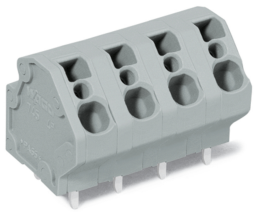
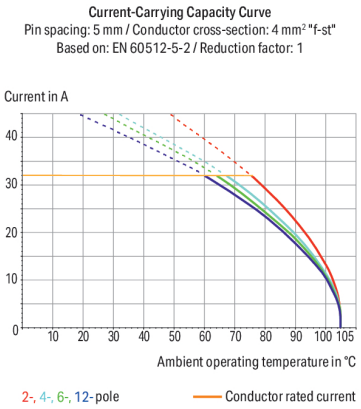
# Data Sheet | Item Number: 745-3160

PCB terminal block; 4 mm²; Pin spacing 7.5 mm; 10-pole; CAGE CLAMP®; gray

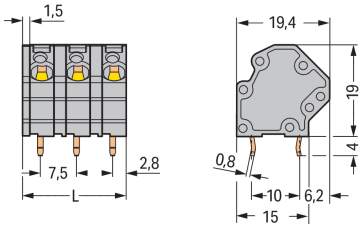
https://www.wago.com/745-3160






Color: gray

Similar to illustration




Dimensions in mm
L = (pole no. – 1) x pin spacing + 5 mm + 1.5 mm

PCB terminal block, 745 Series, 45 °conductor entry to board

Our PCB terminal block (item number 745-3160) makes connections quick and easy. It is a universal connector that can be used practically anywhere, e. g., as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Ensure that the strip lengths are between 8 and 9 mm when connecting conductors to this PCB terminal block. This product incorporates one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection provides a proven 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. Dimensions: (74 x 23 x 19.4) mm (width x height x depth). Depending on the conductor type, this PCB terminal block is suitable 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. The PCB terminal block is designed for THT soldering. The conductor is designed to be inserted at a 45° angle..

## Notes

| | |
|---|---|
| Variants: | Versions for Ex e II and Ex i<br>Other colors<br>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 | | |
|---|---|---|---|
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 500 V | 630 V | 1000 V |
| Rated impulse withstand voltage | 6 kV | 6 kV | 6 kV |
| Rated current | 32 A | 32 A | 32 A |

| Approvals per | UL 1059 | | |
|---|---|---|---|
| Use group | B | C | D |
| Rated voltage | 300 V | 150 V | 300 V |
| Rated current | 20 A | 20 A | 10 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 | 10 |
| Total number of potentials | 10 |
| Number of connection types | 1 |
| Number of levels | 1 |

### Connection 1

| | |
|---|---|
| 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 insulated ferrule | 0.25 … 2.5 mm² |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 … 2.5 mm² |
| Strip length | 8 … 9 mm / 0.31 … 0.35 inches |
| Conductor connection direction to PCB | 45 ° |
| Pole number | 10 |

## Physical data

| | |
|---|---|
| Pin spacing | 7.5 mm / 0.295 inches |
| Width | 74 mm / 2.913 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 |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## 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 | 0.396 MJ |
| Weight | 21.9 g |

## Environmental requirements

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

## Commercial data

| | |
|---|---|
| PU (SPU) | 36 pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4055143660006 |
| 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

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

### General approvals

| | | |
|---|---|---|
| cURus<br>Underwriters Laboratories Inc. | UL 1059 | E45172 |

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## Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 745-3160

### Documentation

**Additional Information**

| | | |
|---|---|---|
| Technical Section | 03.04.2019 | pdf<br>2027.26 KB |

### CAD/CAE-Data

**CAD data**

2D/3D Models 745-3160

**CAE data**

EPLAN Data Portal 745-3160

ZUKEN Portal 745-3160

**PCB Design**

Symbol and Footprint via SamacSys 745-3160

Symbol and Footprint via Ultra Librarian 745-3160

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# 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; uninsulated; 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; 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; uninsulated; 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; 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; uninsulated; 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; 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; 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; 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; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



Item No.: 216-289
Ferrule; Sleeve for 10 mm² / AWG 8; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-209
Ferrule; Sleeve for 10 mm² / AWG 8; insulated; electro-tin plated; red



Item No.: 216-109
Ferrule; Sleeve for 10 mm² / AWG 8; uninsulated; electro-tin plated



Item No.: 216-210
Ferrule; Sleeve for 16 mm² / AWG 6; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-110
Ferrule; Sleeve for 16 mm² / AWG 6; uninsulated; electro-tin plated; brown metallic



Item No.: 216-246
Ferrule; Sleeve for 2.5 mm² / AWG 14; 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; 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; 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; uninsulated; electro-tin plated; silver-colored



Item No.: 216-267
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-287
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-207
Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; gray



Item No.: 216-107
Ferrule; Sleeve for 4 mm² / AWG 12; uninsulated; electro-tin plated



Item No.: 216-208
Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow



Item No.: 216-288
Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow



Item No.: 216-108
Ferrule; Sleeve for 6 mm² / AWG 10; uninsulated; electro-tin plated; silver-colored

 Continued on next page

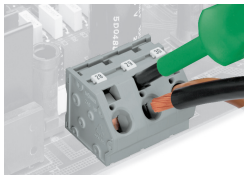
### 1.1.2 Test and measurement

#### 1.1.2.1 Testing accessories

Item No.: 210-136
Test plug; 2 mm Ø; with 500 mm cable; red

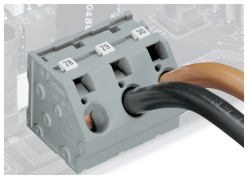
## Installation Notes

### Conductor termination



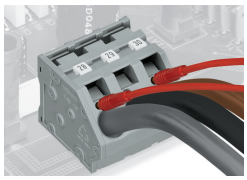
Inserting/removing a conductor via 5.5 mm screwdriver – 745 Series, 16 mm².

### Marking



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

### Testing



Testing with test plug – 745 Series.