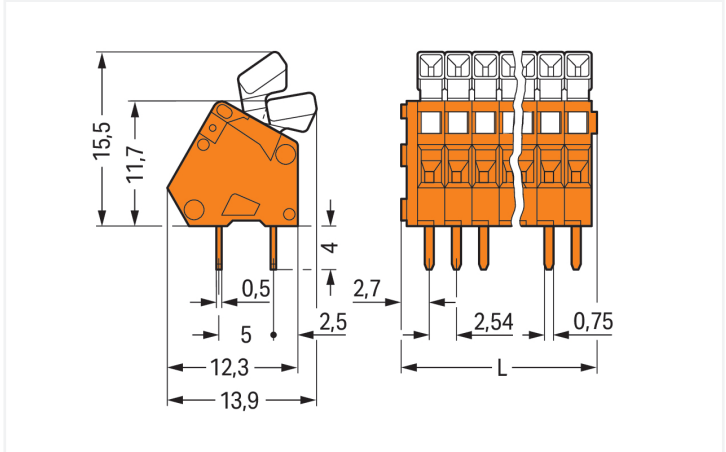
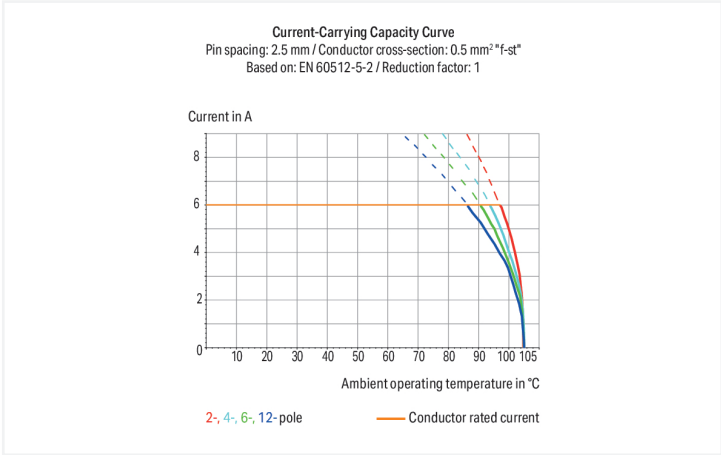


Color: ■ orange

Similar to illustration



Dimensions in mm  
L = (pole no. x pin spacing) + 2.3 mm



PCB terminal block, 233 Series, solder pin dimensions 0.5 x 0.75 mm

Our PCB terminal block (item number 233-502) simplifies electrical installations. You can count on trusted safety with these PCB terminal blocks, perfect for a wide variety of applications when designing your devices. This PCB terminal block has a rated voltage of 160 V and can handle currents up to 6 A. Conductors should only be connected to this PCB terminal block if their strip length is between 5 mm and 6 mm. Featuring one conductor terminal along with CAGE CLAMP®, this connector outperforms the competition. Our celebrated universal connection known as CAGE CLAMP® is industry-leading when it comes to connection technology and electrical interconnections. Dimensions: 7.38 x 19.5 x 13.9 mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is ideal for conductor cross sections ranging from 0.08 mm² to 0.5 mm². It has one level. You can connect two potentials / two poles using the two clamping points. The contacts are made of electrolytic copper (ECu), the clamping spring is made of chrome-nickel spring steel (CrNi), and the orange housing is made of polyamide (PA66) for insulation. The contact surface is coated with tin. A push-button is used to operate this PCB terminal block. The PCB terminal block is designed for THT soldering. Insert the conductor into the board at a 30° angle.. The solder pins are organized over the entire terminal strip (in-line). They are 0.5 x 0.75 mm cross-section and 4 mm in length. Each potential has two solder pins.

| Notes     |  |
|-----------|--|
| Variants: | Other pole numbers<br>Other colors<br>Mixed-color PCB connector strips<br>Direct marking<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 |        |        |  |
| Overvoltage category |  |  | III            | III    | II     |  |
| Pollution degree     |  |  | 3              | 2      | 2      |  |
| Nominal voltage      |  |  | 63 V           | 160 V  | 320 V  |  |
| Rated surge voltage  |  |  | 2.5 kV         | 2.5 kV | 2.5 kV |  |
| Rated current        |  |  | 6 A            | 6 A    | 6 A    |  |

| Approvals per |  |  | UL 1059 |   |   |  |
|---------------|--|--|---------|---|---|--|
| Use group     |  |  | B       | C | D |  |
| Rated voltage |  |  | 150 V   | - | - |  |
| Rated current |  |  | 4 A     | - | - |  |

| Approvals per |  |  | CSA   |   |   |  |
|---------------|--|--|-------|---|---|--|
| Use group     |  |  | B     | C | D |  |
| Rated voltage |  |  | 150 V | - | - |  |
| Rated current |  |  | 4 A   | - | - |  |

| Connection data            |  |  |   |  |  |  |
|----------------------------|--|--|---|--|--|--|
| Clamping units             |  |  | 2 |  |  |  |
| Total number of potentials |  |  | 2 |  |  |  |
| Number of connection types |  |  | 1 |  |  |  |
| Number of levels           |  |  | 1 |  |  |  |

