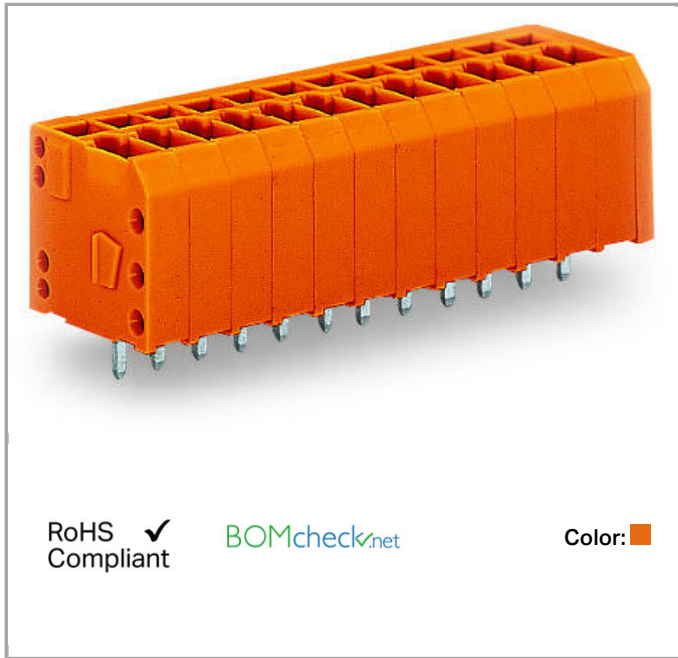


# Data sheet | Item number: 739-339

PCB terminal block; 1.5 mm<sup>2</sup>; Pin spacing 3.81 mm; 9-pole; CAGE CLAMP®



739-339



RoHS  
Compliant

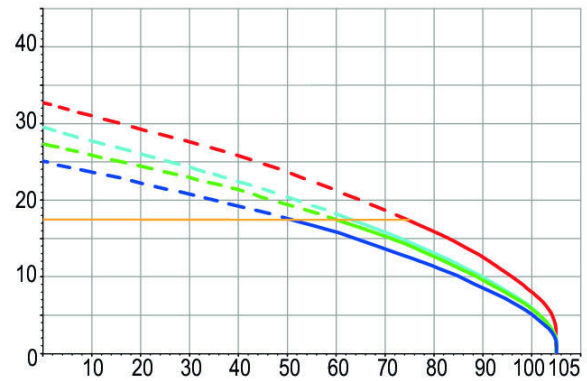
BOMcheck.net

Color: ■

## Current-Carrying Capacity Curve

Pin spacing: 3.5 mm / Conductor cross-section: 1.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1

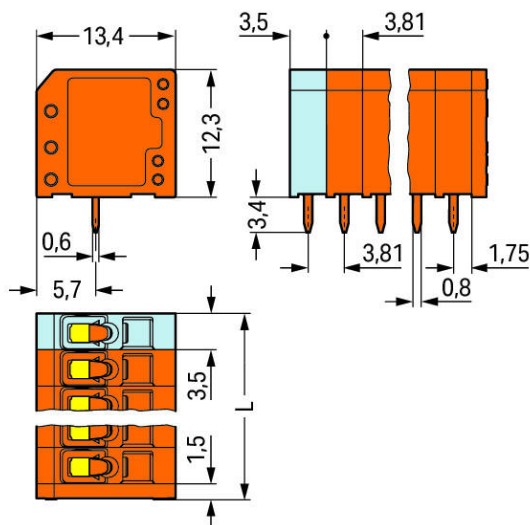
Current in A



Ambient operating temperature in °C

2, 4, 6, 12-pole

Conductor rated current



L = pole no. x pin spacing + 3.5 mm + 1.5 mm



## Item description

- PCB terminal strips with screwdriver-actuated CAGE CLAMP®
- Vertical conductor entry and operating direction for space-saving positioning/grouping

## 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) | 15 A  |
| Rated voltage UL (Use Group D) | 300 V |
| Rated current UL (Use Group D) | 10 A  |

