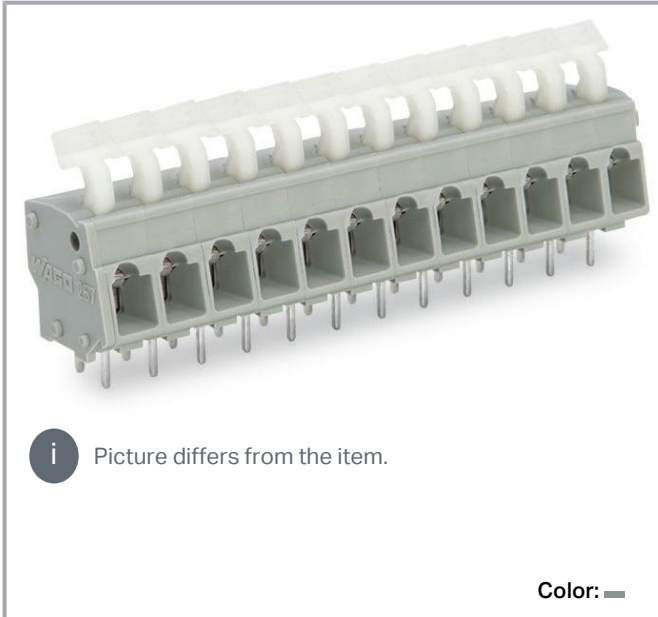


Data sheet | Item number: 257-498

PCB terminal block; push-button; 2.5 mm²; Pin spacing 5/5.08 mm; 48-pole;
CAGE CLAMP®; commoning option; 2,50 mm²; gray

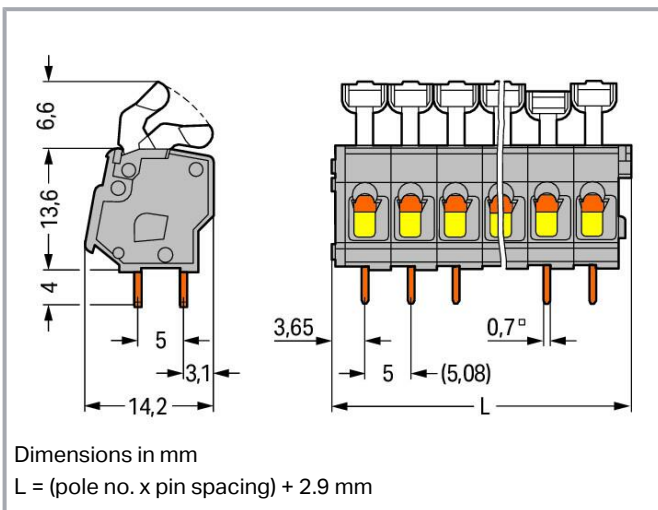
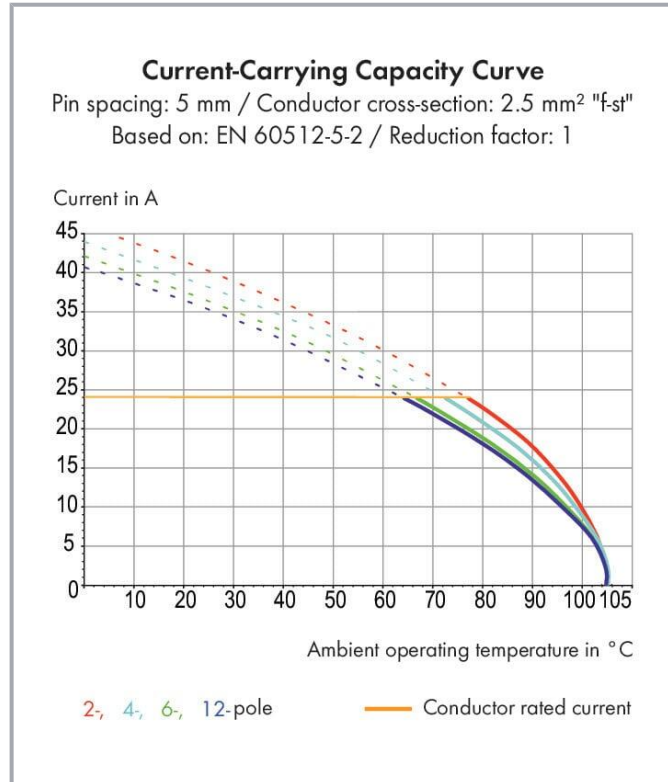


www.wago.com/257-498



i Picture differs from the item.

