

# Data sheet | Item number: 745-3105

PCB terminal block; 4 mm<sup>2</sup>; Pin spacing 5 mm; 5-pole; CAGE CLAMP®



745-3105

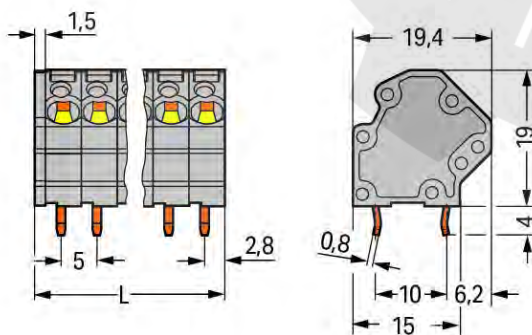
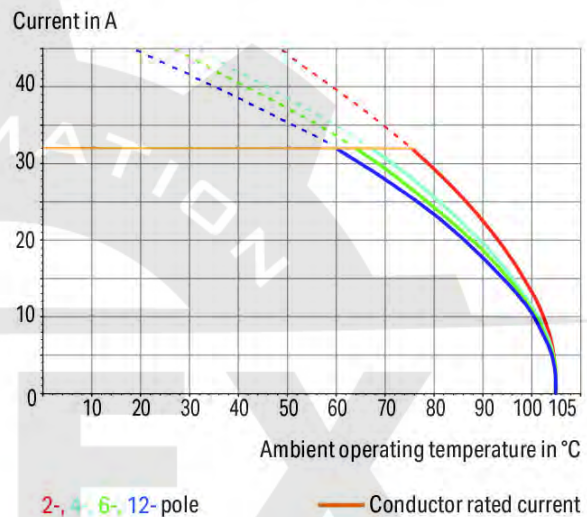


RoHS  
Compliant

BOMcheck.net

Color: ■

**Current-Carrying Capacity Curve**  
Pin spacing: 5 mm / Conductor cross-section: 4 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1



$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$

Item description

- PCB terminal strips with screwdriver-actuated CAGE CLAMP®
- 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

## Data

### Electrical data

#### Ratings per IEC/EN 60664-1

|                                 |       |
|---------------------------------|-------|
| Rated voltage (III / 3)         | 320 V |
| Rated impulse voltage (III / 3) | 4 kV  |
| Rated voltage (III / 2)         | 320 V |
| Rated impulse voltage (III / 2) | 4 kV  |
| Rated voltage (II / 2)          | 630 V |
| Rated impulse voltage (II / 2)  | 4 kV  |
| Rated current                   | 32 A  |

#### 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 D) | 300 V |
| Rated current UL (Use Group D) | 10 A  |

#### Approvals per CSA

|                                 |       |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 20 A  |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A  |

### Connection data

|                                                          |                                |
|----------------------------------------------------------|--------------------------------|
| Connection technology                                    | CAGE CLAMP®                    |
| Actuation type                                           | Operating tool                 |
| Solid conductor                                          | 0.08 ... 4 mm² / 28 ... 12 AWG |
| Fine-stranded conductor                                  | 0.08 ... 4 mm² / 28 ... 12 AWG |
| Fine-stranded conductor with ferrule with plastic collar | 0.25 ... 2.5 mm²               |

|                                                             |                                 |
|-------------------------------------------------------------|---------------------------------|
| Fine-stranded conductor with ferrule without plastic collar | 0.25 ... 2.5 mm <sup>2</sup>    |
| Strip length                                                | 8 ... 9 mm / 0.31 ... 0.35 inch |
| Conductor entry angle to the PCB                            | 45°                             |
| No. of poles                                                | 5                               |
| Total number of connection points                           | 5                               |
| Total number of potentials                                  | 5                               |
| Number of connection types                                  | 1                               |
| Number of levels                                            | 1                               |

### Geometrical Data

|                                   |                                |
|-----------------------------------|--------------------------------|
| Pin spacing                       | 5 mm / 0.197 inch              |
| Width                             | 26.5 mm / 1.043 inch           |
| Height                            | 23 mm / 0.906 inch             |
| Height from the surface           | 19 mm / 0.748 inch             |
| Depth                             | 19.4 mm / 0.764 inch           |
| Solder pin length                 | 4 mm                           |
| Solder pin dimensions             | 0.8 x 1.2 mm                   |
| Drilled hole diameter (tolerance) | 1.5 <sup>(- ... +0.1)</sup> mm |

### PCB contact

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

### Material Data

|                             |                                        |
|-----------------------------|----------------------------------------|
| Color                       | gray                                   |
| Material group              | I                                      |
| Insulating material         | Polyamide 66 (PA 66)                   |
| Flammability class per UL94 | V0                                     |
| Clamping spring material    | Chrome nickel spring steel (CrNi)      |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating             | tin-plated                             |
| Fire load                   | 0.14 MJ                                |
| Weight                      | 9.166 g                                |

