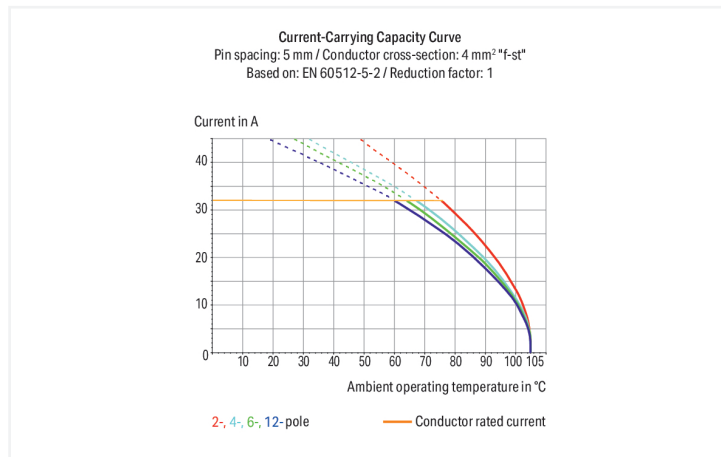


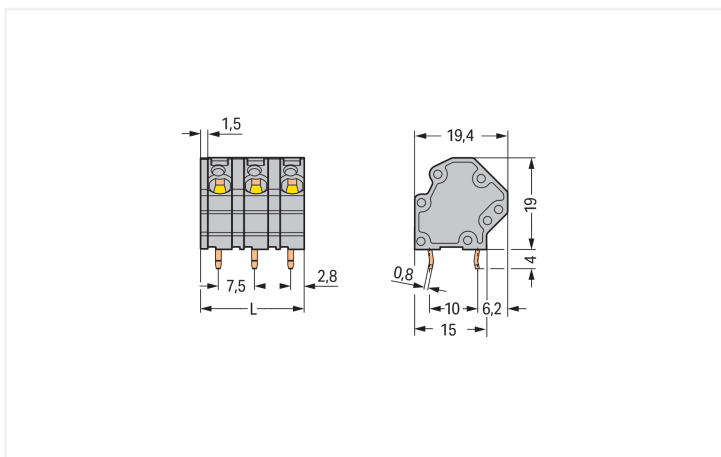
Data Sheet | Item Number: 745-3154

PCB terminal block; 4 mm²; Pin spacing 7.5 mm; 4-pole; CAGE CLAMP®; gray

<https://www.wago.com/745-3154>



Color: ■ gray



Dimensions in mm

L = (pole no. - 1) x pin spacing + 5 mm + 1.5 mm

PCB terminal block, 745 Series, CAGE CLAMP®

Connecting conductors is quick and easy with this PCB terminal block (item number 745-3154). You can count on tried and tested safety with these PCB terminal blocks, perfect for a wide variety of applications when designing your devices. Strip lengths must be between 8 and 9 mm when connecting conductors to this PCB terminal block. This product incorporates one conductor terminal and utilizes CAGE CLAMP®. Our trusted universal connection known as CAGE CLAMP® leads the way when it comes to connection technology and electrical interconnections. The dimensions are (29 x 23 x 19.4) mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is designed for conductor cross sections ranging from 0.08 mm² to 4 mm².

Tin is used for coating the contact surfaces. An operating tool is used to operate this PCB terminal block. THT is used to solder the PCB terminal block. The conductor is designed to be inserted into the board at a 45° angle.

Notes

Variants:

Versions for Ex e II and Ex i

Other colors

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

Electrical data

| Ratings per | | IEC/EN 60664-1 | | | Approvals per | | UL 1059 | | |
|---------------------------------|--|----------------|-------|--------|---------------|-------|---------|-------|--|
| Overvoltage category | | III | III | II | Use group | B | C | D | |
| Pollution degree | | 3 | 2 | 2 | Rated voltage | 300 V | 150 V | 300 V | |
| Nominal voltage | | 500 V | 630 V | 1000 V | Rated current | 20 A | 20 A | 10 A | |
| Rated impulse withstand voltage | | 6 kV | 6 kV | 6 kV | | | | | |
| Rated current | | 32 A | 32 A | 32 A | | | | | |

| Approvals per | | CSA | | |
|---------------|--|-------|-------|-------|
| Use group | | B | C | D |
| Rated voltage | | 300 V | 150 V | 300 V |
| Rated current | | 20 A | 20 A | 10 A |

