

## Data sheet | Item number: 736-654

Double-deck PCB terminal block; 2.5 mm<sup>2</sup>; Pin spacing 7.62 mm; 2 x 4-pole;  
CAGE CLAMP®



736-654



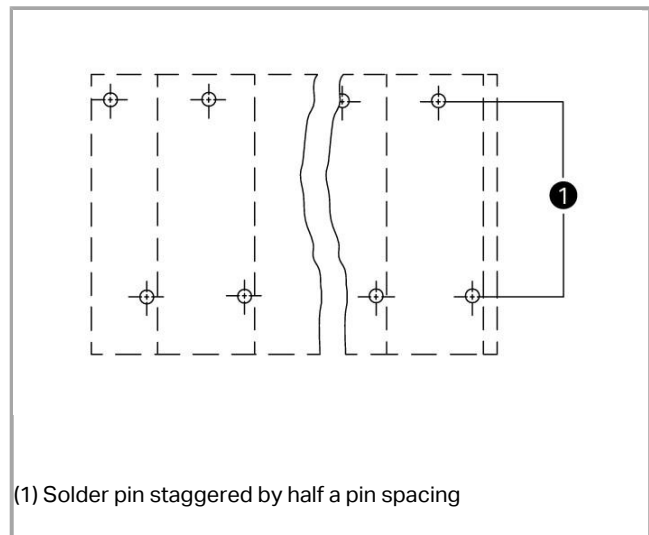
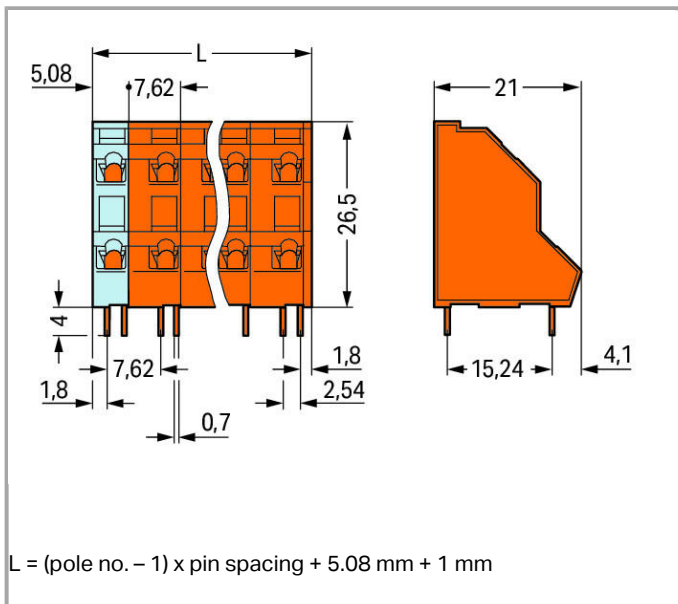
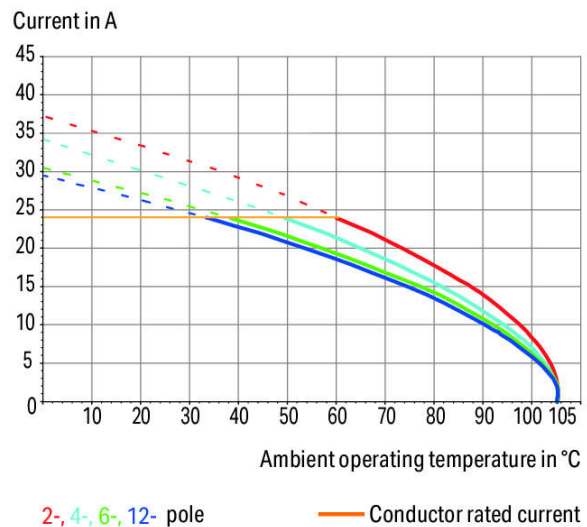
RoHS  
Compliant

BOMcheck.net

Color: ■

### Current-Carrying Capacity Curve

Pin spacing: 5.08 mm / Conductor cross-section: 2.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1



## Item description



- PCB terminal strips with screwdriver-actuated CAGE CLAMP®
- High-density, double-deck design for space-efficient wiring of multiple conductors in confined areas
- Custom marking for all termination levels

## Data

### Electrical data

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

| Ratings note                      | Between the modules |
|-----------------------------------|---------------------|
| Rated voltage (III / 3)           | 400 V               |
| Rated impulse voltage (III / 3)   | 6 kV                |
| Rated voltage (III / 2)           | 630 V               |
| Rated impulse voltage (III / 2)   | 6 kV                |
| Rated voltage (II / 2)            | 1000 V              |
| Rated impulse voltage (II / 2)    | 6 kV                |
| Rated current                     | 21 A                |
| Ratings according to 2            | IEC/EN 60664-1      |
| Ratings note 2                    | Between the decks   |
| Rated voltage (III / 3) 2         | 320 V               |
| Rated impulse voltage (III / 3) 2 | 4 kV                |
| Rated voltage (III / 2) 2         | 320 V               |
| Rated impulse voltage (III / 2) 2 | 4 kV                |
| Rated voltage (II / 2) 2          | 630 V               |
| Rated impulse voltage (II / 2) 2  | 4 kV                |
| Rated current (2)                 | 21 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                                       | CAGE CLAMP®                                  |
| Actuation type                                              | Operating tool                               |
| Solid conductor                                             | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor                                     | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 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                                                | 5 ... 6 mm / 0.2 ... 0.24 inch               |
| Conductor entry angle to the PCB                            | 45°                                          |
| Note (conductor cross-section)                              | 12 AWG: THHN, THWN                           |
| No. of poles                                                | 4                                            |
| Total number of connection points                           | 8                                            |
| Total number of potentials                                  | 8                                            |
| Number of connection types                                  | 1                                            |
| Number of levels                                            | 2                                            |

