

Data sheet | Item number: 738-312

Quadruple-deck PCB terminal block; 2.5 mm²; Pin spacing 5.08 mm; 48-pole;
CAGE CLAMP®; 2,50 mm²; orange



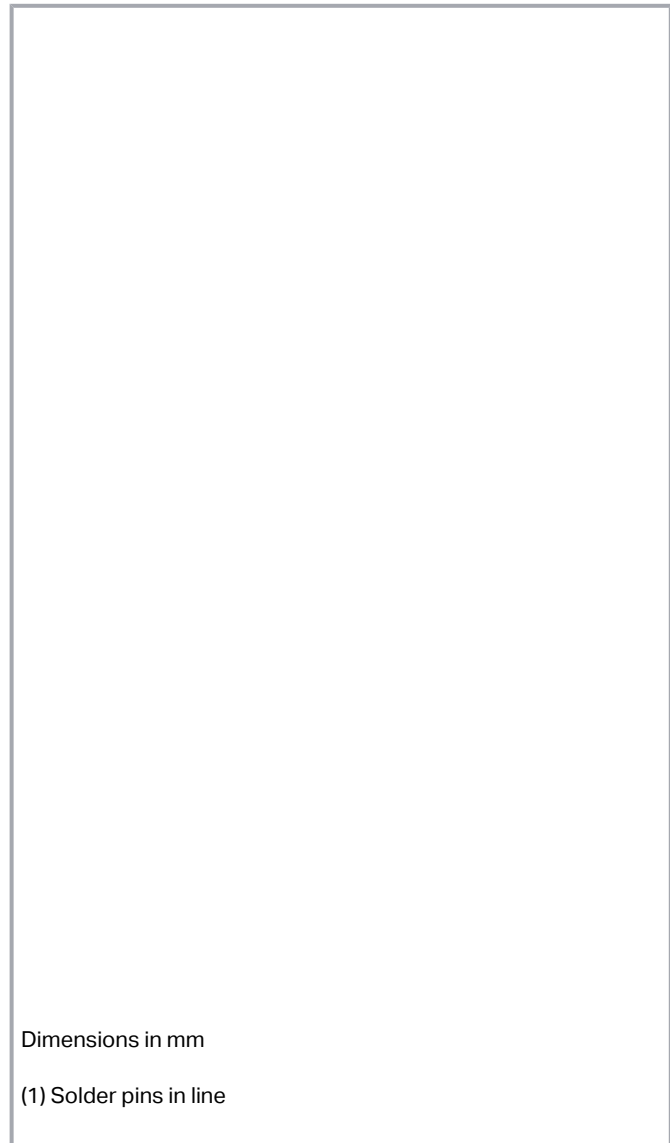
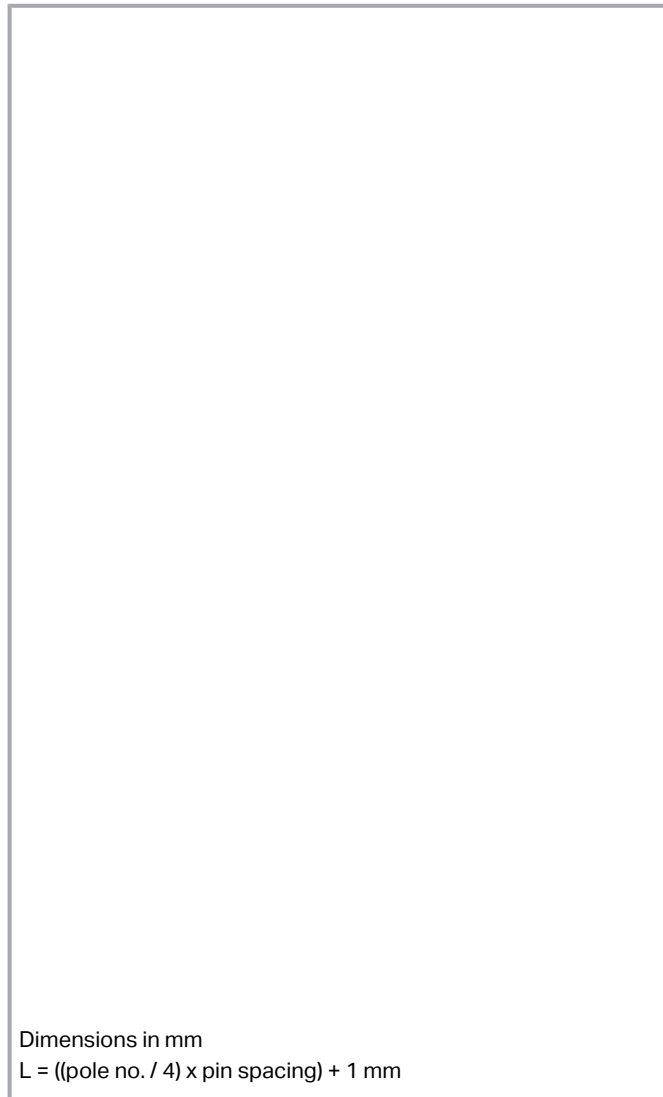
www.wago.com/738-312



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

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Item description

- PCB terminal strips with screwdriver-actuated CAGE CLAMP[®] connection
- High-density, quadruple-deck design for space-efficient wiring of multiple conductors in confined areas
- Angled conductor entry and CAGE CLAMP[®] actuation streamline operation
- Custom marking for all termination levels

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



Data 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

| Ratings | between the modules |
|-------------------------------|---|
| 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 | 18 A |
| Legend (ratings) | (III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2 |

