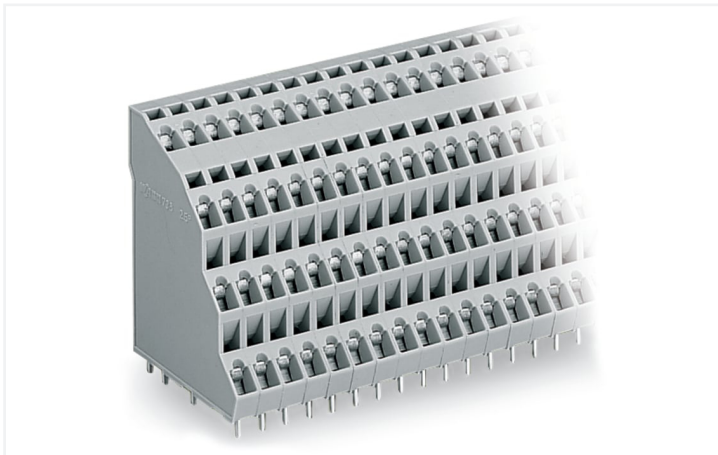


Data Sheet | Item Number: 738-102

Quadruple-deck PCB terminal block; 2.5 mm²; Pin spacing 5 mm; 8-pole; CAGE CLAMP®;

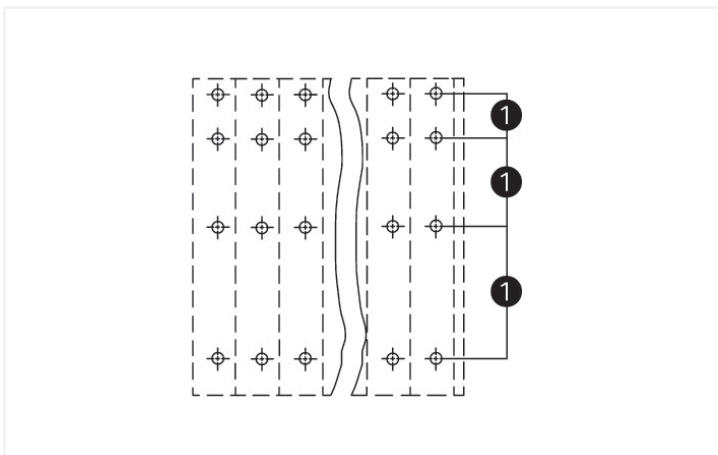
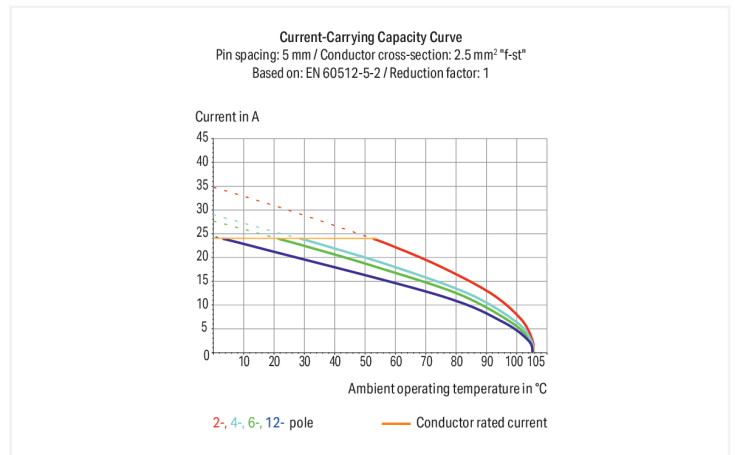
gray

<https://www.wago.com/738-102>

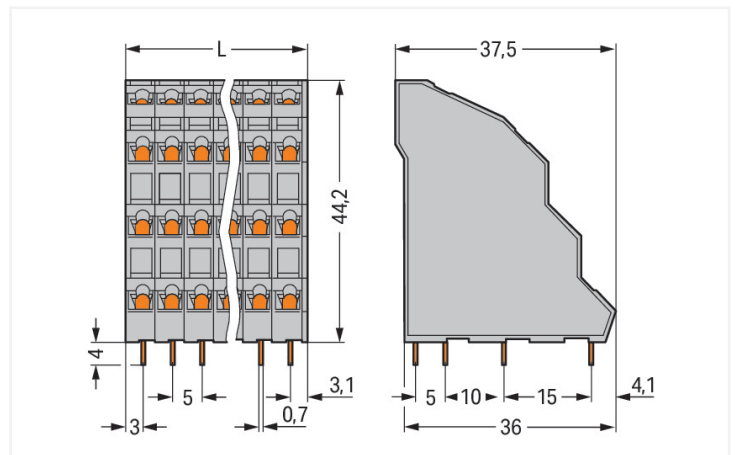


Color: ■ gray

Similar to illustration



(1) Solder pins in line



Dimensions in mm
 $L = ((\text{pole no.} / 4) \times \text{pin spacing}) + 1 \text{ mm}$

PCB terminal block, 738 Series, solder pin dimensions 0.7 x 0.7 mm

Our PCB terminal block (item number 738-102) makes connections quick and easy. You can count on trusted safety with these PCB terminal blocks, perfect for a wide range of applications when designing your devices. Conductors should only be connected to this PCB terminal block if their strip length is between 5 and 6 mm. This product features one conductor terminal and utilizes CAGE CLAMP®. Our proven universal connection known as CAGE CLAMP® leads the way when it comes to connection technology and electrical interconnections. The dimensions are (11 x 48.2 x 37.5) mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm².