Connection Data

| | |
|----------------------------|---|
| Clamping units | 4 |
| Total number of potentials | 4 |
| 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 ² / 28 ... 12 AWG |
| Fine-stranded conductor | 0.08 ... 4 mm ² / 28 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 2.5 mm ² |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm ² |
| Strip length | 8 ... 9 mm / 0.31 ... 0.35 inches |
| Conductor connection direction to PCB | 45 ° |
| Pole number | 4 |

Physical data

| | |
|-------------------------|--------------------------|
| Pin spacing | 7.5 mm / 0.295 inches |
| Width | 29 mm / 1.142 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 |
| ! | 1.5 ^(+0.1) 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

| | |
|------------------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | gray |
| Material group | I |
| Insulation material (main housing) | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Chrome-nickel spring steel (CrNi) |
| Contact material | Electrolytic copper (E _{cu}) |
| Contact Plating | Tin |
| Fire load | 0.156 MJ |
| Weight | 8.8 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|--------------------------------|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 108 pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4045454140335 |
| Customs tariff number | 85369010000 |

Product Classification

| | |
|-------------|----------------------|
| UNSPSC | 39121409 |
| eCl@ss 10.0 | 27-44-04-01 |
| eCl@ss 9.0 | 27-44-04-01 |
| ETIM 9.0 | EC002643 |
| ETIM 10.0 | EC002643 |
| ECCN | NO US CLASSIFICATION |

Environmental Product Compliance

| | |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

Approvals / Certificates

General approvals



General approvals

| | | |
|--|---------|--------|
| cURus Underwriters Laboratories Inc. | UL 1059 | E45172 |
|--|---------|--------|

| Approval | Standard | Certificate Name |
|---------------------------------|---------------|------------------|
| CCA DEKRA Certification B.V. | EN 60947 | NTR NL-7095 |
| CCA DEKRA Certification B.V. | EN 60947 | 71-112275 |
| CSA DEKRA Certification B.V. | C22.2 No. 158 | 1604421 |

Declarations of conformity and manufacturer's declarations

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

Downloads

Environmental Product Compliance

| Compliance Search |
|--|
| Environmental Product Compliance 745-3154 ↓ |

Documentation

| Additional Information | | | |
|------------------------|------------|-------------------|-------------------|
| Technical Section | 03.04.2019 | pdf 2027.26 KB | ↓ |

CAD/CAE-Data

| CAD data |
|--|
| 2D/3D Models 745-3154 ↓ |

| CAE data |
|---|
| EPLAN Data Portal 745-3154 ↓ |

| |
|--|
| ZUKEN Portal 745-3154 ↓ |
|--|

PCB Design

| |
|--|
| Symbol and Footprint via SamacSys 745-3154 ↓ |
|--|

| |
|---|
| Symbol and Footprint via Ultra Librarian 745-3154 ↓ |
|---|

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



Item No.: 216-241

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-141

Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-242

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-262

Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-142

Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-243

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-263

Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-143

Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-244

Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-264

Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-284

Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-144

Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



Item No.: 216-246

Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-266

Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-286

Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-106

Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; silver-colored

1.1.2 Marking

1.1.2.1 Marking strip



Item No.: 210-332/750-020

Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.1.3 Test and measurement

1.1.3.1 Testing accessories



Item No.: 210-136

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

1.1.4 Tool

1.1.4.1 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**

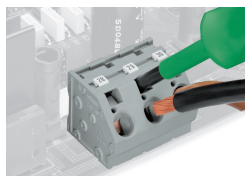
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

**Item No.: 210-657**

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

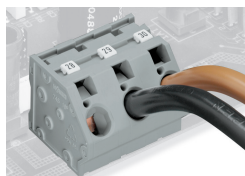
Installation Notes

Conductor termination



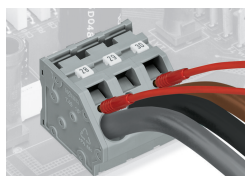
Inserting/removing a conductor via 5.5 mm screwdriver – 745 Series, 16 mm².

Marking



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

Testing



Testing with test plug – 745 Series.