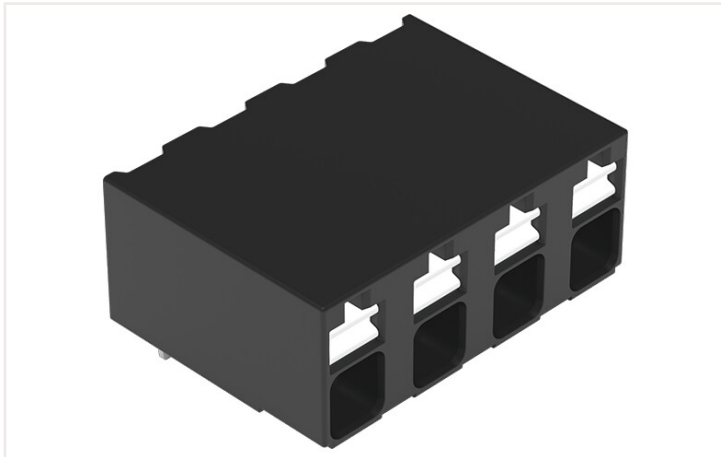


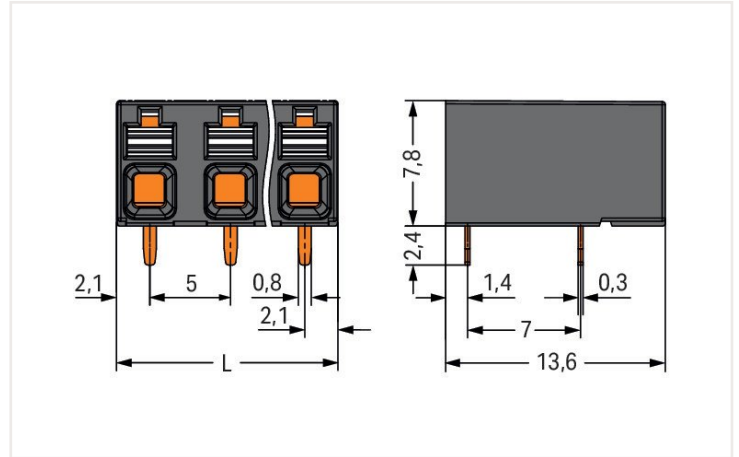
Data sheet | Item number: 2086-3224

THR PCB terminal block; push-button; 1.5 mm²; Pin spacing 5 mm; 4-pole; Push-in CAGE CLAMP®; 1,50 mm²; black

<https://www.wago.com/2086-3224>

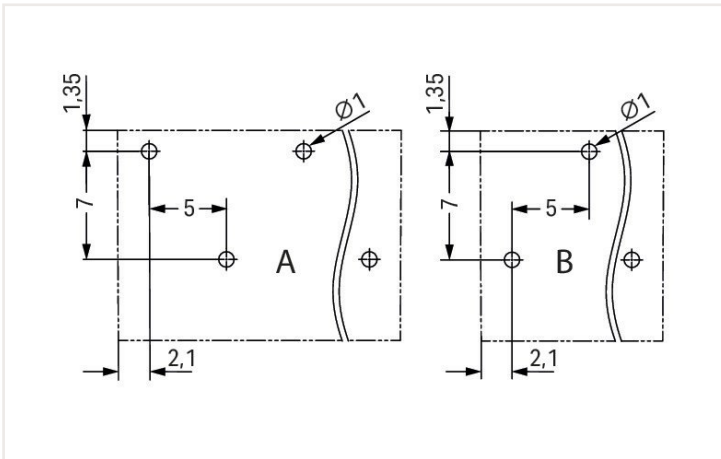


Color: ■ black



Dimensions in mm

L = (pole no. - 1) x pin spacing + 4.2 mm

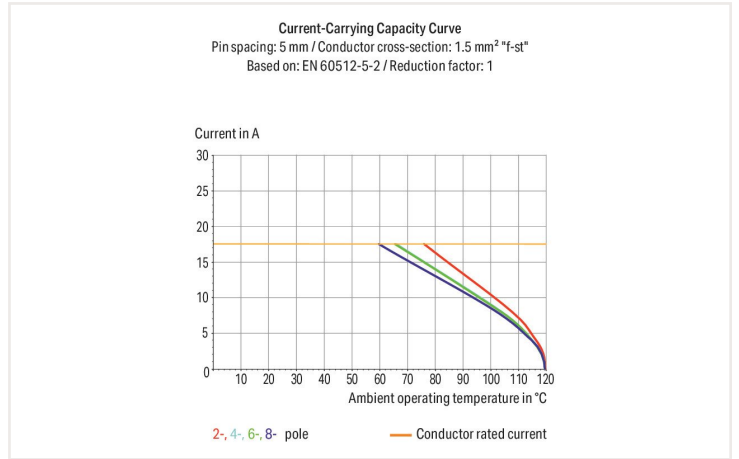


Dimensions in mm

A = Even pole numbers

B = Odd pole numbers

- Ideal for compact device connection, panel feedthrough and tight spaces
- Push-in CAGE CLAMP® termination of solid and ferruled conductors
- 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
- Optionally available with in-line or staggered pins (3.5 and 5 mm pin spacing)



