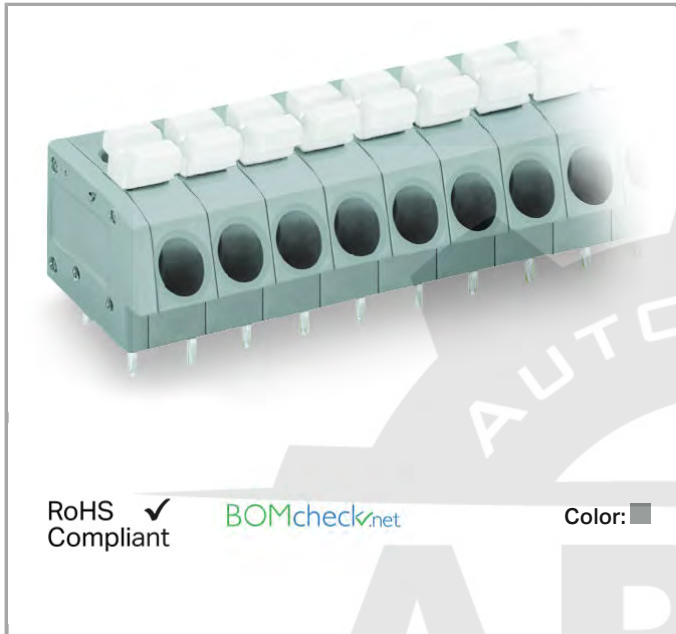


# Data sheet | Item number: 804-104

PCB terminal block; Push-button; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 4-pole; Push-  
in CAGE CLAMP®



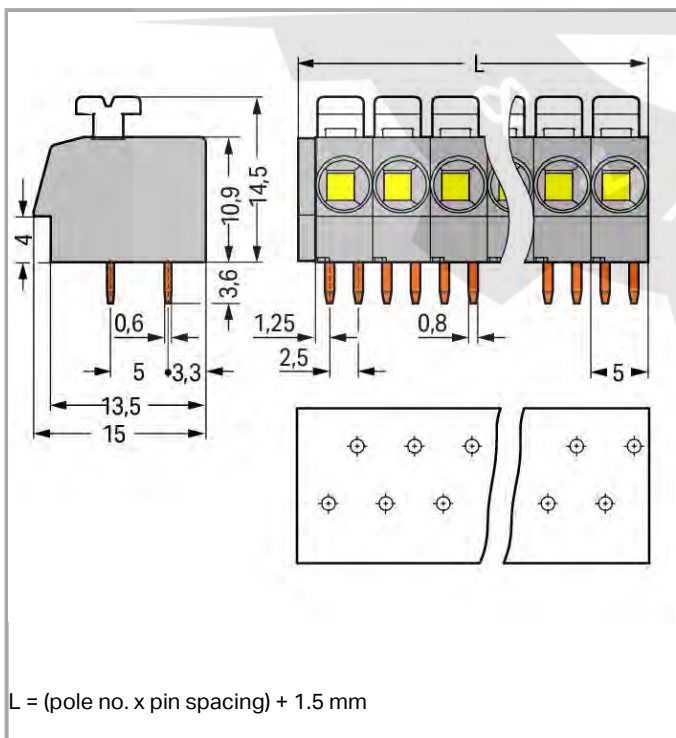
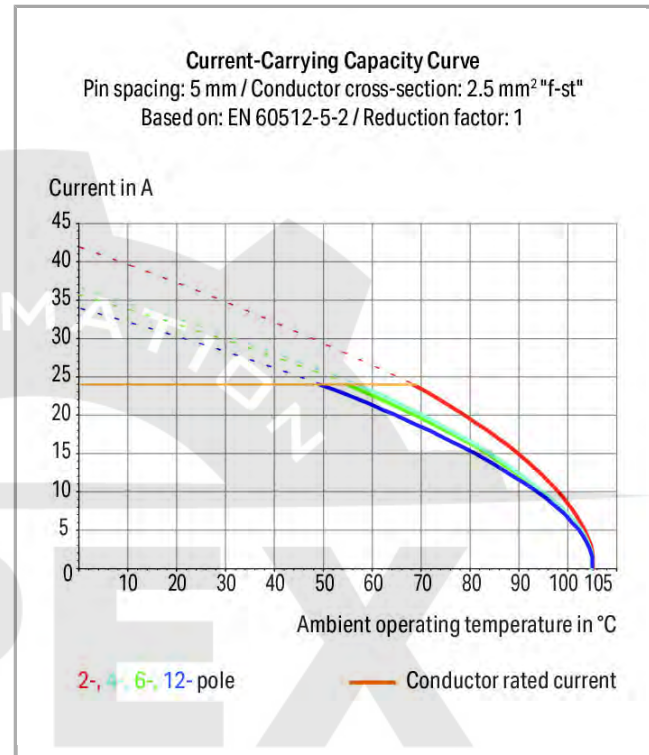
804-104



