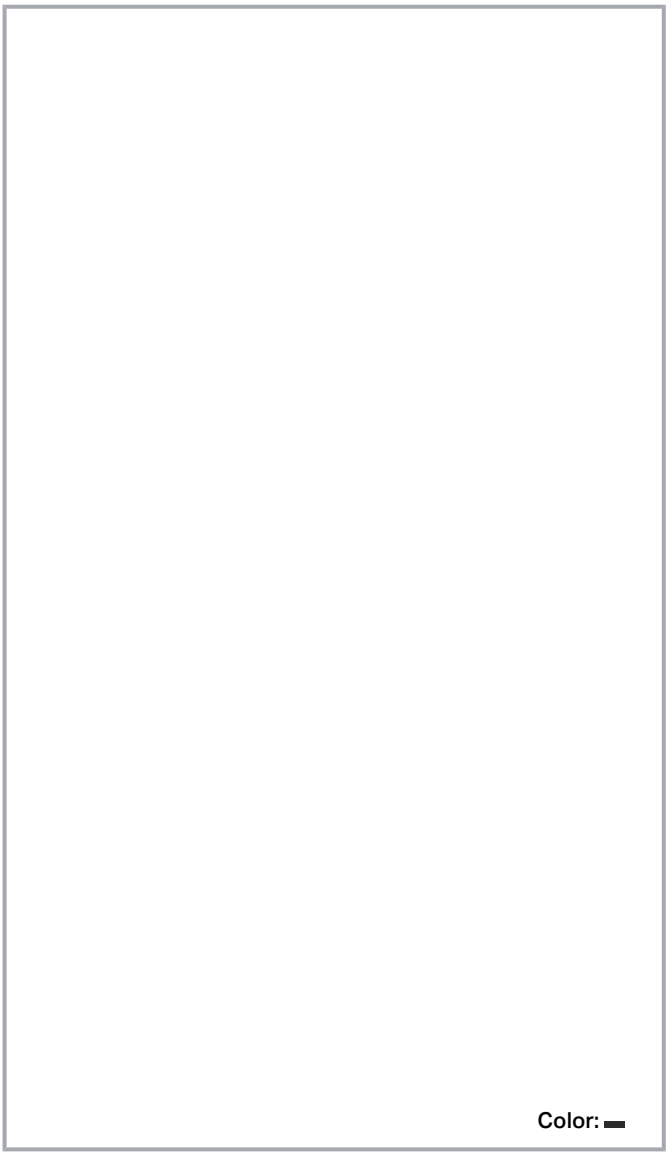
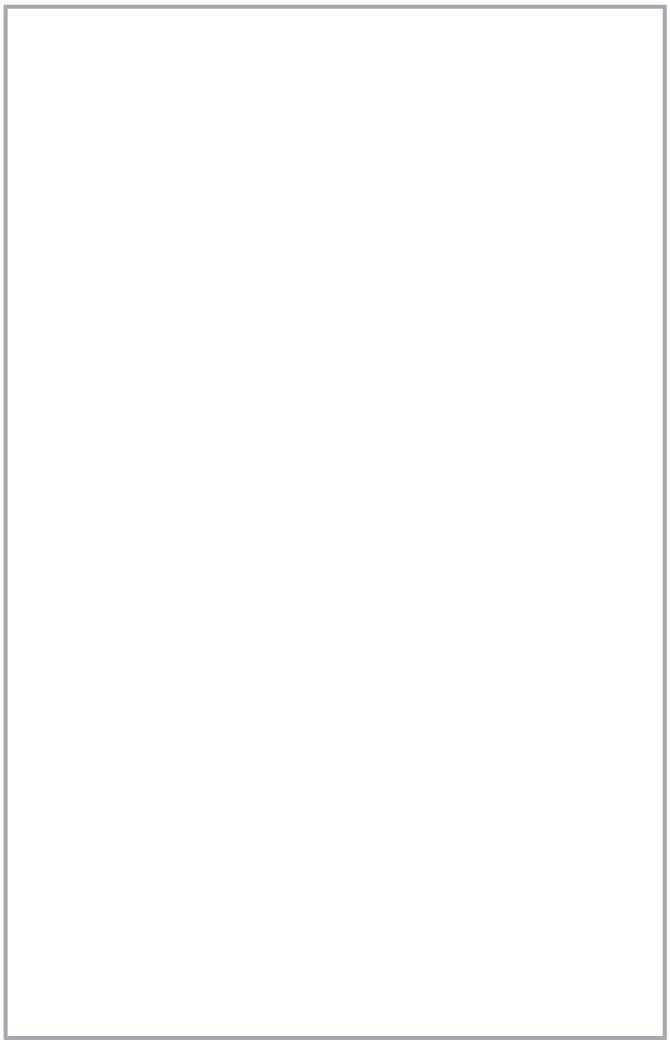
**Data sheet | Item number: 2086-1129/300-000**

