

**Data sheet | Item number: 235-778**

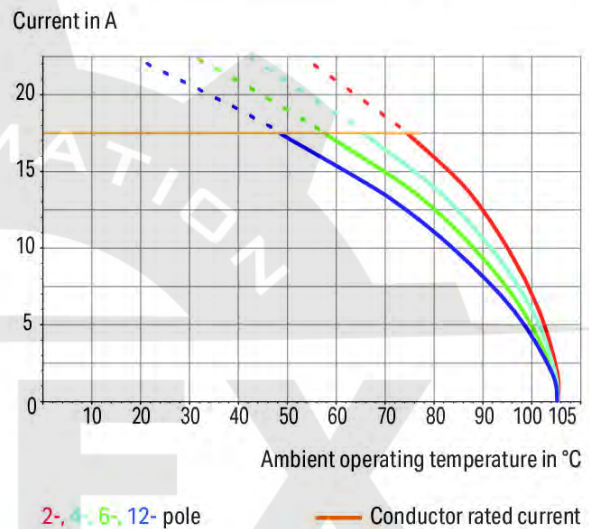
Stackable PCB terminal block; Push-button; 1.5 mm<sup>2</sup>; Pin spacing 3.81 mm;  
1-pole; Push-in CAGE CLAMP®



235-778



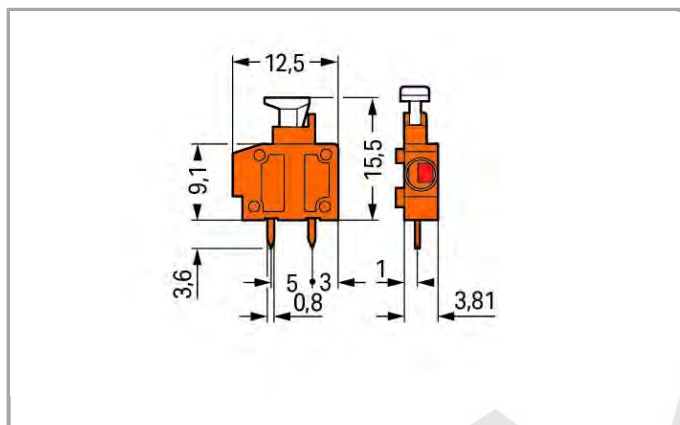
**Current-Carrying Capacity Curve**  
Pin spacing: 3.81 mm / Conductor cross-section: 1.5 mm<sup>2</sup>"e"  
Based on: EN 60512-5-2 / Reduction factor: 1



RoHS Compliant

[BOMcheck.net](https://www.bomcheck.net)

Color:



### Item description

- Modular PCB terminal blocks with push-buttons for custom terminal strip assemblies
- Push-in terminations of solid and ferruled conductors
- Convenient termination/removal of fine-stranded conductors via push-buttons

### Data

#### Electrical data

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

|                                 |        |
|---------------------------------|--------|
| Rated voltage (III / 3)         | 200 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)          | 500 V  |
| Rated impulse voltage (II / 2)  | 4 kV   |
| Rated current                   | 17.5 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  |

## Connection data

|                                                             |                                              |
|-------------------------------------------------------------|----------------------------------------------|
| Connection technology                                       | Push-in CAGE CLAMP®                          |
| Actuation type                                              | Push-button                                  |
| Solid conductor                                             | 0.5 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG  |
| Fine-stranded conductor                                     | 0.75 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG |
| Fine-stranded conductor with ferrule with plastic collar    | 0.25 ... 1 mm <sup>2</sup>                   |
| Fine-stranded conductor with ferrule without plastic collar | 0.25 ... 1 mm <sup>2</sup>                   |
| Strip length                                                | 9 ... 10 mm / 0.35 ... 0.39 inch             |
| Conductor entry angle to the PCB                            | 0°                                           |
| No. of poles                                                | 1                                            |
| Total number of connection points                           | 1                                            |
| Total number of potentials                                  | 1                                            |
| Number of connection types                                  | 1                                            |
| Number of levels                                            | 1                                            |

## Geometrical Data

|                                   |                            |
|-----------------------------------|----------------------------|
| Pin spacing                       | 3.81 mm / 0.15 inch        |
| Width                             | 5.3 mm / 0.209 inch        |
| Height                            | 19.1 mm / 0.752 inch       |
| Height from the surface           | 15.5 mm / 0.61 inch        |
| Depth                             | 12.5 mm / 0.492 inch       |
| Solder pin length                 | 3.6 mm                     |
| Solder pin dimensions             | 0.4 x 0.8 mm               |
| Drilled hole diameter (tolerance) | 1 <sup>- ... +0.1</sup> mm |

## PCB contact

|                                     |                                    |
|-------------------------------------|------------------------------------|
| PCB contact                         | THT                                |
| Solder pin arrangement              | within the terminal block, in line |
| Number of solder pins per potential | 2                                  |

