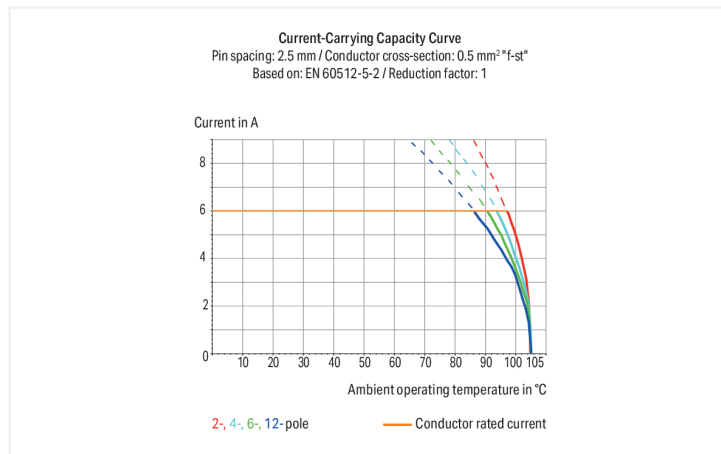


Data Sheet | Item Number: 233-504

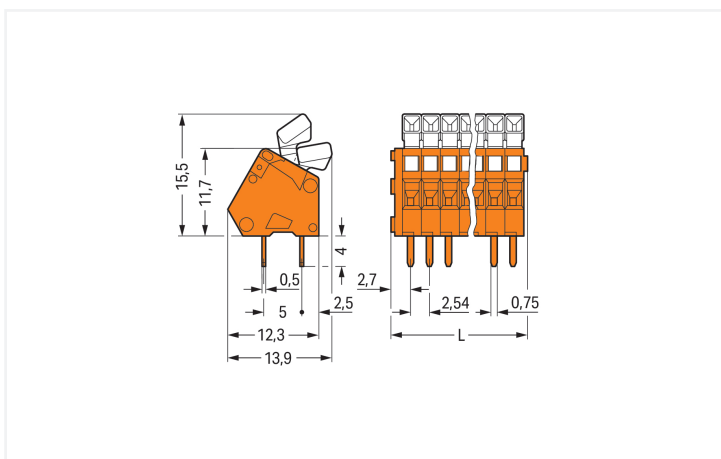
PCB terminal block; push-button; 0.5 mm²; Pin spacing 2.54 mm; 4-pole; CAGE CLAMP®; orange

<https://www.wago.com/233-504>



Color: ■ orange

Similar to illustration



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 2.3 \text{ mm}$

PCB terminal block, 233 Series, 30 °conductor entry to board

Our PCB terminal block (item number 233-504) simplifies electrical installations. It offers the flexibility needed for different mounting types. Ensure that the strip lengths are between 5 and 6 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a reliable 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: (12.46 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. Tin is used for coating the contact surfaces. This PCB terminal block is operated with a push-button. The PCB terminal block is designed for THT soldering. Insert the conductor into the board at an angle of 30°..

Notes

| | |
|-----------|--|
| Variants: | Other pole numbers Other colors Mixed-color PCB connector strips Direct marking 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 | 150 V | - | - |
| Nominal voltage | 63 V | 160 V | 320 V | Rated current | 4 A | - | - |
| Rated impulse withstand voltage | 2.5 kV | 2.5 kV | 2.5 kV | | | | |
| Rated current | 6 A | 6 A | 6 A | | | | |

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

Connection Data

| | | | |
|----------------------------|---|---|---|
| Clamping units | 4 | Connection 1 | |
| Total number of potentials | 4 | Connection technology | CAGE CLAMP® |
| Number of connection types | 1 | Actuation type | Push-button |
| Number of levels | 1 | Solid conductor | 0.08 ... 0.5 mm ² / 28 ... 20 AWG |
| | | Fine-stranded conductor | 0.08 ... 0.5 mm ² / 28 ... 20 AWG |
| | | Fine-stranded conductor; with insulated ferrule | 0.25 mm ² |
| | | Fine-stranded conductor; with uninsulated ferrule | 0.25 mm ² |
| | | Note (conductor cross-section) | Terminating 0.75 mm ² /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 | 4 |

Physical data

| | |
|-------------------------|--------------------------|
| Pin spacing | 2.54 mm / 0.1 inches |
| Width | 12.46 mm / 0.491 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 |
| ! | 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) | Information on material specifications can be found here |
| 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 _{cu}) |
| Contact Plating | Tin |
| Fire load | 0.04 MJ |
| Weight | 1.7 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|--------------------------------|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 400 (100) pcs |
| Packaging type | Box |
| Country of origin | CH |
| GTIN | 4045454050283 |
| 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 DEKRA Certification B.V. | EN 60998 | NTR NL 6946 |
| CCA DEKRA Certification B.V. | EN 60998 | 2153951.01 |
| CCA DEKRA Certification B.V. | EN 60947-7-4 | NTR NL 7786 |

General approvals

| | | |
|---------------------------------------|--------------|-----------|
| CSA DEKRA Certification B.V. | C22.2 | 1465035 |
| KEMA/KEUR DEKRA Certification B.V. | EN 60947-7-4 | 71-111040 |
| UL UL International Germany GmbH | UL 1059 | E45172 |

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications



| Approval | Standard | Certificate Name |
|------------------------------------|-----------|------------------|
| ABS American Bureau of Shipping | - | 24-0095975-PDA |
| BV Bureau Veritas S.A. | IEC 60998 | 11915/E0 BV |
| DNV DNV GL SE | - | TAE000016Z |

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 233-504



Documentation

Additional Information

Technical Section

03.04.2019

pdf
2027.26 KB



CAD/CAE-Data

CAD data

2D/3D Models 233-504



CAE data

EPLAN Data Portal 233-504



ZUKEN Portal 233-504



PCB Design

Symbol and Footprint via SamacSys 233-504



Symbol and Footprint via Ultra Librarian 233-504



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

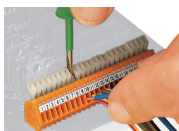
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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.