

**Data sheet | Item number: 745-3212**

PCB terminal block; 4 mm<sup>2</sup>; Pin spacing 10 mm; 12-pole; CAGE CLAMP®;  
4,00 mm<sup>2</sup>; gray

[www.wago.com/745-3212](http://www.wago.com/745-3212)



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

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## Item description

- Terminal strips with screwdriver-actuated CAGE CLAMP<sup>®</sup> connection
- Versions with Ex approval
- Mixed-color PCB terminal strips from factory
- Space-saving configuration of terminal strips when placed behind each other
- Custom color combinations
- Double solder pins for high mechanical stability
- Integrated testing tap

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

**Data****Notes**

Variants:

Other pole numbers

Versions for Ex e II and Ex i

Other colors

Mixed-color PCB connector strips

Direct marking

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.**Electrical data****Ratings per IEC/EN**

| Ratings per                   | IEC/EN 60664-1  |
|-------------------------------|---|
| Nominal voltage (III/3)       | 800 V   |
| Rated impulse voltage (III/3) | 8 kV  |
| Rated voltage (III/2)         | 1000 V  |
| Rated impulse voltage (III/2) | 8 kV  |
| Nominal voltage (II/2)        | 1000 V  |
| Rated surge voltage (II/2)    | 8 kV  |
| Rated current                 | 32 A  |
| Legend (ratings)              | (III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2 |

**Ratings per UL**

| Approvals per                  | UL 1059 |
|--------------------------------|---------|
| Rated voltage UL (Use Group B) | 300 V   |
| Rated current UL (Use Group B) | 20 A    |
| Rated voltage UL (Use Group C) | 300 V   |
| Rated current UL (Use Group C) | 20 A    |
| Rated voltage UL (Use Group D) | 600 V   |
| Rated current UL (Use Group D) | 5 A     |

**Ratings per CSA**

| Approvals per                   | CSA   |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 20 A  |
| Rated voltage CSA (Use Group C) | 300 V |

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|                                 |       |
|---------------------------------|-------|
| Rated current CSA (Use Group C) | 20 A  |
| Rated voltage CSA (Use Group D) | 600 V |
| Rated current CSA (Use Group D) | 5 A   |

### Connection data

|                            |    |
|----------------------------|----|
| Connection points          | 12 |
| Total number of potentials | 12 |
| Number of connection types | 1  |
| Number of levels           | 1  |

### Connection 1

|   |  |
|---|--|
| Connection technology                             | CAGE CLAMP®                                |
| Actuation type                                    | Operating tool                             |
| Solid conductor                                   | 0.08 ... 4 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   | 0.25 ... 2.5 mm <sup>2</sup>               |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm <sup>2</sup>               |
| Strip length                                      | 8 ... 9 mm / 0.31 ... 0.35 inches          |
| Conductor connection direction to PCB             | 45 °                                       |
| Pole number                                       | 12   |

### Physical data

|                                      |                          |
|--------------------------------------|--------------------------|
| Pin spacing                          | 10 mm / 0.394 inches     |
| Width                                | 116.5 mm / 4.587 inches  |
| Height                               | 23 mm / 0.906 inches     |
| Height from the surface              | 19 mm / 0.748 inches     |
| Depth                                | 19.4 mm / 0.764 inches   |
| Solder pin length                    | 4 mm                     |
| Solder pin dimensions                | 0.8 x 1.2 mm             |
| Drilled hole diameter with tolerance | 1.5 <sup>(+0.1)</sup> mm |

### Plug-in connection

|                                      |    |
|--------------------------------------|----|
| Plugging without loss of pin spacing | No |
|--------------------------------------|----|

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



## PCB contact

|                                     |  |
|-------------------------------------|--|
| PCB contact                         | THT                                      |
| Solder pin arrangement              | over the entire terminal strip (in-line) |
| Number of solder pins per potential | 2  |

## Material Data

Note (material data)

Information on material specifications can be found here

|                             |  |
|-----------------------------|--|
| Color                       | gray                                   |
| Material group              | I                                      |
| Insulation material         | Polyamide (PA66)                       |
| Flammability class per UL94 | V0                                     |
| Clamping spring material    | Chrome-nickel spring steel (CrNi)      |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating             | Tin                                    |
| Fire load                   | 0.63 MJ                                |
| Weight                      | 31.6 g                                 |

