

## Data sheet | Item number: 737-616

Triple-deck PCB terminal block; 2.5 mm<sup>2</sup>; Pin spacing 7.62 mm; 3 x 16-pole;  
CAGE CLAMP®



737-616

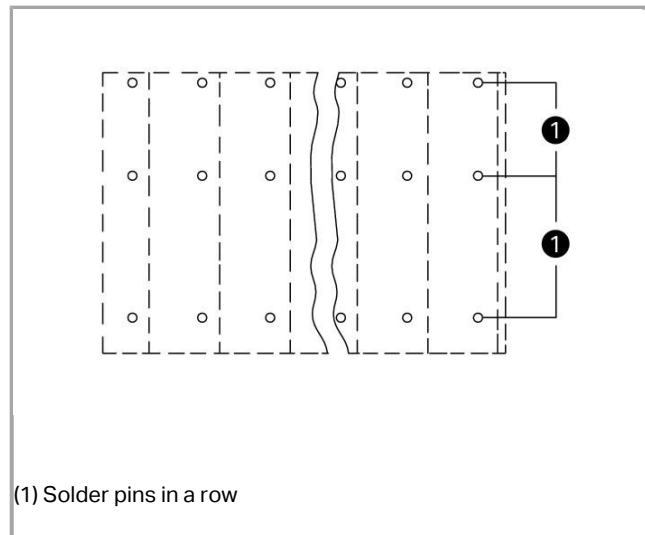
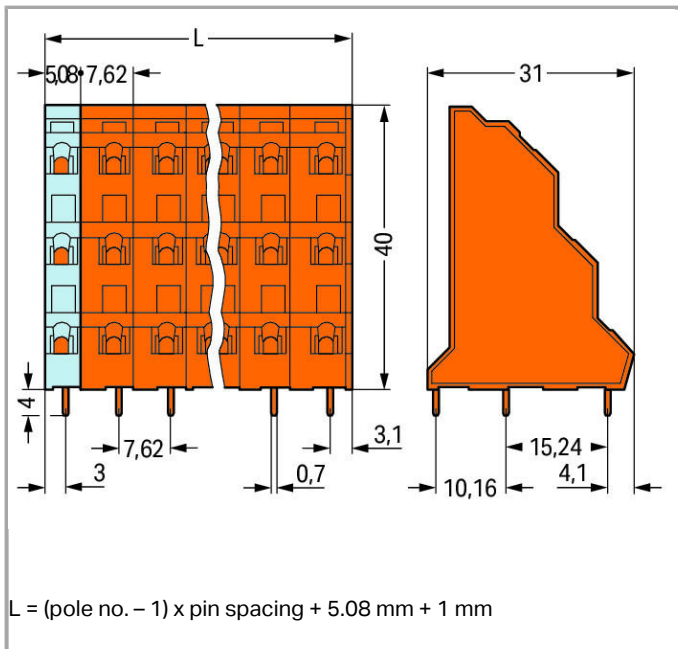
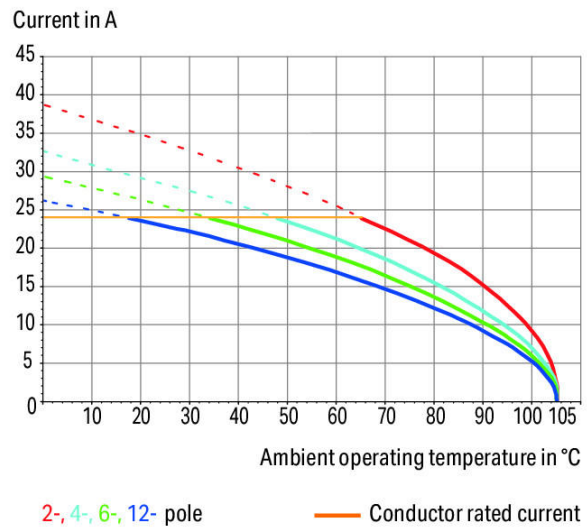


RoHS Compliant

[BOMcheck.net](https://www.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 mm² / 28 ... 12 AWG |
| Fine-stranded conductor                                     | 0.08 ... 2.5 mm² / 28 ... 12 AWG |
| Fine-stranded conductor with ferrule with plastic collar    | 0.25 ... 1.5 mm²                 |
| Fine-stranded conductor with ferrule without plastic collar | 0.25 ... 2.5 mm²                 |
| 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                                                | 16                               |
| Total number of connection points                           | 48                               |
| Total number of potentials                                  | 48                               |
| Number of connection types                                  | 1                                |
| Number of levels                                            | 3                                |

## Geometrical Data

|                                   |                                |
|-----------------------------------|--------------------------------|
| Pin spacing                       | 7.62 mm / 0.3 inch             |
| Width                             | 120.3 mm / 4.736 inch          |
| Height                            | 44 mm / 1.732 inch             |
| Height from the surface           | 40 mm / 1.575 inch             |
| Depth                             | 31 mm / 1.22 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, in line |
| 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       | 1.238 MJ   |
| Weight          | 75.598 g   |

## Environmental Requirements

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

## Commercial data

|                    |                     |
|--------------------|---------------------|
| Product Group      | 4 (Printed Circuit) |
| Country of origin  | PL                  |
| GTIN               | 4045454022488       |
| 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             | 2169331.28       |
|  | CCA<br>DEKRA Certification B.V. | EN 60947                 | NTR NL-7150      |
|  | 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  
Underwriters Laboratories Inc.

UL 1059

E45172,  
sec. 6



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UL 1059

E45172,  
sec. 6

## Compatible products

### Marking accessories

Item no.: 210-332/762-020

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

// 62-020

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.: 210-658

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

210-658



Item no.: 210-720

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

210-720

#### ferrule



Item no.: 216-101

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated

216-101



Item no.: 216-102

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated

216-102



Item no.: 216-103

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated

216-103



Item no.: 216-104

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated

216-104



Item no.: 216-106

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; uninsulated; electro-tin plated

216-106



Item no.: 216-121

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated

216-121



Item no.: 216-122

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated

216-122



Item no.: 216-123

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated

216-123

Item no.: 216-124



Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated

216-124



**Item no.: 216-131**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

216-131



**Item no.: 216-132**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

216-132



**Item no.: 216-141**

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



**Item no.: 216-142**

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



**Item no.: 216-143**

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



**Item no.: 216-144**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

216-144



**Item no.: 216-151**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

216-151



**Item no.: 216-152**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

216-152



**Item no.: 216-201**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated

216-201



**Item no.: 216-202**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated

216-202



**Item no.: 216-203**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated

216-203



**Item no.: 216-204**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated

216-204



**Item no.: 216-221**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated

216-221



**Item no.: 216-222**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated

216-222



**Item no.: 216-223**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated

216-223



**Item no.: 216-224**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated

216-224



**Item no.: 216-241**

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



**Item no.: 216-242**

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;<br>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<br>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<br>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;<br>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<br>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<br>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 737-616 | 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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