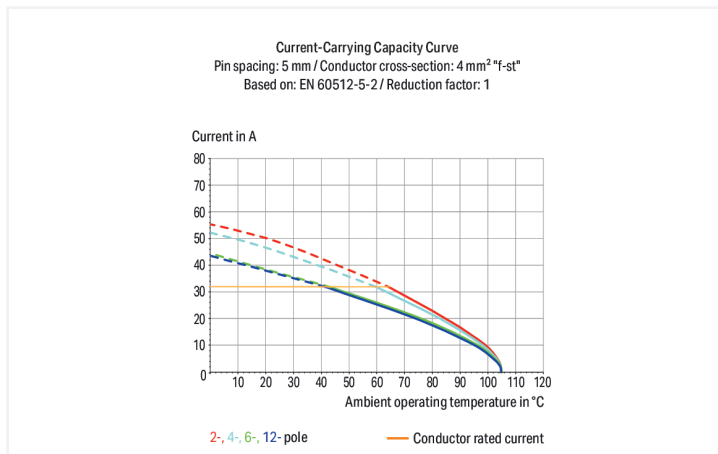


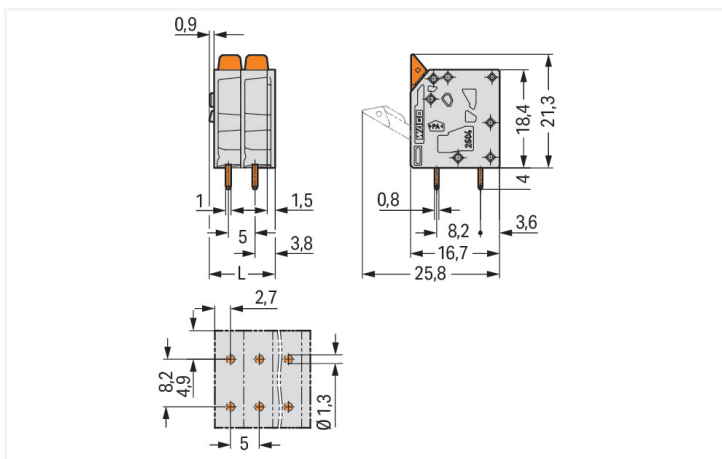
# Data Sheet | Item Number: 2604-3105

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

<https://www.wago.com/2604-3105>



Color: ■ gray



Dimensions in mm

L = (pole no. - 1) x pin spacing + 7.4 mm

PCB terminal block, 2604 Series, solder pin dimensions 0.8 x 1 mm

Our PCB terminal block (item number 2604-3105) is the perfect way to connect conductors quickly and securely. It is a universal connector that can be used almost anywhere, for example, as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Conductors can only be connected to this PCB terminal block if their strip length is between 9 and 11 mm. This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, offering a key advantage: both solid and fine-stranded conductors with ferrules can be directly inserted without the need for tools or any preparation, such as crimping the ferrule. Dimensions: (27.4 x 25.3 x 16.7) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.2 mm<sup>2</sup> to 4 mm<sup>2</sup>. The contact surface is coated with tin. A lever is used to operate this PCB terminal block. The PCB terminal block is designed for THT soldering. The conductor is designed to be inserted into the board at an angle of 90°.

## Notes

|           |  |
|-----------|--|
| Variants: | Other pole numbers<br>Direct marking<br>Other colors<br>Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> . |
|-----------|--|

## Electrical data

| Ratings per                     | IEC/EN 60664-1 |       |       | Approvals per | UL 1059 |   |       |
|---------------------------------|----------------|-------|-------|---------------|---------|---|-------|
| Overtoltage category            | III            | III   | II    | Use group     | B       | C | D     |
| Pollution degree                | 3              | 2     | 2     | Rated voltage | 300 V   | - | 300 V |
| Nominal voltage                 | 320 V          | 400 V | 630 V | Rated current | 20 A    | - | 10 A  |
| Rated impulse withstand voltage | 4 kV           | 4 kV  | 4 kV  |               |         |   |       |
| Rated current                   | 32 A           | 32 A  | 32 A  |               |         |   |       |

| Approvals per | CSA   |   |       |
|---------------|-------|---|-------|
| Use group     | B     | C | D     |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 20 A  | - | 5 A   |

## Connection Data

|                            |   |   |   |
|----------------------------|---|---|---|
| Clamping units             | 5 | <b>Connection 1</b>                               |   |
| Total number of potentials | 5 | Connection technology                             | Push-in CAGE CLAMP®                       |
| Number of connection types | 1 | Actuation type                                    | Lever                                     |
| Number of levels           | 1 | Solid conductor                                   | 0.2 ... 4 mm <sup>2</sup> / 24 ... 12 AWG |
|                            |   | Fine-stranded conductor                           | 0.2 ... 4 mm <sup>2</sup> / 24 ... 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>              |
|                            |   | Fine-stranded conductor; with twin ferrule        | 0.25 ... 1.5 mm <sup>2</sup>              |
|                            |   | Strip length                                      | 9 ... 11 mm / 0.35 ... 0.43 inches        |
|                            |   | Conductor connection direction to PCB             | 90 °                                      |
|                            |   | Pole number                                       | 5   |