| Connection 1                                      |  |
|---|--|
| Connection technology                             | CAGE CLAMP®  |
| Actuation type                                    | Push-button  |
| Solid conductor                                   | 0.08 ... 0.5 mm² / 28 ... 20 AWG   |
| Fine-stranded conductor                           | 0.08 ... 0.5 mm² / 28 ... 20 AWG   |
| Fine-stranded conductor; with insulated ferrule   | 0.25 mm²   |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 mm²   |
| Note (conductor cross-section)                    | Terminating 0.75 mm²/18 AWG conductors is possible; however insulation diameter allows only every other clamping unit to be terminated with this conductor size. |
| Strip length                                      | 5 ... 6 mm / 0.2 ... 0.24 inches   |
| Conductor connection direction to PCB             | 30 °   |
| Pole number                                       | 2  |

| Physical data                        |                        |
|--------------------------------------|------------------------|
| Pin spacing                          | 2.54 mm / 0.1 inches   |
| Width                                | 7.38 mm / 0.291 inches |
| Height                               | 19.5 mm / 0.768 inches |
| Height from the surface              | 15.5 mm / 0.61 inches  |
| Depth                                | 13.9 mm / 0.547 inches |
| Solder pin length                    | 4 mm                   |
| Solder pin dimensions                | 0.5 x 0.75 mm          |
| Drilled hole diameter with tolerance | 1.1 (+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)               |  | <a href="#">Information on material specifications can be found here</a> |
| Color                              | orange                                 |  |
| 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                          | 0.022 MJ                               |  |
| Weight                             | 0.9 g                                  |  |

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

| Commercial data       |                                |
|-----------------------|--------------------------------|
| Product Group         | 4 (Printed Circuit Connectors) |
| PU (SPU)              | 600 (100) pcs                  |
| Packaging type        | Box                            |
| Country of origin     | CH                             |
| GTIN                  | 4045454050269                  |
| 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 8.0               | EC002643             |
| ECCN                   | NO US CLASSIFICATION |

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

| Approvals / Certificates                                |              |   |          |          |                  |   |   |   |   |   |   |
|---|--------------|---|----------|----------|------------------|---|---|---|---|---|---|
| General approvals                                       |              | Declarations of conformity and manufacturer's declarations  |          |          |                  |   |   |   |   |   |   |
|   |              |   |          |          |                  |   |   |   |   |   |   |
| Approval  | Standard     | Certificate Name  |          |          |                  |   |   |   |   |   |   |
| CCA<br>DEKRA Certification B.V.                         | EN 60998     | NTR NL 6946   |          |          |                  |   |   |   |   |   |   |
| CCA<br>DEKRA Certification B.V.                         | EN 60998     | 2153951.01  |          |          |                  |   |   |   |   |   |   |
| CCA<br>DEKRA Certification B.V.                         | EN 60947-7-4 | NTR NL 7786   |          |          |                  |   |   |   |   |   |   |
| CSA<br>DEKRA Certification B.V.                         | C22.2        | 1465035   |          |          |                  |   |   |   |   |   |   |
| KEMA/KEUR<br>DEKRA Certification B.V.                   | EN 60947-7-4 | 71-111040   |          |          |                  |   |   |   |   |   |   |
| UL<br>UL International Germany GmbH                     | UL 1059      | E45172  |          |          |                  |   |   |   |   |   |   |
|   |              | <table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>EU-Declaration of Confor-<br/>mity<br/>WAGO GmbH &amp; Co. KG</td><td>-</td><td>-</td></tr><tr><td>UK-Declaration of Confor-<br/>mity<br/>WAGO GmbH &amp; Co. KG</td><td>-</td><td>-</td></tr></table> | Approval | Standard | Certificate Name | EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | - | - | UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | - | - |
| Approval  | Standard     | Certificate Name  |          |          |                  |   |   |   |   |   |   |
| EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -            | -   |          |          |                  |   |   |   |   |   |   |
| UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -            | -   |          |          |                  |   |   |   |   |   |   |




Approvals for marine applications

|  |  |  |
|--|---|---|
| Approval   | Standard  | Certificate Name  |
| ABS<br>American Bureau of Ship-<br>ping  | -   | 19-HG1869876-PDA  |
| BV<br>Bureau Veritas S.A.  | IEC 60998   | 11915/D0 BV   |
| DNV<br>DNV GL SE   | -   | TAE000016Z  |

Downloads

Environmental Product Compliance



| Compliance Search   |
|---|
| Environmental Product<br>Compliance 233-502                                       |
|  |



Documentation

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

CAD/CAE-Data

| CAD data  |
|---|
| 2D/3D Models 233-502  |
|  |

| CAE data  |
|---|
| EPLAN Data Portal<br>233-502  |
|  |
| ZUKEN Portal 233-502  |
|  |

| PCB Design  |
|---|
| Symbol and Footprint<br>via SamacSys 233-502  |
|  |
| Symbol and Footprint<br>via Ultra Librarian<br>233-502                              |
|  |



1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



Item No.: 216-301

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-321

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-151

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated



Item No.: 216-131

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored

1.1.2 Marking

1.1.2.1 Marking strip



Item No.: 210-331/250-202

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/254-202

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/250-207

Marking strips; as a DIN A4 sheet; MARKED; 1-48 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/254-207

Marking strips; as a DIN A4 sheet; MARKED; 1-48 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/250-204

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/254-204

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/250-206

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-331/254-206

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.1.3 Tool

1.1.3.1 Operating tool



Item No.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

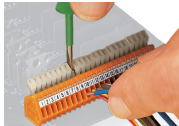


Item No.: 210-648

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

Installation Notes

Conductor termination



Inserting/removing a conductor.

Nominal cross-section: 0.5 mm² (20 AWG), 0.75 mm² (18 AWG) only in every other position

Marking



Labeling via self-adhesive marking strips  
or factory direct marking.