## Environmental requirements

|                         |                 |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +105 °C |
|-------------------------|-----------------|

## Commercial data

|                       |                                |
|-----------------------|--------------------------------|
| Product Group         | 4 (Printed Circuit Connectors) |
| eCl@ss 10.0           | 27-44-04-01                    |
| eCl@ss 9.0            | 27-44-04-01                    |
| ETIM 8.0              | EC002643                       |
| ETIM 7.0              | EC002643                       |
| PU (SPU)              | 24 (12) pcs                    |
| Packaging type        | box                            |
| Country of origin     | PL                             |
| GTIN                  | 4045454001063                  |
| Customs tariff number | 85369010000                    |

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## Environmental Product Compliance

RoHS Compliance Status

Compliant, No Exemption

## Approvals / Certificates

### General approvals

| Logo | Approval                                       | Additional Approval Text | Certificate name |
|------|--|--------------------------|------------------|
|      | <b>CCA</b><br>DEKRA Certification B.V.         | EN 60947                 | NTR NL-7095      |
|      | <b>CCA</b><br>DEKRA Certification B.V.         | EN 60947                 | 71-112275        |
|      | <b>CSA</b><br>DEKRA Certification B.V.         | C22.2 No. 158            | 1604421          |
|      | <b>cURus</b><br>Underwriters Laboratories Inc. | UL 1059                  | E45172           |

### Declarations of conformity and manufacturer's declarations

| Logo | Approval  | Additional Approval Text | Certificate name |
|------|---|--------------------------|------------------|
|      | <b>EU-Declaration of Conformity</b><br>WAGO GmbH & Co. KG | -                        | -                |
|      | <b>UK-Declaration of Conformity</b><br>WAGO GmbH & Co. KG | -                        | -                |

## Optional accessories

### Marking accessories

#### Marking strip

|  |  |
|--|--|
| <b>Item no.: 210-332/1000-202</b><br>Marking strips; as a DIN A4 sheet; MARKED; 1-16 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white  | <a href="http://www.wago.com/210-332/1000-202">www.wago.com/210-332/1000-202</a> |
| <b>Item no.: 210-332/1000-204</b><br>Marking strips; as a DIN A4 sheet; MARKED; 17-31 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white | <a href="http://www.wago.com/210-332/1000-204">www.wago.com/210-332/1000-204</a> |
| <b>Item no.: 210-332/1000-206</b><br>Marking strips; as a DIN A4 sheet; MARKED; 33-48 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white | <a href="http://www.wago.com/210-332/1000-206">www.wago.com/210-332/1000-206</a> |

### Ferrule

#### Ferrule

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|   |  |
|---|--|
| <b>Item no.: 216-106</b><br>Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; uninsulated; electro-tin plated; silver-colored   | <a href="http://www.wago.com/216-106">www.wago.com/216-106</a> |
| <b>Item no.: 216-123</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored   | <a href="http://www.wago.com/216-123">www.wago.com/216-123</a> |
| <b>Item no.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored  | <a href="http://www.wago.com/216-122">www.wago.com/216-122</a> |
| <b>Item no.: 216-124</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated   | <a href="http://www.wago.com/216-124">www.wago.com/216-124</a> |
| <b>Item no.: 216-142</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92                | <a href="http://www.wago.com/216-142">www.wago.com/216-142</a> |
| <b>Item no.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated  | <a href="http://www.wago.com/216-132">www.wago.com/216-132</a> |
| <b>Item no.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored   | <a href="http://www.wago.com/216-121">www.wago.com/216-121</a> |
| <b>Item no.: 216-143</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92                   | <a href="http://www.wago.com/216-143">www.wago.com/216-143</a> |
| <b>Item no.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored  | <a href="http://www.wago.com/216-131">www.wago.com/216-131</a> |
| <b>Item no.: 216-141</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92                 | <a href="http://www.wago.com/216-141">www.wago.com/216-141</a> |
| <b>Item no.: 216-152</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated  | <a href="http://www.wago.com/216-152">www.wago.com/216-152</a> |
| <b>Item no.: 216-151</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated  | <a href="http://www.wago.com/216-151">www.wago.com/216-151</a> |
| <b>Item no.: 216-144</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored | <a href="http://www.wago.com/216-144">www.wago.com/216-144</a> |
| <b>Item no.: 216-223</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red  | <a href="http://www.wago.com/216-223">www.wago.com/216-223</a> |
| <b>Item no.: 216-241</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white            | <a href="http://www.wago.com/216-241">www.wago.com/216-241</a> |
| <b>Item no.: 216-242</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray            | <a href="http://www.wago.com/216-242">www.wago.com/216-242</a> |
| <b>Item no.: 216-222</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray  | <a href="http://www.wago.com/216-222">www.wago.com/216-222</a> |
| <b>Item no.: 216-221</b>  |  |