## Physical data

|                         |                          |
|-------------------------|--------------------------|
| Pin spacing             | 5 mm / 0.197 inches      |
| Width                   | 27.4 mm / 1.079 inches   |
| Height                  | 25.3 mm / 0.996 inches   |
| Height from the surface | 21.3 mm / 0.839 inches   |
| Depth                   | 16.7 mm / 0.657 inches   |
| Solder pin length       | 4 mm                     |
| Solder pin dimensions   | 0.8 x 1 mm               |
| Drilled hole diameter   | 1.3 <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

|                                    |  |
|------------------------------------|--|
| 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   |
| Clamping spring material           | Chrome-nickel spring steel (CrNi)  |
| Contact material                   | Electrolytic copper (E <sub>cu</sub> )                                   |
| Contact Plating                    | Tin  |
| Fire load                          | 0.119 MJ   |
| Actuator color                     | orange   |
| Weight                             | 8.4 g  |

### Environmental requirements

|                                  |                 |  |   |
|----------------------------------|-----------------|--|---|
| Limit temperature range          | -60 ... +105 °C | <b>Environmental Testing</b>   |   |
| Processing temperature           | -35 ... +60 °C  | Test specification:  | DIN EN 50155 (VDE 0115-200):2022-06                 |
| Continuous operating temperature | -60 ... +105 °C | Railway applications –<br>Rolling stock –<br>Electronic equipment                |   |
|                                  |                 | Test procedure:  | DIN EN 61373 (VDE 0115-0106):2011-04                |
|                                  |                 | Railway applications –<br>Rolling stock equipment –<br>Vibration and shock tests |   |
|                                  |                 | Spectrum/Mounting location   | Service life test, Category 1, Class A/B            |
|                                  |                 | Functional test with noise-like oscillations                                     | Test passed according to Section 8 of the standard  |
|                                  |                 | Frequency  | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz    |
|                                  |                 | Acceleration   | 0.101g (highest test level used for all axes)       |
|                                  |                 | Test duration per axis   | 10 min.   |
|                                  |                 | Test directions  | X, Y and Z axes                                     |
|                                  |                 | Monitoring of contact faults and interruptions                                   | Passed  |
|                                  |                 | Voltage drop measurement before and after each axis                              | Passed  |
|                                  |                 | Simulated service life test through increased levels of noise-like oscillations  | Test passed according to Section 9 of the standard  |
|                                  |                 | Frequency  | f <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 Hz    |
|                                  |                 | Acceleration   | 0.572g (highest test level used for all axes)       |
|                                  |                 | Test duration per axis   | 5 h   |
|                                  |                 | Test directions  | X, Y and Z axes                                     |
|                                  |                 | Extended testing: Monitoring of contact faults and interruptions                 | Passed  |
|                                  |                 | Extended testing: Voltage drop measurement before and after each axis            | Passed  |
|                                  |                 | Shock test   | Test passed according to Section 10 of the standard |
|                                  |                 | Shock pulse form   | Half sine   |
|                                  |                 | Acceleration   | 5g (highest test level used for all axes)           |
|                                  |                 | Shock duration   | 30 ms   |
|                                  |                 | Number of shocks (per axis)  | 3 pos. und 3 neg.                                   |
|                                  |                 | Test directions  | X, Y and Z axes                                     |

**Environmental Testing**

|   |        |
|---|--------|
| Extended testing: Monitoring of contact faults and interruptions      | Passed |
| Extended testing: Voltage drop measurement before and after each axis | Passed |
| Vibration and shock stress for rolling stock equipment                | Passed |

**Commercial data**

|                       |               |
|-----------------------|---------------|
| PU (SPU)              | 70 pcs        |
| Packaging type        | Box           |
| Country of origin     | PL            |
| GTIN                  | 4066966390476 |
| 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 |
|---------------------------------------|---------------|------------------|
| CB<br>DEKRA Certification B.V.        | IEC 60947-7-4 | NL-61583         |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947-7-4  | 71-100535        |
| UL<br>Underwriters Laboratories Inc.  | UL 1059       | E45172           |

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



| Approval                      | Standard | Certificate Name |
|-------------------------------|----------|------------------|
| Railway<br>WAGO GmbH & Co. KG | -        | Z00004411.000    |

## Downloads

### Environmental Product Compliance

| Compliance Search                          |                   |
|--|-------------------|
| Environmental Product Compliance 2604-3105 | <a href="#">↓</a> |

## Documentation

| Additional Information |            |                   |                   |
|------------------------|------------|-------------------|-------------------|
| Technical Section      | 03.04.2019 | pdf<br>2027.26 KB | <a href="#">↓</a> |

## CAD/CAE-Data

| CAD data                  |                   |
|---------------------------|-------------------|
| 2D/3D Models<br>2604-3105 | <a href="#">↓</a> |

| CAE data                  |                   |
|---------------------------|-------------------|
| ZUKEN Portal<br>2604-3105 | <a href="#">↓</a> |

## PCB Design

|  |                   |
|--|-------------------|
| Symbol and Footprint<br>via SamacSys<br>2604-3105        | <a href="#">↓</a> |
| Symbol and Footprint<br>via Ultra Librarian<br>2604-3105 | <a href="#">↓</a> |

## 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 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



**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; gray



**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



**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



**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



**Item No.: 216-106**  
 Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; un-insulated; electro-tin plated; silver-colored

## Installation Notes

### Conductor termination



Insert fine-stranded conductors – and remove all conductors – via operating tool.

### Conductor termination



Insert solid conductors via push-in termination.