Color: —



Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
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Email: info.de@wago.com | Web: www.wago.com

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Item description

- PCB terminal blocks with push-buttons and CAGE CLAMP® connection
- Versions with Ex approval
- Set to metric or inch pin spacing by compressing PCB terminal strips or pulling them apart
- Ideal for in-the-field wiring thanks to simplified push-button actuation
- Convenient, tool-free operation

Data

Notes

| | |
|-----------|---|
| Variants: | Other pole numbers Versions for Ex e II and Ex i 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

| Ratings per | IEC/EN 60664-1 |
|-------------------------------|--|
| Nominal voltage (III/3) | 250 V |
| Rated impulse voltage (III/3) | 4 kV |
| Rated voltage (III/2) | 320 V |
| Rated impulse voltage (III/2) | 4 kV |
| Nominal voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |
| Rated current | 24 A |
| Legend (ratings) | (III / 2) \triangleq Overvoltage category III / Pollution degree 2 |

Ratings per UL

| Approvals per | UL 1059 |
|--------------------------------|---------|
| Rated voltage UL (Use Group B) | 300 V |
| Rated current UL (Use Group B) | 15 A |
| Rated voltage UL (Use Group D) | 300 V |
| Rated current UL (Use Group D) | 10 A |

Subject to changes. Please also observe the further product documentation!

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Ratings per CSA

| Approvals per | CSA |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 15 A |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A |

Connection data

| | |
|----------------------------|----|
| Connection points | 48 |
| Total number of potentials | 48 |
| Number of connection types | 1 |
| Number of levels | 1 |

Connection 1

| | |
|---|--|
| Connection technology | CAGE CLAMP® |
| Actuation type | Push-button (angled) |
| Solid conductor | 0.08 ... 2.5 mm ² / 28 ... 12 AWG |
| Fine-stranded conductor | 0.08 ... 2.5 mm ² / 28 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 1.5 mm ² |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 1.5 mm ² |
| Note (conductor cross-section) | 12 AWG: THHN, THWN |
| Strip length | 5 ... 6 mm / 0.2 ... 0.24 inches |
| Conductor connection direction to PCB | 0° |
| Pole number | 48 |

Physical data

| | |
|--------------------------------------|------------------------------|
| Pin spacing | 5/5.08 mm / 0.197/0.2 inches |
| Width | 242.9 mm / 9.563 inches |
| Height | 24.2 mm / 0.953 inches |
| Height from the surface | 20.2 mm / 0.795 inches |
| Depth | 14.2 mm / 0.559 inches |
| Solder pin length | 4 mm |
| Solder pin dimensions | 0.7 x 0.7 mm |
| Drilled hole diameter with tolerance | 1.1 ^(+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 | 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 | 1.013 MJ |
| Weight | 54.8 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|--------------------------------|
| Product Group | 4 (Printed Circuit Connectors) |
| eCl@ss 10.0 | 27-44-04-01 |
| eCl@ss 9.0 | 27-44-04-01 |
| ETIM 8.0 | EC002643 |
| ETIM 7.0 | EC002643 |
| ECCN | NO DATA |
| PU (SPU) | 20 (5) pcs |
| Packaging type | box |
| Country of origin | PL |
| GTIN | 4044918412698 |
| Customs tariff number | 85369010000 |

Subject to changes. Please also observe the further product documentation!

Environmental Product Compliance

RoHS Compliance Status



Compliant, No Exemption

Approvals / Certificates

General approvals



| Logo | Approval | Additional Approval Text | Certificate name |
|--|--------------------------------------|--------------------------|------------------|
|  | CCA DEKRA Certification B.V. | EN 60947-7-4 | 71-113014 |
|  | CCA DEKRA Certification B.V. | EN 60947-7-4 | NTR NL-7821 |
|  | CCA DEKRA Certification B.V. | EN 60947 | 2160584.28 |
|  | CCA DEKRA Certification B.V. | EN 60947 | NTR NL-7128 |
|  | CSA DEKRA Certification B.V. | C22.2 No. 158 | 70049157 |
|  | UR Underwriters Laboratories Inc. | UL 1059 | E45172 |

Declarations of conformity and manufacturer's declarations

| Logo | Approval | Additional Approval Text | Certificate name |
|--|--|--------------------------|------------------|
|  | EU-Declaration of Conformity WAGO GmbH & Co. KG | - | - |
|  | UK-Declaration of Conformity WAGO GmbH & Co. KG | - | - |

Subject to changes. Please also observe the further product documentation!