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

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white[www.wago.com/216-221](http://www.wago.com/216-221)**Item no.: 216-224**Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black[www.wago.com/216-224](http://www.wago.com/216-224)**Item no.: 216-243**Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red[www.wago.com/216-243](http://www.wago.com/216-243)**Item no.: 216-244**Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black[www.wago.com/216-244](http://www.wago.com/216-244)**Item no.: 216-263**Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red[www.wago.com/216-263](http://www.wago.com/216-263)**Item no.: 216-246**Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue[www.wago.com/216-246](http://www.wago.com/216-246)**Item no.: 216-266**Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue[www.wago.com/216-266](http://www.wago.com/216-266)**Item no.: 216-264**Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black[www.wago.com/216-264](http://www.wago.com/216-264)**Item no.: 216-286**Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue[www.wago.com/216-286](http://www.wago.com/216-286)**Item no.: 216-262**Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray[www.wago.com/216-262](http://www.wago.com/216-262)**Item no.: 216-321**Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow[www.wago.com/216-321](http://www.wago.com/216-321)**Item no.: 216-322**Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise[www.wago.com/216-322](http://www.wago.com/216-322)**Tool**

## Operating tool

**Item no.: 210-657**

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

[www.wago.com/210-657](http://www.wago.com/210-657)**Item no.: 210-658**

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

[www.wago.com/210-658](http://www.wago.com/210-658)**Item no.: 210-720**

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

[www.wago.com/210-720](http://www.wago.com/210-720)**Testing and measuring**

## Testing accessories

**Item no.: 210-136**

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

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Test plug; 2 mm Ø; with 500 mm cable; red

[www.wago.com/210-136](http://www.wago.com/210-136)

## Downloads

### Documentation

#### Additional Information

2019 年4月3日

pdf  
2.0 MB

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## CAD/CAE-Data

### CAD data

2D/3D Models 745-3212

[URL](#)

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### CAE data

EPLAN Data Portal 745-3212

[URL](#)

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ZUKEN Portal 745-3212

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### PCB Design

Symbol and Footprint 745-3212

[URL](#)

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CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

### Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0

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- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 745-3212

URL

Download

PCB terminal block; 4 mm<sup>2</sup>; Pin spacing 10 mm; 12-pole; CAGE CLAMP®; 4,00 mm<sup>2</sup>;  
gray

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## Installation Notes

### Conductor termination



Inserting/removing a conductor via 5.5 mm  
screwdriver – 745 Series, 16 mm<sup>2</sup>.

### Marking

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

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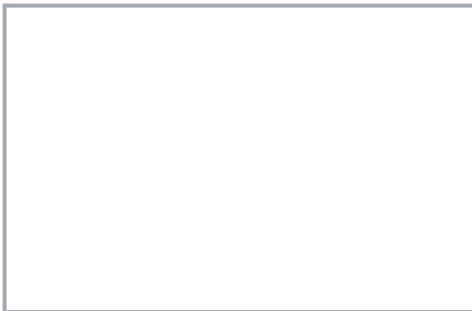
Data sheet | Item number: 745-3212

[www.wago.com/745-3212](http://www.wago.com/745-3212)



Marking via Mini-WSB and WMB markers or factory direct marking – 745 Series.

#### Testing



Testing with test plug – 745 Series.

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