THR PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.5 mm; 9-pole; Push-in CAGE CLAMP®; Solder pin length 1.5 mm; 1,50 mm²; black

www.wago.com/2086-1129_300-000



Subject to changes. Please also observe the further product documentation!

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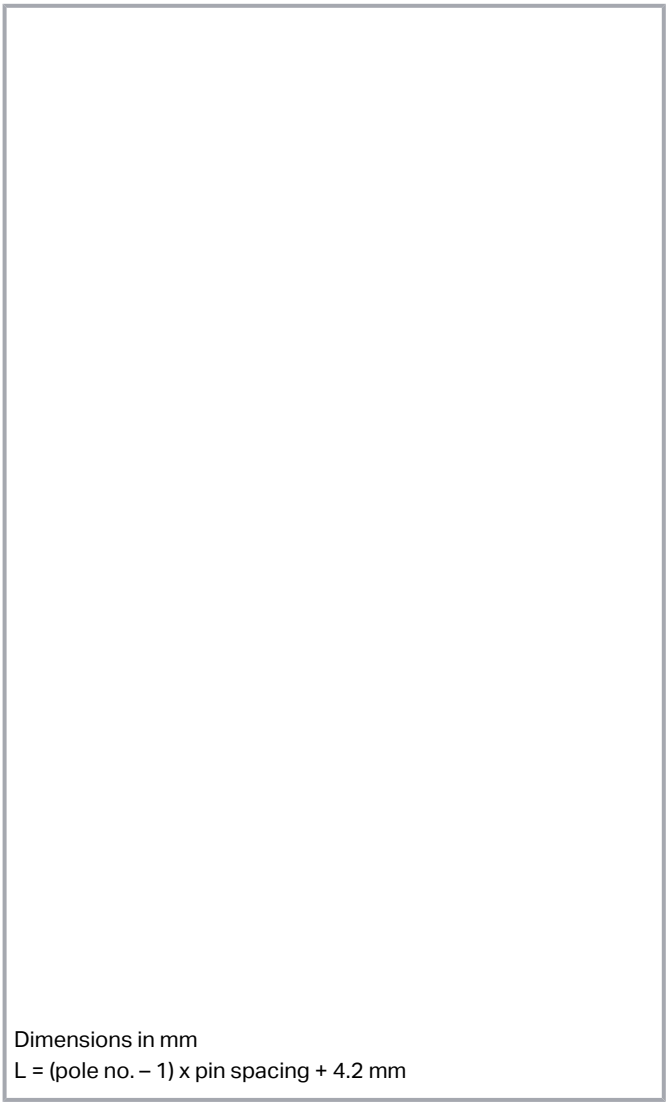
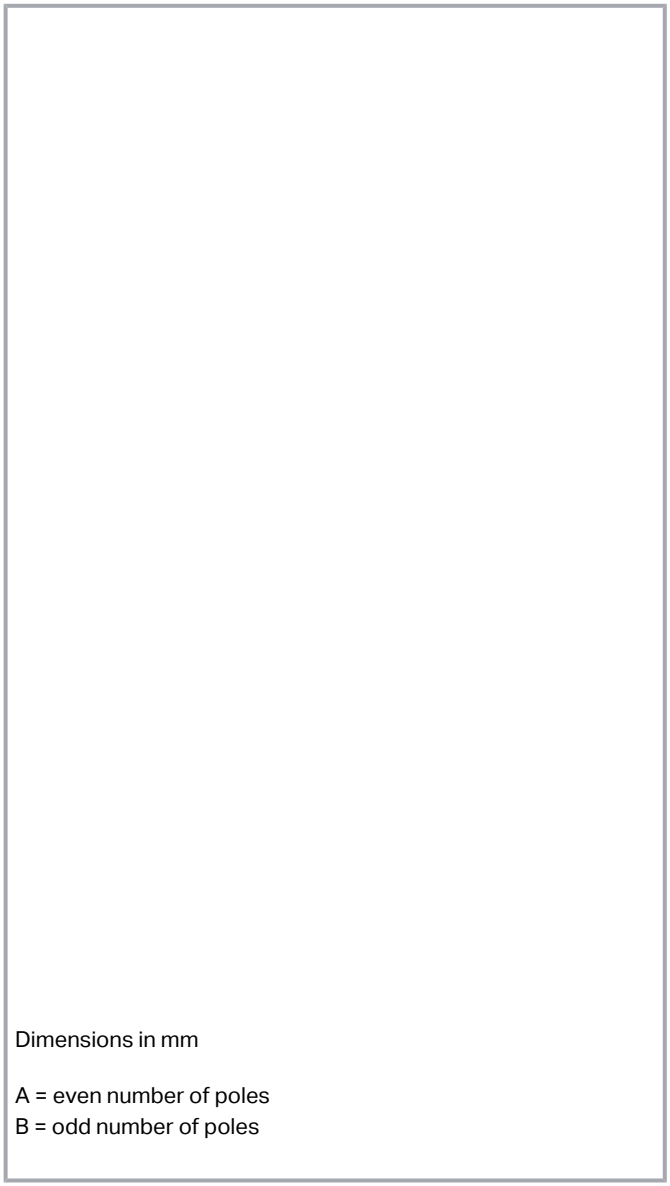