Approvals for marine applications

| Logo | Approval | Additional Approval Text | Certificate name |
|---|---|--------------------------|--------------------------|
|  | ABS American Bureau of Shipping | - | 19- HG1869876- PDA |
|  | BV Bureau Veritas S.A. | IEC 60998 | 11915/DO BV |
|  | DNV DNV GL SE | - | TAE000016Z |

Optional accessories

Tool

Operating tool



Item no.: 210-658

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

www.wago.com/210-658



Item no.: 210-720

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

www.wago.com/210-720

Marking accessories

Marking strip



Item no.: 210-332/500-202

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-332/500-202



Item no.: 210-332/500-206

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-332/500-206



Item no.: 210-332/500-205

Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-332/500-205

Item no.: 210-332/508-202

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| | | |
|---|--|--|
|  | Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white | www.wago.com/210-332/508-202 |
|  | Item no.: 210-332/500-204 Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white | www.wago.com/210-332/500-204 |
|  | Item no.: 210-332/508-204 Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white | www.wago.com/210-332/508-204 |
|  | Item no.: 210-332/508-206 Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white | www.wago.com/210-332/508-206 |
|  | Item no.: 210-332/508-205 Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white | www.wago.com/210-332/508-205 |
| Ferrule | | |
| Ferrule | | |
|  | Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-101 |
|  | Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-104 |
|  | Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-102 |
|  | Item no.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated | www.wago.com/216-103 |
|  | Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-123 |
|  | Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-122 |
|  | Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated | www.wago.com/216-124 |
|  | Item no.: 216-142 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | www.wago.com/216-142 |
|  | Item no.: 216-132 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-132 |
|  | Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-121 |
|  | Item no.: 216-143 | |

Subject to changes. Please also observe the further product documentation!










| | | |
|--|---|--|
| | Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | www.wago.com/216-143 |
| | Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-131 |
| | Item no.: 216-141 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | www.wago.com/216-141 |
| | Item no.: 216-152 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-152 |
| | Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red | www.wago.com/216-203 |
| | Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray | www.wago.com/216-202 |
| | Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-151 |
| | Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black | www.wago.com/216-204 |
| | Item no.: 216-144 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored | www.wago.com/216-144 |
| | Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white | www.wago.com/216-201 |
| | Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red | www.wago.com/216-223 |
| | Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white | www.wago.com/216-241 |
| | Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray | www.wago.com/216-242 |
| | Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray | www.wago.com/216-222 |
| | Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white | www.wago.com/216-221 |
| | Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black | www.wago.com/216-224 |
| | Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red | www.wago.com/216-243 |
| | Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight | www.wago.com/216-244 |

Subject to changes. Please also observe the further product documentation!





crimped; acc. to DIN 46228, Part 4/09.90; black

| | | |
|---|--|--|
|  | Item no.: 216-263 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red | www.wago.com/216-263 |
|  | Item no.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | www.wago.com/216-264 |
|  | Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray | www.wago.com/216-262 |
|  | Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow | www.wago.com/216-301 |
|  | Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow | www.wago.com/216-321 |
|  | Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; light turquoise | www.wago.com/216-322 |
|  | Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; light turquoise | www.wago.com/216-302 |

Testing and measuring

Testing accessories

| | | |
|---|--|--|
|  | Item no.: 249-110 Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 5 mm / 0.197 in; gray | www.wago.com/249-110 |
|  | Item no.: 249-111 Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 5.08 mm / 0.2 in; orange | www.wago.com/249-111 |

Downloads

Documentation

Additional Information

| | | | |
|--|------------|-----------------|----------|
| Technical Section | 2019 Apr 3 | pdf 2.1 MB | Download |
| Technical explanations | | | |
| Gebrückte Klemmenleisten für Leiterplatten | | pdf 187.6 kB | Download |

CAD/CAE-Data

CAD data

| | | |
|----------------------|-----|----------|
| 2D/3D Models 257-498 | URL | Download |
|----------------------|-----|----------|

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CAE data

| | | |
|---------------------------|---------------------|--------------------------|
| EPLAN Data Portal 257-498 | URL | Download |
| ZUKEN Portal 257-498 | URL | Download |

PCB Design

Symbol and Footprint via Ultra Librarian 257-498 [URL](#) [Download](#)

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

Supported formats:

- Accel EDA 14 & 15
- Altair
- Altium 6 to current version
- Autodesk Fusion 360
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics
- BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design
- Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

—
Subject to changes. Please also observe the further product documentation!



- Zuken eCADSTAR 2020 and 2021 Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

Symbol and Footprint via SamacSys 257-498

URL

Download

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

Supported formats:

- 3D (stp)
- Altium
- CADSTAR
- Capture
- CircuitStudio
- CR-5000
- CR-8000
- DEHDL
- DesignSpark PCB
- DesignSpark PCB PRO
- DipTrace
- EAGLE
- Easy-PC
- EasyEDA
- eCADSTAR
- KiCad
- OrCAD_Allegro16
- PADS
- Proteus
- Pulsonix
- Quadcept
- SOLIDWORKS PCB
- TARGET 3001!
- xDX Designer
- Xpedition

PCB Component Libraries (EDA), PCB CAD Library SamacSys Electronic Component Search Engine

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Asset Administration Shell

Asset Administration Shell 257-498

[URL](#)