Ratings per IEC/EN 2

| Ratings | between the decks |
|-------------------------------|-------------------|
| Ratings per 2 | IEC/EN 60664-1 |
| Rated voltage (III/3) 2 | 320 V |
| Rated surge voltage (III/3) 2 | 4 kV |
| Rated voltage (III/2) 2 | 320 V |
| Rated surge voltage (III/2) 2 | 4 kV |
| Rated voltage (II/2) 2 | 630 V |
| Rated surge voltage (II/2) 2 | 4 kV |
| Rated current 2 | 18 A |

Ratings per UL

| | |
|---------------|---------|
| Approvals per | UL 1059 |
|---------------|---------|

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



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

Ratings per CSA

| | |
|---------------------------------|-------|
| Approvals per | CSA |
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 10 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 | 4 |

Connection 1

| | |
|---|--|
| Connection technology | CAGE CLAMP® |
| Actuation type | Operating tool |
| 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 ... 2.5 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 | 45 ° |
| Pole number | 48 |

Physical data

| | |
|-------------------------|-------------------------|
| Pin spacing | 5.08 mm / 0.2 inches |
| Width | 61.96 mm / 2.439 inches |
| Height | 48.2 mm / 1.898 inches |
| Height from the surface | 44.2 mm / 1.74 inches |
| Depth | 37.5 mm / 1.476 inches |

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



| | |
|--------------------------------------|--------------------------|
| Solder pin length | 4 mm |
| Solder pin dimensions | 0.7 x 0.7 mm |
| Drilled hole diameter with tolerance | 1.3 ^(+0.1) mm |

PCB contact

| | |
|-------------------------------------|-------------------------------------|
| PCB contact | THT |
| Solder pin arrangement | within the terminal block (in-line) |
| Number of solder pins per potential | 1 |

Material Data

Note (material data)

Information on material specifications can be found here

| | |
|-----------------------------|--|
| Color | orange |
| 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 | 0.993 MJ |
| Weight | 72.6 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 |
| PU (SPU) | 12 pcs |
| Packaging type | box |
| Country of origin | PL |
| GTIN | 4045454162122 |

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| | |
|-----------------------|-------------|
| Customs tariff number | 85369010000 |
|-----------------------|-------------|

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 | 2160584.20 |
| | CCA DEKRA Certification B.V. | EN 60947-7-4 | NTR NL 7817 |
| | CCA DEKRA Certification B.V. | EN 60947-7-4 | 71-112779 |
| | CCA DEKRA Certification B.V. | EN 60947 | NTR NL- 7103 |
| | CSA DEKRA Certification B.V. | C22.2 No. 158 | 1711139 |
| | 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 | - | - |

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 GL Det Norske Veritas, Germanischer Lloyd | - | TAE000016Z |

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Optional accessories

Tool

Operating tool

| | |
|---|--|
| Item no.: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured | www.wago.com/210-657 |
| 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 |

Testing and measuring

Testing accessories

| | |
|--|--|
| Item no.: 231-426 Testing plug module with contact stud; orange | www.wago.com/231-426 |
| Item no.: 231-455 Testing plug module with contact stud; Pin spacing 5.08 mm / 0.2 in; 2,50 mm ² ; orange | www.wago.com/231-455 |

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.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-106 |
| 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 |

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| | |
|---|--|
| 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 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; | www.wago.com/216-243 |

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



acc. to DIN 46228, Part 4/09.90; red

Item no.: 216-244Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blackwww.wago.com/216-244**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; redwww.wago.com/216-263**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; blackwww.wago.com/216-264**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; graywww.wago.com/216-262**Item no.: 216-301**Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellowwww.wago.com/216-301**Item no.: 216-321**Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellowwww.wago.com/216-321**Item no.: 216-322**Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoisewww.wago.com/216-322**Item no.: 216-302**Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoisewww.wago.com/216-302**Marking accessories**

Marking strip

Item no.: 210-332/508-202

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/210-332/508-202**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**Downloads****Documentation****Additional Information**

2019 年4月3日

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Gebrückte Klemmenleisten für Leiterplatten

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CAD/CAE-Data

CAD data

2D/3D Models 738-312 [URL](#) [Download](#)

CAE data

EPLAN Data Portal 738-312 [URL](#) [Download](#)

ZUKEN Portal 738-312 [URL](#) [Download](#)

PCB Design

Symbol and Footprint 738-312 [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
- Altium 6 to current version
- 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

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

- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

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

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 738-312

URL

Download

Quadruple-deck PCB terminal block; 2.5 mm²; Pin spacing 5.08 mm; 48-pole; CAGE CLAMP®; 2,50 mm²; orange

Installation Notes

Conductor termination



Inserting a conductor via 3.5 mm screwdriver.

Screwdriver actuation parallel to conductor entry

Installation

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



Low space requirements due to high-density design

Double-deck PCB terminal strip – 736 Series



Possible combination:

Double- (736 Series) and triple-deck PCB terminal strips (737 Series) upon request



Possible combination:

Double- (736 Series) and triple-deck PCB terminal strips (737 Series) upon request



Possible combination:

Double- (737 Series) and quadruple-deck PCB terminal strips (738 Series) upon request

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



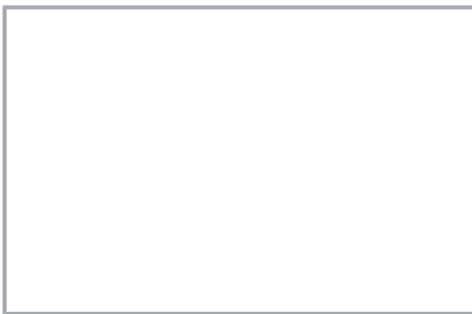
Possible combination:

Double- (737 Series) and quadruple-deck PCB terminal strips (738 Series) upon request

Marking



Testing



Testing via contact area above the conductors.

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