Dimensions in mm
L = (pole no. – 1) x pin spacing + 4.2 mm



Dimensions in mm

A = even number of poles
B = odd number of poles

## Item description

- Ideal for compact device connection, panel feedthrough and tight spaces
- Push-in CAGE CLAMP® allows push-in termination of solid and fine-stranded conductors with ferrules
- SMD and THR variants available
- Delivery in tape-and-reel packaging for full integration into SMT soldering process
- Push-button moves in direction of conductor connection
- Conductor connection and mating direction both parallel and perpendicular to the PCB
- Choice of double pin spacing or alternating pin spacing, 3.5 and 5 mm pin spacing

Subject to changes. Please also observe the further product documentation!

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## Data
## Electrical data

### IEC Approvals

| | |
|---|---|
| Ratings per | IEC/EN 60664-1 |
| Rated voltage (III / 3) | 250 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated voltage (III/2) | 320 V |
| Rated surge voltage (III/2) | 4 kV |
| Nominal voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |
| Rated current | 17.5 A |
| Legend (ratings) | (III / 2) ≙ Overvoltage category III / Pollution degree 2 |

### UL Approvals

| | |
|---|---|
| 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 C) | 300 V |
| Rated current UL (Use Group C) | 10 A |
| Rated voltage UL (Use Group D) | 300 V |
| Rated current UL (Use Group D) | 10 A |

### CSA Approvals

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

| | |
|---|---|
| Total number of potentials | 9 |
| Number of connection types | 1 |
| Number of levels | 1 |

## Connection 1

| | |
|---|---|
| Connection technology | Push-in CAGE CLAMP® |
| Actuation type | Push-button |
| Solid conductor | 0.14 … 1.5 mm² / 24 … 16 AWG |
| Fine-stranded conductor | 0.14 … 1.5 mm² / 24 … 16 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 … 0.75 mm² |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 … 1.5 mm² |
| Strip length | 8 … 9 mm / 0.31 … 0.35 inch |
| Conductor connection direction to PCB | 90 ° |
| Number of poles | 9 |

## Physical data

| | |
|---|---|
| Pin spacing | 3.5 mm / 0.138 inch |
| Width | 32.2 mm / 1.268 inch |
| Height | 15.1 mm / 0.594 inch |
| Height from the surface | 13.6 mm / 0.535 inch |
| Depth | 7.8 mm / 0.307 inch |
| Solder pin length | 1.5 mm |
| Solder pin dimensions | 0.3 x 0.8 mm |
| Plated through-hole diameter (THR) | 1 $^{(+0.1)}$ mm |

## PCB contact

| | |
|---|---|
| PCB Contact | THR |
| Solder pin arrangement | over the entire terminal strip (staggered) |
| Number of solder pins per potential | 1 |

## Material data

| | |
|---|---|
| Color | black |
| Insulation material | Polyphthalamide (PPA GF) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Chrome nickel spring steel (CrNi) |
| Contact material | Electrolytic copper ($E_{Cu}$) |
| Contact plating | tin-plated |
| Fire load | 0.123 MJ |
| Weight | 4.2 g |

Subject to changes. Please also observe the further product documentation!