## Material Data

|                             |                                        |
|-----------------------------|----------------------------------------|
| 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                   | 0.01 MJ                                |

|        |         |
|--------|---------|
| Weight | 0.581 g |
|--------|---------|

## Environmental Requirements

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

## Commercial data

|                    |                     |
|--------------------|---------------------|
| Product Group      | 4 (Printed Circuit) |
| Country of origin  | CN                  |
| GTIN               | 4044918833028       |
| Customs Tariff No. | 85369010000         |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                               | Approval                                     | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|----------------------------------------------|--------------------------|------------------|
|    | CCA<br>DEKRA Certification B.V.              | EN 60947                 | NTR NL-7144      |
|  | CCA<br>DEKRA Certification B.V.              | EN 60947                 | 2149549.02       |
|  | CCA<br>DEKRA Certification B.V.              | EN 60998                 | NTR NL-6919      |
|  | CCA<br>DEKRA Certification B.V.              | EN 60947-7-4             | NTR NL-7625      |
|  | VDE<br>VDE Prüf- und Zertifizierungsinstitut | EN 60947                 | 40029328         |

### Ship Approvals

| Logo                                                                               | Approval                                         | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------|------------------|
|  | DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE000016Z       |

## 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.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated                                                                          | 216-121 |
|    | <b>Item no.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated                                                                         | 216-122 |
|    | <b>Item no.: 216-123</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated                                                                            | 216-123 |
|   | <b>Item no.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated                                                                         | 216-131 |
|  | <b>Item no.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated                                                                         | 216-132 |
|  | <b>Item no.: 216-141</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 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 mm <sup>2</sup> / 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 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92    | 216-143 |
|  | <b>Item no.: 216-151</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated                                                                         | 216-151 |
|  | <b>Item no.: 216-152</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated                                                                         | 216-152 |
|  | <b>Item no.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated                                                                            | 216-201 |
|  | <b>Item no.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated                                                                           | 216-202 |
|  | <b>Item no.: 216-203</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated                                                                              | 216-203 |
|  | <b>Item no.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated                                                                            | 216-221 |

|                                                                                    |                                                                                                                                                                                      |                      |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
|     | <b>Item no.: 216-222</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated                                                                         | 216-222              |
|     | <b>Item no.: 216-223</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated                                                                            | 216-223              |
|     | <b>Item no.: 216-241</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 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 mm <sup>2</sup> / 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 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90    | 216-243              |
|     | <b>Item no.: 216-262</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 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 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90    | 216-263              |
|                                                                                    | <b>Item no.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated                                                                         | 216-301              |
|    | <b>Item no.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated                                                                         | 216-302              |
|                                                                                    | <b>Item no.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated                                                                         | 216-321              |
|   | <b>Item no.: 216-322</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated                                                                         | 216-322              |
| <b>Marking accessories</b>                                                         |                                                                                                                                                                                      |                      |
|                                                                                    | <b>Item no.: 210-332/381-202</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>/ 381-202 |
|                                                                                    | <b>Item no.: 210-332/381-204</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>/ 381-204 |
|                                                                                    | <b>Item no.: 210-332/381-205</b><br>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      | 210-332<br>/ 381-205 |
|                                                                                    | <b>Item no.: 210-332/381-206</b><br>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    | 210-332<br>/ 381-206 |
| <b>End plate</b>                                                                   |                                                                                                                                                                                      |                      |
|  | <b>Item no.: 235-100</b><br>End plate; snap-fit type; 1 mm thick                                                                                                                     | 235-100              |
|  | <b>Item no.: 235-200</b><br>End plate; snap-fit type; 1 mm thick                                                                                                                     | 235-200              |

|                                                                                     |                                                                                                         |         |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------|
|     | <b>Item no.: 235-400</b><br>End plate; snap-fit type; 1 mm thick                                        | 235-400 |
|     | <b>Item no.: 235-500</b><br>End plate; snap-fit type; 1 mm thick                                        | 235-500 |
|     | <b>Item no.: 235-550</b><br>End plate; snap-fit type; 1 mm thick                                        | 235-550 |
|     | <b>Item no.: 235-600</b><br>End plate; snap-fit type; 1 mm thick                                        | 235-600 |
|     | <b>Item no.: 235-700</b><br>End plate; snap-fit type; 1 mm thick                                        | 235-700 |
|     | <b>Item no.: 235-800</b><br>End plate; snap-fit type; 1 mm thick                                        | 235-800 |
|     | <b>Item no.: 235-850</b><br>End plate; snap-fit type; 1 mm thick                                        | 235-850 |
| <b>tools</b>                                                                        |                                                                                                         |         |
|     | <b>Item no.: 210-657</b><br>Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short  | 210-657 |
|    | <b>Item no.: 210-720</b><br>Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm | 210-720 |
| <b>General accessories</b>                                                          |                                                                                                         |         |
|  | <b>Item no.: 235-316</b><br>Spacer; for doubling the pin spacing                                        | 235-316 |

## Downloads

## Documentation

## Additional Information

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