281-490