## Geometrical Data

|                                   |                                |
|-----------------------------------|--------------------------------|
| Pin spacing                       | 7.62 mm / 0.3 inch             |
| Width                             | 28.86 mm / 1.136 inch          |
| Height                            | 30.5 mm / 1.201 inch           |
| Height from the surface           | 26.5 mm / 1.043 inch           |
| Depth                             | 21 mm / 0.827 inch             |
| Solder pin length                 | 4 mm                           |
| Solder pin dimensions             | 0.7 x 0.7 mm                   |
| Drilled hole diameter (tolerance) | 1.3 <sup>(- ... +0.1)</sup> mm |

## PCB contact

|                                     |                                      |
|-------------------------------------|--------------------------------------|
| PCB contact                         | THT                                  |
| Solder pin arrangement              | within the terminal block, staggered |
| Number of solder pins per potential | 1                                    |

## Material Data

|                             |                                        |
|-----------------------------|----------------------------------------|
| Color                       | orange                                 |
| 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       | 0.184 MJ   |
| Weight          | 10.744 g   |

## Environmental Requirements

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

## Commercial data

|                    |                     |
|--------------------|---------------------|
| Product Group      | 4 (Printed Circuit) |
| Country of origin  | PL                  |
| GTIN               | 4044918916257       |
| Customs Tariff No. | 85369010000         |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                               | Approval                        | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|---------------------------------|--------------------------|------------------|
|   | CCA<br>DEKRA Certification B.V. | EN 60947                 | 2160584.37       |
|  | CCA<br>DEKRA Certification B.V. | EN 60947                 | NTR NL-7143      |
|  | CCA<br>DEKRA Certification B.V. | IEC 60947-7-4            | NTR NL-7307      |
|  | CSA<br>DEKRA Certification B.V. | C22.2 No. 158            | 70049157         |

### Ship Approvals

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

## UL-Approvals

| Logo                                                                             | Approval                                | Additional Approval Text | Certificate name  |
|----------------------------------------------------------------------------------|-----------------------------------------|--------------------------|-------------------|
|  | cURus<br>Underwriters Laboratories Inc. | UL 1059                  | E45172,<br>sec. 6 |
|  | cURus<br>Underwriters Laboratories Inc. | UL 1059                  | E45172,<br>sec. 6 |

## Compatible products

## tools

|                                                                                    |                                                                                                         |         |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------|
|    | Item no.: 210-657<br>Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short         | 210-657 |
|   | Item no.: 210-658<br>Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short; angled | 210-658 |
|  | Item no.: 210-720<br>Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm        | 210-720 |

## Marking accessories

|  |                                                                                                                                                                          |                      |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
|  | Item no.: 210-332/762-020<br>Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive | 210-332<br>// 62-020 |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|

## ferrule

|                                                                                    |                                                                                                         |         |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------|
|  | Item no.: 216-101<br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated  | 216-101 |
|  | Item no.: 216-102<br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated | 216-102 |
|  | Item no.: 216-103<br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated    | 216-103 |
|  | Item no.: 216-104<br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated  | 216-104 |
|  | Item no.: 216-106<br>Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; uninsulated; electro-tin plated  | 216-106 |
|  | Item no.: 216-121<br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated  | 216-121 |
|  | Item no.: 216-122<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 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><br>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 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.: 216-244</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / 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 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.: 216-264</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / 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 mm <sup>2</sup> / 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 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 |

## Downloads

## CAD/CAE - Smart Data

## CAD data

|                     |     |          |
|---------------------|-----|----------|
| 3D Download 736-654 | URL | Download |
|---------------------|-----|----------|

## PCB libraries

|                                                                                                               |                      |                |          |
|---------------------------------------------------------------------------------------------------------------|----------------------|----------------|----------|
| TARGET Library for WAGO PCB Terminal Blocks<br>Compatible with TARGET PCB Design Software Version 17.x        | 1.1.0<br>Oct 6, 2014 | zip<br>27.1 MB | Download |
| EAGLE Library for WAGO PCB Terminal Blocks<br>Compatible with EAGLE PCB Design Software Version 6.x or higher | 2.1<br>Oct 6, 2014   | zip<br>23.9 MB | Download |
| DesignSpark Library for WAGO PCB Terminal Blocks<br>Compatible with DesignSpark PCB Version 4.x or higher     | 2.1<br>Oct 6, 2014   | zip<br>22.5 MB | Download |



Subject to changes.

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