Tin is used for coating the contact surfaces. This PCB terminal block is operated with an operating tool. THT is used to solder the PCB terminal block. Insert the conductor into the board at an angle of 45°..

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 | between the modules | | |
|---------------------------------|---------------------|-------------------|-------------------|
| Ratings per | IEC/EN 60664-1 | IEC/EN 60664-1 | IEC/EN 60664-1 |
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 250 V | 320 V | 630 V |
| Rated impulse withstand voltage | 4 kV | 4 kV | 4 kV |
| Rated current | 18 A | 18 A | 18 A |

| Ratings | between the decks | | |
|---------------------------------|-------------------|-------------------|-------------------|
| Ratings per | IEC/EN 60664-1 | IEC/EN 60664-1 | IEC/EN 60664-1 |
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 320 V | 320 V | 630 V |
| Rated impulse withstand voltage | 4 kV | 4 kV | 4 kV |
| Rated current | 18 A | 18 A | 18 A |

| Approvals per | UL 1059 | | |
|---------------|---------|---|-------|
| Use group | B | C | D |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 10 A | - | 10 A |

| Approvals per | CSA | | |
|---------------|-------|---|-------|
| Use group | B | C | D |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 10 A | - | 10 A |

Connection Data

| | |
|----------------------------|---|
| Clamping units | 8 |
| Total number of potentials | 8 |
| 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 | 8 |

Physical data

| | |
|-------------------------|--------------------------|
| Pin spacing | 5 mm / 0.197 inches |
| Width | 11 mm / 0.433 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 |
| Solder pin length | 4 mm |
| Solder pin dimensions | 0.7 x 0.7 mm |
| Drilled hole diameter | 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 | 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 _{Cu}) |
| Contact Plating | Tin |
| Fire load | 0.172 MJ |
| Weight | 13 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|--------------------------------|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 72 pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4045454161897 |
| 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 60947 | NTR NL-7103 |
| CCA DEKRA Certification B.V. | EN 60947-7-4 | NTR NL 7817 |
| CSA DEKRA Certification B.V. | C22.2 No. 158 | 1711139 |

General approvals

| | | |
|---|--------------|------------|
| KEMA/KEUR DEKRA Certification B.V. | EN 60947-7-4 | 71-112779 |
| KEMA/KEUR DEKRA Certification B.V. | EN 60947 | 2160584.20 |
| UR Underwriters Laboratories Inc. | 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 738-102 [↓](#)

Documentation

Additional Information

| | | | |
|--|------------|-------------------|-------------------|
| Technical Section | 03.04.2019 | pdf 2027.26 KB | ↓ |
| Gebrückte Klemmenleisten für Leiterplatten | | pdf 303.71 KB | ↓ |

CAD/CAE-Data

CAD data

2D/3D Models 738-102 [↓](#)

CAE data

| | |
|---------------------------|-------------------|
| EPLAN Data Portal 738-102 | ↓ |
| ZUKEN Portal 738-102 | ↓ |

PCB Design

| | |
|--|-------------------|
| Symbol and Footprint via SamacSys 738-102 | ↓ |
| Symbol and Footprint via Ultra Librarian 738-102 | ↓ |

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



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; silver-colored



Item No.: 216-322

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-152

Ferrule; Sleeve for 0.34 mm² / 22 AWG; uninsulated; electro-tin plated; silver-colored



Item No.: 216-221

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



Item No.: 216-121

Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored



Item No.: 216-222

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-122

Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; silver-colored



Item No.: 216-223

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-123

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored



Item No.: 216-224

Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-124

Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated

1.1.2 Marking

1.1.2.1 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



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



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



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

1.1.3 Test and measurement

1.1.3.1 Testing accessories



Item No.: 231-126

Testing plug module with contact stud; for 280, 736, 737, 738, 780 Series; Pin spacing 5 mm / 0.197 in; 2,50 mm²; gray



Item No.: 231-155

Testing plug module with contact stud; Pin spacing 5 mm / 0.197 in; 2,50 mm²; gray

1.1.4 Tool

1.1.4.1 Operating tool



Item No.: 210-658

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



Item No.: 210-720

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



Item No.: 210-657

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

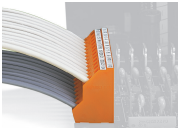
Installation Notes

Conductor termination



Inserting a conductor via 3.5 mm screwdriver.
Screwdriver actuation parallel to conductor entry

Installation



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

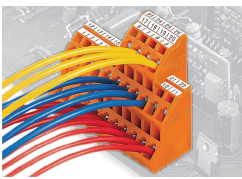


Possible combination:
Double- (737 Series) and quadruple-deck PCB terminal strips (738 Series) upon request



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

Marking



Testing



Testing via contact area above the conductors.