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## Environmental requirements

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

## Commercial data

| | |
|---|---|
| PU (SPU) | 96 Stück |
| Packaging type | BOX |
| Country of origin | CH |
| GTIN | 4055144090314 |
| Customs tariff number | 85369010000 |

## Approvals / Certificates

### Country specific Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|---|---|---|---|
| | **CB**<br>DEKRA Certification B.V. | IEC 60947-7-4 | NL-74022 |
| | **CSA**<br>DEKRA Certification B.V. | C22.2 | 80060692 |
| | **KEMA/KEUR**<br>DEKRA Certification B.V. | EN 60947-7-4 | 71-119449 |

### UL-Approvals

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

## Optional accessories

### Tools

Operating tool

| | | |
|---|---|---|
| | **Item no.: 210-719**<br>Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft | www.wago.com/210-719 |

### Testing accessories

Subject to changes. Please also observe the further product documentation!

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Testing accessories

| | | |
|---|---|---|
| | Item no.: 735-500<br>Test pin; 1 mm Ø; with solder connection for test wire | www.wago.com/735-500 |
| | Item no.: 859-500<br>Test pin; 1 mm Ø; with solder connection for test wire | www.wago.com/859-500 |

**Ferrules**

Ferrule

| | | |
|---|---|---|
|  | Item no.: 216-101<br>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-101 |
|  | Item no.: 216-104<br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-104 |
|  | Item no.: 216-102<br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-102 |
|  | Item no.: 216-103<br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated | www.wago.com/216-103 |
|  | Item no.: 216-142<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 | www.wago.com/216-142 |
|  | Item no.: 216-132<br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-132 |
|  | Item no.: 216-121<br>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-121 |
|  | Item no.: 216-143<br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | www.wago.com/216-143 |
|  | Item no.: 216-131<br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-131 |
|  | Item no.: 216-141<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 | www.wago.com/216-141 |
|  | Item no.: 216-152<br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-152 |
|  | Item no.: 216-202<br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray | www.wago.com/216-202 |
|  | Item no.: 216-151<br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-151 |
|  | Item no.: 216-144<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; silver-colored | www.wago.com/216-144 |



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| | | |
|---|---|---|
|  | **Item no.: 216-201**<br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white | www.wago.com/216-201 |
|  | **Item no.: 216-241**<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; white | www.wago.com/216-241 |
| | **Item no.: 216-242**<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; gray | www.wago.com/216-242 |
| | **Item no.: 216-301**<br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow | www.wago.com/216-301 |
| | **Item no.: 216-302**<br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green | www.wago.com/216-302 |

## Downloads

### Documentation

**Additional Information**

| | | | |
|---|---|---|---|
| Technical explanations | 2019 Apr 3 | pdf<br>2.0 MB | Download |
| THR Soldering Process | | pdf<br>548.2 kB | Download |

## CAD files

**CAE data**

| | | |
|---|---|---|
| ZUKEN Portal 2086-1129/300-000 | URL | Download |

**CAD data**

| | | |
|---|---|---|
| 2D/3D Models 2086-1129/300-000 | URL | Download |

## Environmental Product Compliance

**Compliance Search**

| | | |
|---|---|---|
| Environmental Product Compliance 2086-1129/300-000<br>THR PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.5 mm; 9-pole; Push-in CAGE CLAMP®; Solder pin length 1.5 mm; 1,50 mm²; black | URL | Download |

## Installation Notes

Subject to changes. Please also observe the further product documentation!

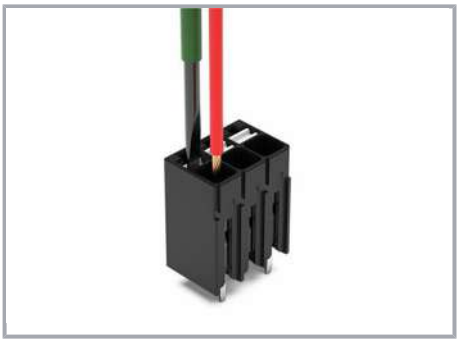
### Conductor termination

Inserting solid conductor via push-in termination.

### Conductor removal

Removing fine-stranded conductors via push-buttons.

### Conductor termination



Inserting and removing fine-stranded conductors via push-buttons.

### Testing

Subject to changes. Please also observe the further product documentation!

Testing via 1 mm Ø test pin.

Touch contact with current bar.

### Marking

Pole marking via direct marking
perpendicular to conductor entry.