### Environmental Requirements

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

## Commercial data

|                    |                     |
|--------------------|---------------------|
| Product Group      | 4 (Printed Circuit) |
| Country of origin  | PL                  |
| GTIN               | 4045454153700       |
| Customs Tariff No. | 85369010000         |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                              | Approval                        | Additional Approval Text | Certificate name |
|-----------------------------------------------------------------------------------|---------------------------------|--------------------------|------------------|
|   | CCA<br>DEKRA Certification B.V. | EN 60947                 | NTR NL-7095      |
|   | CCA<br>DEKRA Certification B.V. | EN 60947                 | 2160584.15       |
|  | CSA<br>DEKRA Certification B.V. | C22.2 No. 158            | 1604421          |

### UL-Approvals

| Logo                                                                               | Approval                                | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|-----------------------------------------|--------------------------|------------------|
|  | cURus<br>Underwriters Laboratories Inc. | UL 1059                  | E45172<br>sec6   |

## Compatible products

### Marking accessories

|                                                                                                                                                                                   |                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>Item no.: 210-332/500-202</b><br>Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive  | 210-332<br>/500-202 |
| <b>Item no.: 210-332/500-204</b><br>Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive | 210-332<br>/500-204 |

|                                                                                                                                               |                                                                                                                                                                                        |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>Item no.: 210-332/500-205</b>                                                                                                              |                                                                                                                                                                                        | 210-332  |
| Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive   |                                                                                                                                                                                        | 7500-205 |
| <b>Item no.: 210-332/500-206</b>                                                                                                              |                                                                                                                                                                                        | 210-332  |
| Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive |                                                                                                                                                                                        | 7500-206 |
| <b>tools</b>                                                                                                                                  |                                                                                                                                                                                        |          |
|                                                               | <b>Item no.: 210-657</b><br>Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short                                                                                 | 210-657  |
|                                                               | <b>Item no.: 210-658</b><br>Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short; angled                                                                         | 210-658  |
|                                                               | <b>Item no.: 210-720</b><br>Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm                                                                                | 210-720  |
| <b>check</b>                                                                                                                                  |                                                                                                                                                                                        |          |
|                                                               | <b>Item no.: 210-136</b><br>Test plug; 2 mm Ø; with 500 mm cable                                                                                                                       | 210-136  |
|                                                               | <b>Item no.: 210-137</b><br>Test plug; 2.3 mm Ø; with 500 mm cable                                                                                                                     | 210-137  |
| <b>ferrule</b>                                                                                                                                |                                                                                                                                                                                        |          |
|                                                              | <b>Item no.: 216-106</b><br>Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; uninsulated; electro-tin plated                                                                          | 216-106  |
|                                                             | <b>Item no.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated                                                                          | 216-121  |
|                                                             | <b>Item no.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated                                                                         | 216-122  |
|                                                             | <b>Item no.: 216-123</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated                                                                            | 216-123  |
|                                                             | <b>Item no.: 216-124</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated                                                                          | 216-124  |
|                                                             | <b>Item no.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated                                                                         | 216-131  |
|                                                             | <b>Item no.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated                                                                         | 216-132  |
|                                                             | <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  | 216-141  |
|                                                             | <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 | 216-142  |
|                                                             | <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    | 216-143  |
|                                                                                                                                               | <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                                           | 216-144  |



crimped; acc. to DIN 46228, Part 1/08.92

**Item no.: 216-151**Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

216-151

**Item no.: 216-152**Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

216-152

**Item no.: 216-221**Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated

216-221

**Item no.: 216-222**Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated

216-222

**Item no.: 216-223**Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated

216-223

**Item no.: 216-224**Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated

216-224

**Item no.: 216-241**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

216-241

**Item no.: 216-242**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

216-242

**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

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

216-244

**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

216-246

**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

216-262

**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

216-263

**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

216-264

**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

216-266

**Item no.: 216-284**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

216-284

**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

216-286

**Item no.: 216-321**

216-321

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated**Item no.: 216-322**

216-322

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated**Downloads****CAD/CAE - Smart Data****CAD data**

| 3D Download 745-3105                                            |             | URL     | Download |
|-----------------------------------------------------------------|-------------|---------|----------|
| <b>PCB libraries</b>                                            |             |         |          |
| EAGLE Library for WAGO PCB Terminal Blocks                      | 2.1         | zip     | Download |
| Compatible with EAGLE PCB Design Software Version 6.x or higher | Oct 6, 2014 | 23.9 MB |          |
| DesignSpark Library for WAGO PCB Terminal Blocks                | 2.1         | zip     | Download |
| Compatible with DesignSpark PCB Version 4.x or higher           | Oct 6, 2014 | 22.5 MB |          |
| TARGET Library for WAGO PCB Terminal Blocks                     | 1.1.0       | zip     | Download |
| Compatible with TARGET PCB Design Software Version 17.x         | Oct 6, 2014 | 27.1 MB |          |

Subject to changes.