[Download](#)

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 257-498

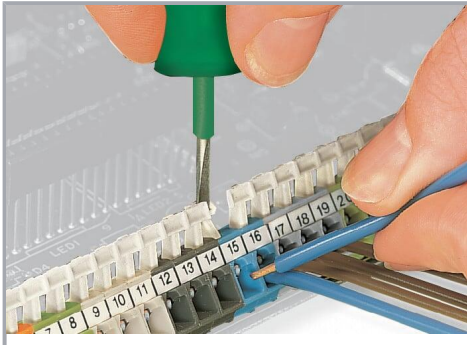
[URL](#)

[Download](#)

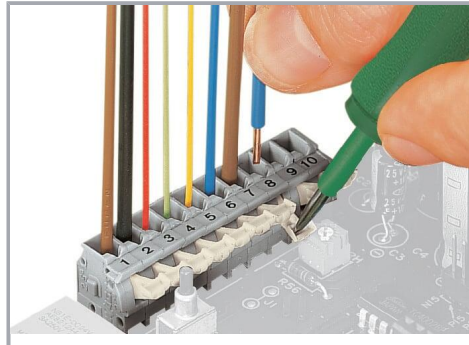
PCB terminal block; push-button; 2.5 mm²; Pin spacing 5/5.08 mm; 48-pole; CAGE CLAMP®; commoning option; 2,50 mm²; gray

Installation Notes

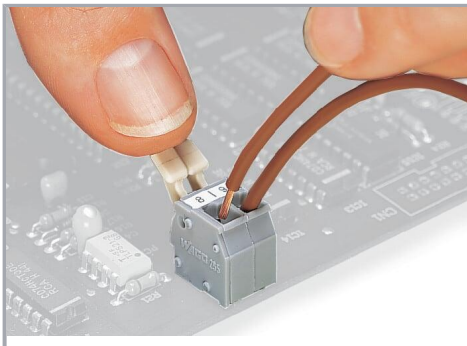
Conductor termination



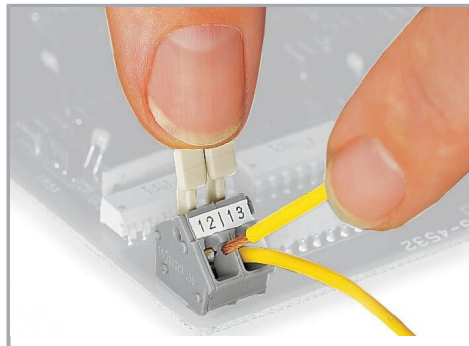
Inserting/removing a conductor – 256 Series.



Inserting/removing a conductor (255 Series)



Inserting/removing a conductor via finger-operated lever – 255 Series.



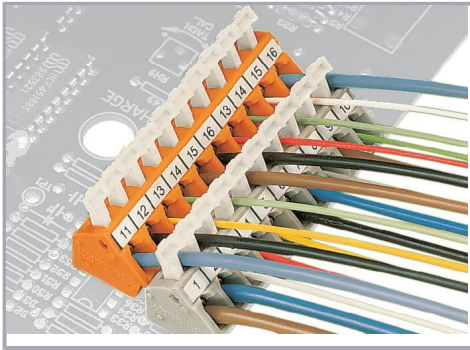
Inserting/removing a conductor via finger-operated lever – 256 Series.

Installation

Subject to changes. Please also observe the further product documentation!

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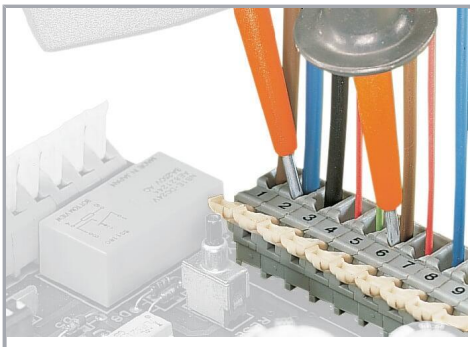
Possible conductor arrangement with terminal strips staggered (for 256 Series only).

Marking

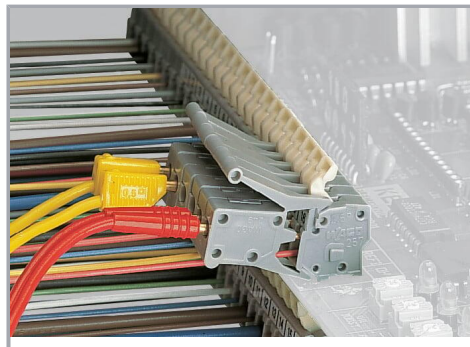


Formation of groups using housings of different colors

Testing



Testing with test probes.



Testing with test plug modules.

Subject to changes. Please also observe the further product documentation!