### Connection data

|                                                             |                                              |
|-------------------------------------------------------------|----------------------------------------------|
| Connection technology                                       | CAGE CLAMP®                                  |
| Actuation type                                              | Operating tool                               |
| Solid conductor                                             | 0.08 ... 1.5 mm <sup>2</sup> / 28 ... 14 AWG |
| Fine-stranded conductor                                     | 0.08 ... 1.5 mm <sup>2</sup> / 28 ... 14 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 ... 1.5 mm <sup>2</sup>                 |
| Strip length                                                | 5 ... 6 mm / 0.2 ... 0.24 inch               |
| Conductor entry angle to the PCB                            | 90°                                          |
| Note (conductor cross-section)                              | 14 AWG: THHN, THWN                           |
| No. of poles                                                | 9                                            |
| Total number of connection points                           | 9                                            |
| Total number of potentials                                  | 9                                            |
| Number of connection types                                  | 1                                            |
| Number of levels                                            | 1                                            |



## Geometrical Data

|                                   |                                |
|-----------------------------------|--------------------------------|
| Pin spacing                       | 3.81 mm / 0.15 inch            |
| Width                             | 35.79 mm / 1.409 inch          |
| Height                            | 15.7 mm / 0.618 inch           |
| Height from the surface           | 12.3 mm / 0.484 inch           |
| Depth                             | 13.4 mm / 0.528 inch           |
| Solder pin length                 | 3.4 mm                         |
| Solder pin dimensions             | 0.6 x 0.8 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, 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                   | 0.121 MJ                               |
| Weight                      | 6.317 g                                |

## Environmental Requirements

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

## Commercial data

|                    |                     |
|--------------------|---------------------|
| Product Group      | 4 (Printed Circuit) |
| Country of origin  | PL                  |
| GTIN               | 4044918301794       |
| Customs Tariff No. | 85369010000         |

## Approvals / Certificates

### Country specific Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|------|----------|--------------------------|------------------|
|------|----------|--------------------------|------------------|

|                                                                                  |                                       |               |                            |
|----------------------------------------------------------------------------------|---------------------------------------|---------------|----------------------------|
|  | CCA<br>DEKRA Certification B.V.       | EN 60947      | 2160584.36                 |
|  | CCA<br>DEKRA Certification B.V.       | EN 60947      | NTR NL-<br>7142 CCA<br>739 |
|  | CSA<br>DEKRA Certification B.V.       | C22.2 No. 158 | 1711139                    |
|  | KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947-7-4  | 2194438:01                 |

#### UL-Approvals

| Logo                                                                              | Approval                             | Additional Approval Text | Certificate name    |
|-----------------------------------------------------------------------------------|--------------------------------------|--------------------------|---------------------|
|  | UL<br>Underwriters Laboratories Inc. | UL 1059                  | 20180629-<br>E45172 |

#### Compatible products

#### Marking accessories

|                                                                                                                                                                                   |                                                                                       |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|
| <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 |
| <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 |
| <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 |
| <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 |

#### 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 mm² / AWG 20; uninsulated; electro-tin plated                                                                         | 216-102 |
|    | <b>Item no.: 216-103</b><br>Ferrule; Sleeve for 1 mm² / 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.: 216-121</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.: 216-221</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 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>check</b>                                                                       |                                                                                                                                                                                      |         |
|  | <b>Item no.: 210-136</b><br>Test plug; 2 mm Ø; with 500 mm cable                                                                                                                     | 210-136 |
|  | <b>Item no.: 210-137</b><br>Test plug; 2.3 mm Ø; with 500 mm cable                                                                                                                   | 210-137 |
| <b>tools</b>                                                                       |                                                                                                                                                                                      |         |
|  | <b>Item no.: 210-647</b><br>Operating tool with partially insulated shaft; Blade (2.5 x 0.4) mm; short                                                                               | 210-647 |
|  | <b>Item no.: 210-648</b><br>Operating tool with partially insulated shaft; Blade (2.5 x 0.4) mm; short; angled                                                                       | 210-648 |
|  | <b>Item no.: 210-719</b><br>Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm                                                                              | 210-719 |

## Downloads

## CAD/CAE - Smart Data

## CAD data



|                                                                                                               |  |                      |                            |
|---------------------------------------------------------------------------------------------------------------|--|----------------------|----------------------------|
| 3D Download 739-339                                                                                           |  | URL                  | Download                   |
| <b>PCB libraries</b>                                                                                          |  |                      |                            |
| 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<br>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<br>Download |
| 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<br>Download |

Subject to changes.