RoHS  
Compliant

BOMcheck.net

Color: ■



## Item description

- PCB terminal strips with Push-in CAGE CLAMP® connection and push-button actuation
- Push-in termination of solid and ferruled, fine-stranded conductors
- A large conductor entry accommodates conductors with a cross-section up to 12 AWG with an insulation diameter up to 4.2 mm
- Terminal strips with spacers to increase pin spacing
- Versions available with custom internal commoning (factory assembly), e.g., commoning ground conductor

## Data

### Electrical data

#### Ratings per IEC/EN 60664-1

|                                 |       |
|---------------------------------|-------|
| Rated 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  |
| Rated voltage (II / 2)          | 630 V |
| Rated impulse voltage (II / 2)  | 4 kV  |
| Rated current                   | 24 A  |

#### Approvals per UL 1059

|                                |       |
|--------------------------------|-------|
| 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  |

#### 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 technology                                       | Push-in CAGE CLAMP®                          |
| Actuation type                                              | Push-button                                  |
| Solid conductor                                             | 0.25 ... 2.5 mm <sup>2</sup> / 20 ... 12 AWG |
| Fine-stranded conductor                                     | 0.25 ... 2.5 mm <sup>2</sup> / 22 ... 12 AWG |
| Fine-stranded conductor with ferrule with plastic collar    | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Fine-stranded conductor with ferrule without plastic collar | 0.25 ... 2.5 mm <sup>2</sup>                 |

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Strip length                      | 10 ... 11 mm / 0.39 ... 0.43 inch |
| Conductor entry angle to the PCB  | 0°                                |
| 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                       | 5 mm / 0.197 inch              |
| Width                             | 21.5 mm / 0.846 inch           |
| Height                            | 18.1 mm / 0.713 inch           |
| Height from the surface           | 14.5 mm / 0.571 inch           |
| Depth                             | 15 mm / 0.591 inch             |
| Solder pin length                 | 3.6 mm                         |
| Solder pin dimensions             | 0.8 x 0.6 mm                   |
| Drilled hole diameter (tolerance) | 1.1 <sup>(- ... +0.1)</sup> mm |

### PCB contact

|                                     |                                           |
|-------------------------------------|-------------------------------------------|
| PCB contact                         | THT                                       |
| Solder pin arrangement              | over the entire terminal strip, staggered |
| 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 <sub>Cu</sub> ) |
| Contact plating             | tin-plated                             |
| Fire load                   | 0.067 MJ                               |
| Weight                      | 4.176 g                                |

### Environmental Requirements

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

### Commercial data

|               |                     |
|---------------|---------------------|
| Product Group | 4 (Printed Circuit) |
|---------------|---------------------|

|                    |               |
|--------------------|---------------|
| Country of origin  | CH            |
| GTIN               | 4044918515009 |
| Customs Tariff No. | 85369010000   |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                             | Approval                                 | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|------------------------------------------|--------------------------|------------------|
|  | CCA<br>DEKRA Certification B.V.          | EN 60947-7-4             | 2169331.07       |
|  | CCA<br>DEKRA Certification B.V.          | EN 60947-7-4             | NTR NL<br>7293   |
|  | ENEC 15<br>UL International Germany GmbH | EN 60998                 | ENEC-<br>00096   |

