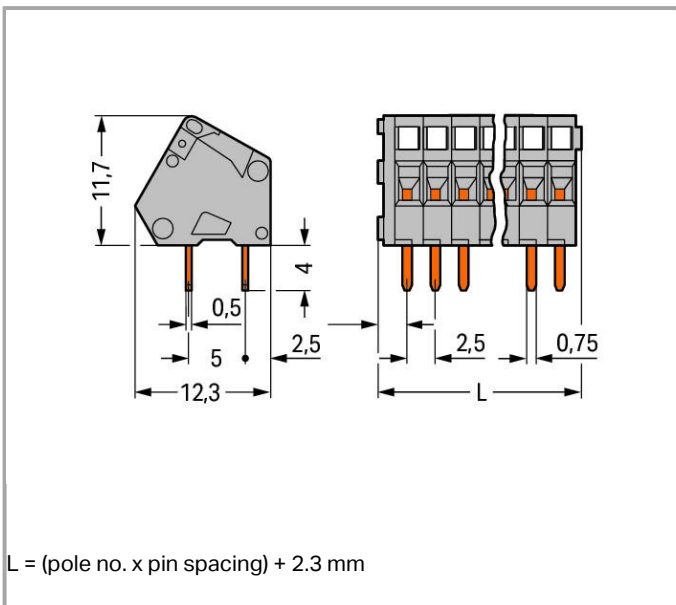
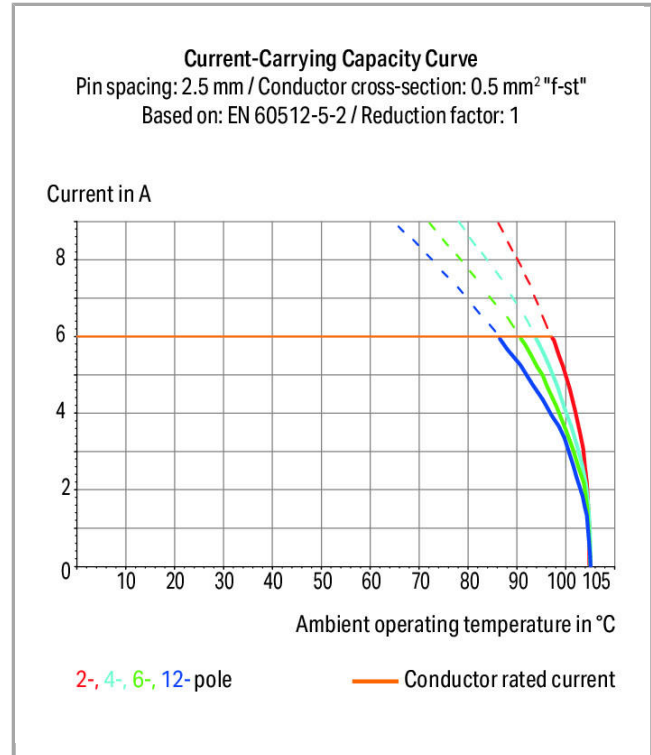
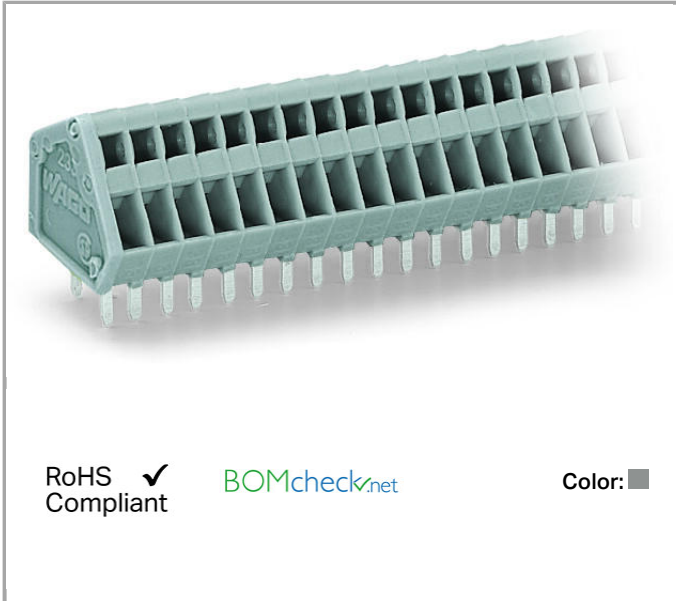


233-104



Item description

- Compact terminal strips with CAGE CLAMP® connection and screwdriver actuation parallel or perpendicular to conductor entry

- Double solder pins for high mechanical stability
- Custom color combinations

Data

Electrical data

Ratings per IEC/EN 60664-1

| | |
|---------------------------------|--------|
| Rated voltage (III / 3) | 63 V |
| Rated impulse voltage (III / 3) | 2.5 kV |
| Rated voltage (III / 2) | 160 V |
| Rated impulse voltage (III / 2) | 2.5 kV |
| Rated voltage (II / 2) | 320 V |
| Rated impulse voltage (II / 2) | 2.5 kV |
| Rated current | 6 A |