Electrical data

| Ratings per IEC/EN | |
|-------------------------------|---|
| Ratings per | IEC/EN 60664-1 |
| Nominal voltage (III/3) | 500 V |
| Rated impulse voltage (III/3) | 6 kV |
| Rated voltage (III/2) | 630 V |
| Rated impulse voltage (III/2) | 6 kV |
| Nominal voltage (II/2) | 1000 V |
| Rated surge voltage (II/2) | 6 kV |
| Rated current | 17.5 A |
| Legend (ratings) | (III / 2) Δ Overvoltage category III / Pollution degree 2 |

| Ratings per UL | |
|--------------------------------|---------|
| 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 |

Ratings per CSA

| | |
|---------------------------------|-------|
| 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 | 4 |
| 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 mm ² / 28 ... 16 AWG |
| Fine-stranded conductor | 0.14 ... 1.5 mm ² / 26 ... 14 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 0.75 mm ² |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 1.5 mm ² |
| Strip length | 8 ... 9 mm / 0.31 ... 0.35 inch |
| Conductor connection direction to PCB | 0° |
| Pole number | 4 |

Physical data

| | |
|------------------------------------|----------------------|
| Pin spacing | 5 mm / 0.197 inch |
| Width | 19.2 mm / 0.756 inch |
| Depth | 13.6 mm / 0.535 inch |
| Solder pin length | 2.4 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

| | |
|-----------------------------|--|
| Note (material data) | Information on material data can be found here |
| 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 |
| Fire load | 0.062 MJ |
| Weight | 2.5 g |

Environmental requirements

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

Commercial data

| | |
|-------------------------------------|---------------|
| PU (SPU) | 168 Pieces |
| Country of origin VKOrg Germany | CH |
| GTIN | 4055144089738 |
| Customs tariff number VKOrg Germany | 85369010000 |

Approvals and certificates

Country specific Approvals



| Approval | Standard | Certificate name |
|---------------------------------------|---------------|------------------|
| CB DEKRA Certification B.V. | IEC 60947-7-4 | NL-74022 |
| CSA DEKRA Certification B.V. | C22.2 | 80060692 |
| KEMA/KEUR DEKRA Certification B.V. | EN 60947-7-4 | 71-119449 |

UL-Approvals



| Approval | Standard | Certificate name |
|--------------------------------------|----------|------------------|
| UL Underwriters Laboratories Inc. | UL 1059 | E45172 |

Downloads

Environmental Product Compliance

Compliance Search

| | |
|--|-------------------|
| Environmental Product Compliance 2086-3224 | ↓ |
|--|-------------------|

Documentation

Additional Information

| | | | |
|-------------------|------------|-------------------|-------------------|
| Technical Section | 03.04.2019 | pdf 1949.09 KB | ↓ |
| | | pdf 535.32 KB | ↓ |

CAD/CAE-Data

CAD data

| | |
|---------------------------|-------------------|
| 2D/3D Models 2086-3224 | ↓ |
|---------------------------|-------------------|

CAE data

| | |
|---------------------------|-------------------|
| ZUKEN Portal 2086-3224 | ↓ |
|---------------------------|-------------------|

1 Compatible products

1.1 Optional accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



Item no.: 216-301
 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

Item no.: 216-151
 Ferrule; Sleeve for 0.25 mm² / AWG 24; un-insulated; electro-tin plated

Item no.: 216-131
 Ferrule; Sleeve for 0.25 mm² / AWG 24; un-insulated; electro-tin plated; silver-colored

Item no.: 216-302
 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item no.: 216-132
 Ferrule; Sleeve for 0.34 mm² / AWG 24; un-insulated; electro-tin plated

Item no.: 216-152
 Ferrule; Sleeve for 0.34 mm² / AWG 24; un-insulated; electro-tin plated

Item no.: 216-241
 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

Item no.: 216-201
 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



Item no.: 216-141
 Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

Item no.: 216-101
 Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored

Item no.: 216-121
 Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored

Item no.: 216-242
 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



Item no.: 216-202
 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray

Item no.: 216-142
 Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

Item no.: 216-102
 Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored

Item no.: 216-103
 Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated



Item no.: 216-143
 Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

Item no.: 216-144
 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored

Item no.: 216-104
 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored

1.1.2 Test and measurement

1.1.2.1 Testing accessories



Item no.: 859-500
 WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 10 mm un-insulated; Test lead for soldering up to 0,5mm²

Item no.: 735-500
 WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm un-insulated; Test lead for soldering up to 0,5mm²

1.1.3 Tool

1.1.3.1 Operating tool



Item no.: 210-719
 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation notes

Conductor termination



Inserting solid conductor via push-in termination.

Conductor termination



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

Conductor removal



Removing a conductor via push-button.

Testing



Testing via 1 mm Ø test pin.
Touch contact with current bar

Marking



Pole marking via direct marking perpendicular to conductor entry.