### UL-Approvals

| Logo                                                                               | Approval                            | Additional Approval Text | Certificate name  |
|------------------------------------------------------------------------------------|-------------------------------------|--------------------------|-------------------|
|  | UL<br>UL International Germany GmbH | UL 1059                  | E45172<br>Sec. 37 |
|  | UL<br>UL International Germany GmbH | UL 1977                  | E45171<br>Sec. 12 |

## Compatible products

### ferrule

|                                                                                    |                                                                                                                |         |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------|
|  | <b>Item no.: 216-101</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated  | 216-101 |
|  | <b>Item no.: 216-102</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated | 216-102 |
|  | <b>Item no.: 216-103</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated    | 216-103 |

|                                                                                    |                                                                                                                                                                            |         |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|    | <b>Item no.: 216-104</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated                                                                          | 216-104 |
|    | <b>Item no.: 216-106</b><br>Ferrule; Sleeve for 2.5 mm² / AWG 14; uninsulated; electro-tin plated                                                                          | 216-106 |
|    | <b>Item no.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated                                                                          | 216-121 |
|    | <b>Item no.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated                                                                         | 216-122 |
|    | <b>Item no.: 216-123</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated                                                                            | 216-123 |
|    | <b>Item no.: 216-124</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated                                                                          | 216-124 |
|    | <b>Item no.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated                                                                         | 216-131 |
|    | <b>Item no.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated                                                                         | 216-132 |
|    | <b>Item no.: 216-141</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92  | 216-141 |
|   | <b>Item no.: 216-142</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | 216-142 |
|  | <b>Item no.: 216-143</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92    | 216-143 |
|  | <b>Item no.: 216-144</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92  | 216-144 |
|  | <b>Item no.: 216-151</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated                                                                         | 216-151 |
|  | <b>Item no.: 216-152</b><br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated                                                                         | 216-152 |
|  | <b>Item no.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated                                                                            | 216-201 |
|  | <b>Item no.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated                                                                           | 216-202 |
|  | <b>Item no.: 216-203</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated                                                                              | 216-203 |
|  | <b>Item no.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated                                                                            | 216-204 |
|  | <b>Item no.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated                                                                            | 216-221 |
|                                                                                    | <b>Item no.: 216-222</b>                                                                                                                                                   |         |

|                                                                                   |                                                                                                                                                                          |         |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|    | Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated                                                                                                     | 216-222 |
|    | <b>Item no.: 216-223</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated                                                                            | 216-223 |
|    | <b>Item no.: 216-224</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated                                                                          | 216-224 |
|    | <b>Item no.: 216-241</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90  | 216-241 |
|    | <b>Item no.: 216-242</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90 | 216-242 |
|    | <b>Item no.: 216-243</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90    | 216-243 |
|    | <b>Item no.: 216-244</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90  | 216-244 |
|    | <b>Item no.: 216-262</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90 | 216-262 |
|    | <b>Item no.: 216-263</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90    | 216-263 |
|   | <b>Item no.: 216-264</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90  | 216-264 |
|  | <b>Item no.: 216-284</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90  | 216-284 |
|  | <b>Item no.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated                                                                         | 216-301 |
|  | <b>Item no.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated                                                                         | 216-302 |
|  | <b>Item no.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated                                                                         | 216-321 |
|  | <b>Item no.: 216-322</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated                                                                         | 216-322 |

## Marking accessories

|                                                                                                                                                                                   |                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <b>Item no.: 210-332/500-202</b><br>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  | 210-332<br>/500-202 |
| <b>Item no.: 210-332/500-204</b><br>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 | 210-332<br>/500-204 |

**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

/500-205

210-332

**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

/500-206

210-332

**tools****Item no.: 210-657**

Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short

210-657

**Item no.: 210-720**

Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm

210-720

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