Approvals per UL 1059

| | |
|--------------------------------|-------|
| Rated voltage UL (Use Group B) | 150 V |
| Rated current UL (Use Group B) | 4 A |

Approvals per CSA

| | |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 150 V |
| Rated current CSA (Use Group B) | 4 A |

Connection data

| | |
|---|---|
| Connection technology | CAGE CLAMP® |
| Actuation type | Operating tool |
| 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 ferrule with plastic collar | 0.25 mm ² |
| Fine-stranded conductor with ferrule without plastic collar | 0.25 mm ² |
| Strip length | 5 ... 6 mm / 0.2 ... 0.24 inch |
| Conductor entry angle to the PCB | 30° |
| 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. |
| No. of poles | 4 |
| Total number of connection points | 4 |
| Total number of potentials | 4 |
| Number of connection types | 1 |
| Number of levels | 1 |

Geometrical Data

| | |
|-----------------------------------|--------------------------------|
| Pin spacing | 2.5 mm / 0.098 inch |
| Width | 12.3 mm / 0.484 inch |
| Height | 15.7 mm / 0.618 inch |
| Height from the surface | 11.7 mm / 0.461 inch |
| Depth | 12.1 mm / 0.476 inch |
| Solder pin length | 4 mm |
| Solder pin dimensions | 0.5 x 0.75 mm |
| Drilled hole diameter (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

| | |
|-----------------------------|--|
| Color | gray |
| Material group | I |
| Insulating material | Polyamide 66 (PA 66) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Chrome nickel spring steel (CrNi) |
| Contact material | Electrolytic copper (E _{Cu}) |
| Contact plating | tin-plated |
| Fire load | 0.02 MJ |
| Weight | 1.458 g |

Environmental Requirements

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






Commercial data

| | |
|--------------------|---------------------|
| Product Group | 4 (Printed Circuit) |
| Country of origin | CH |
| GTIN | 4045454049164 |
| Customs Tariff No. | 85369010000 |



Approvals / Certificates

Country specific Approvals


Certificate

| Logo | Approval | Additional Approval Text | 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 | 2169331.02 |
|  | CSA DEKRA Certification B.V. | C22.2 | 1465035 |
|  | CSA DEKRA Certification B.V. | C22.2 | 1465035 |

Ship Approvals







| Logo | Approval | Additional Approval Text | Certificate name |
|--|--|--------------------------|--------------------------|
|  | ABS American Bureau of Shipping | - | 14- HG1241537- PDA |
|  | DNV GL Det Norske Veritas, Germanischer Lloyd | - | TAE000016Z |

UL-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|-------------------------------------|--------------------------|------------------|
|  | UL UL International Germany GmbH | UL 1059 | E45172 |

Compatible products



tools

| | | |
|--|---|---------|
|  | Item no.: 210-647 Operating tool with partially insulated shaft; Blade (2.5 x 0.4) mm; short | 210-647 |
|  | Item no.: 210-648 Operating tool with partially insulated shaft; Blade (2.5 x 0.4) mm; short; angled | 210-648 |
|  | Item no.: 210-719 Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm | 210-719 |
|  | Item no.: 233-331 Operating tool; for female and male connectors with CAGE CLAMP® connection; insulated | 233-331 |
|  | Item no.: 233-332 Operating tool; for 233 and 733 Series; of insulating material | 233-332 |
|  | Item no.: 233-335 Operating tool; for 233 and 733 Series | 233-335 |

Marking accessories

| | | |
|--|--|---------------------|
| | 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 | 210-331 /250-202 |
| | 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 | 210-331 /250-204 |
| | 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 | 210-331 /250-206 |
| | 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 | 210-331 /250-207 |
| | 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 | 210-331 /254-202 |
| | 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 | 210-331 /254-204 |
| | 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 | 210-331 /254-206 |
| | 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 | 210-331 /254-207 |

ferrule

| | | |
|--|--|---------|
|  | Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated | 216-131 |
|  | Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated | 216-151 |



| | |
|--|---------|
| Item no.: 216-301 | 216-301 |
| Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated | |

| | |
|--|---------|
| Item no.: 216-321 | 216-321 |
| Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated | |

Downloads

CAD/CAE - Smart Data

CAD data

| | | |
|---------------------|-----|----------|
| 3D Download 233-104 | URL | Download |
|---------------------|-----|----------|

PCB libraries

| | | | |
|---|-------------|---------|----------|
| EAGLE Library for WAGO PCB Terminal Blocks | 2.1 | zip | Download |
| Compatible with EAGLE PCB Design Software Version 6.x or higher | Oct 6, 2014 | 23.9 MB | |

| | | | |
|---|-------------|---------|----------|
| TARGET Library for WAGO PCB Terminal Blocks | 1.1.0 | zip | Download |
| Compatible with TARGET PCB Design Software Version 17.x | Oct 6, 2014 | 27.1 MB | |

| | | | |
|---|-------------|---------|----------|
| DesignSpark Library for WAGO PCB Terminal Blocks | 2.1 | zip | Download |
| Compatible with DesignSpark PCB Version 4.x or higher | Oct 6, 2014 | 22.5 MB | |

Subject to changes.