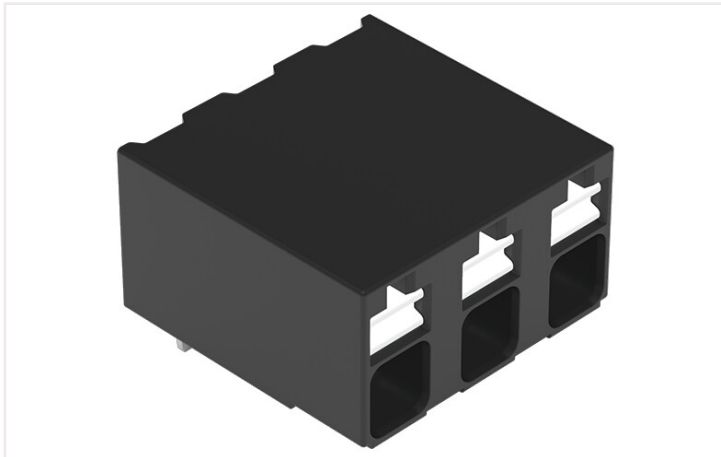


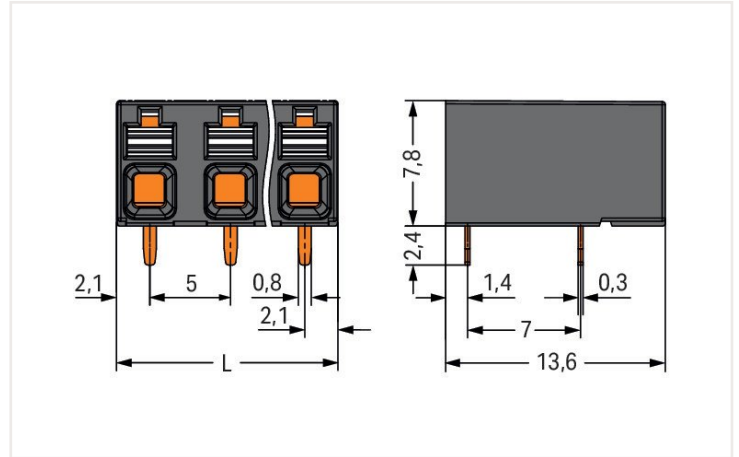
# Data sheet | Item number: 2086-3223

THR PCB terminal block; push-button; 1.5 mm<sup>2</sup>; Pin spacing 5 mm; 3-pole; Push-in CAGE CLAMP®; 1,50 mm<sup>2</sup>; black

<https://www.wago.com/2086-3223>

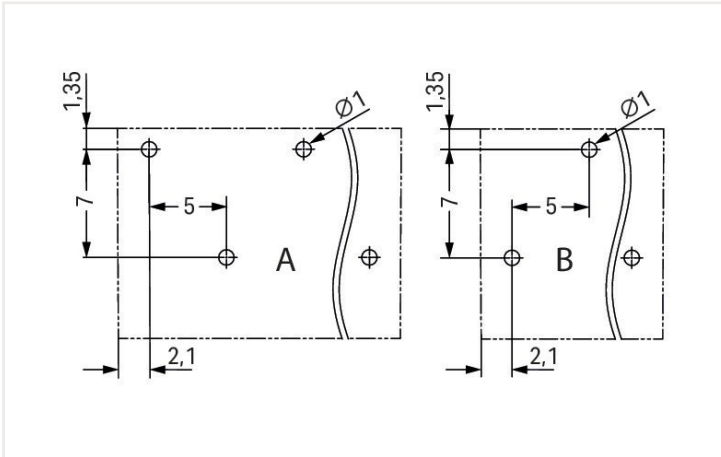


Color: ■ black



Dimensions in mm

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

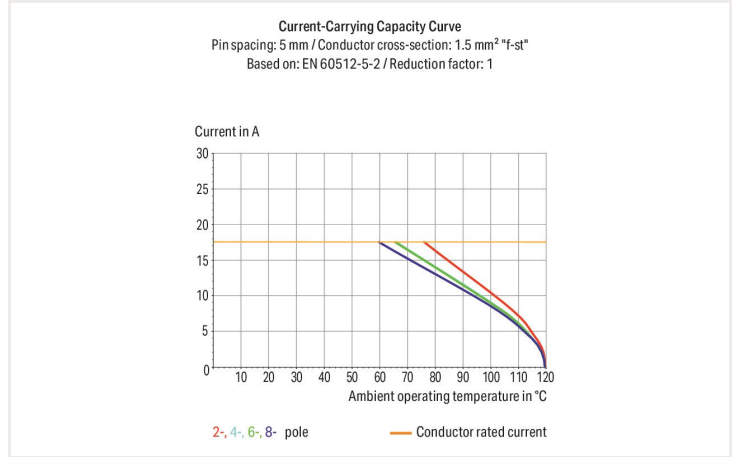


Dimensions in mm

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	3
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 <sup>2</sup> / 28 ... 16 AWG
Fine-stranded conductor	0.14 ... 1.5 mm <sup>2</sup> / 26 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 0.75 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1.5 mm <sup>2</sup>
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Conductor connection direction to PCB	0°
Pole number	3

### Physical data

Pin spacing	5 mm / 0.197 inch
Width	14.2 mm / 0.559 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)	<a href="#">Information on material data can be found here</a>
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 <sub>Cu</sub> )
Contact plating	Tin
Fire load	0.049 MJ
Weight	1.9 g

**Environmental requirements**

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

**Commercial data**

PU (SPU)	228 Pieces
Country of origin VKOrg Germany	CH
GTIN	4055144089684
Customs tariff number VKOrg Germany	85369010000

**Approvals and certificates**

**Country specific Approvals** **UL-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

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

**Downloads**

**Environmental Product Compliance**

**Compliance Search**

Environmental Product Compliance 2086-3223	<a href="#">↓</a>
--	-------------------

**Documentation**

**Additional Information**

Technical Section	03.04.2019	pdf 1949.09 KB	<a href="#">↓</a>
		pdf 535.32 KB	<a href="#">↓</a>

**CAD/CAE-Data**

**CAD data**

2D/3D Models 2086-3223	<a href="#">↓</a>
---------------------------	-------------------

**CAE data**

ZUKEN Portal 2086-3223	<a href="#">↓</a>
---------------------------	-------------------

## 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 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

**Item no.: 216-151**

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

**Item no.: 216-131**

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

**Item no.: 216-302**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item no.: 216-132**

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

**Item no.: 216-152**

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

**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; white

**Item no.: 216-201**

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



**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

**Item no.: 216-101**

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

**Item no.: 216-121**

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

**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; gray



**Item no.: 216-202**

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

**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

**Item no.: 216-102**

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

**Item no.: 216-103**

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



**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

**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; silver-colored

**Item no.: 216-104**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; 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 uninsulated; Test lead for soldering up to 0,5mm<sup>2</sup>

**Item no.: 735-500**

WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to 0,5mm<sup>2</sup>

### 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.