

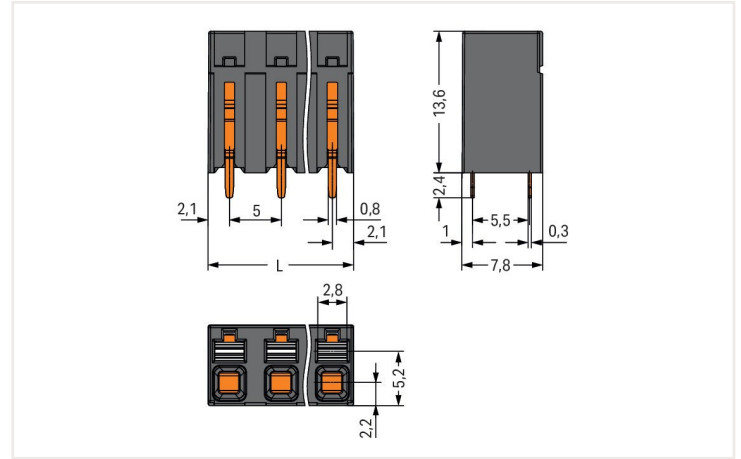
Data sheet | Item number: 2086-3103

THR PCB terminal block; push-button; 1.5 mm²; Pin spacing 5 mm; 3-pole; Push-in CAGE CLAMP®; 1,50 mm²; black

<https://www.wago.com/2086-3103>

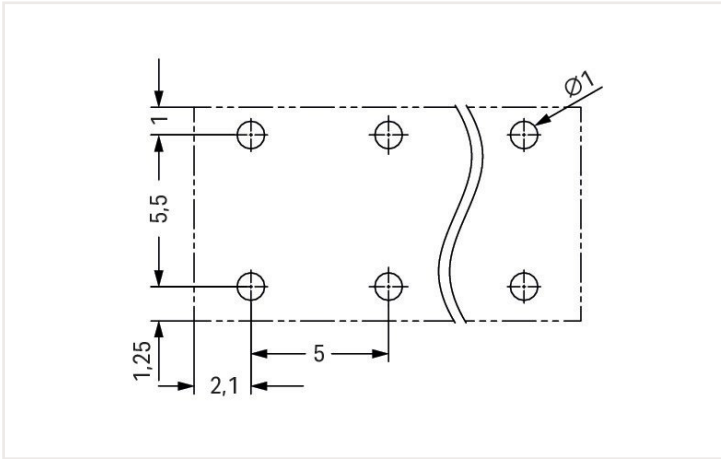


Color: ■ black

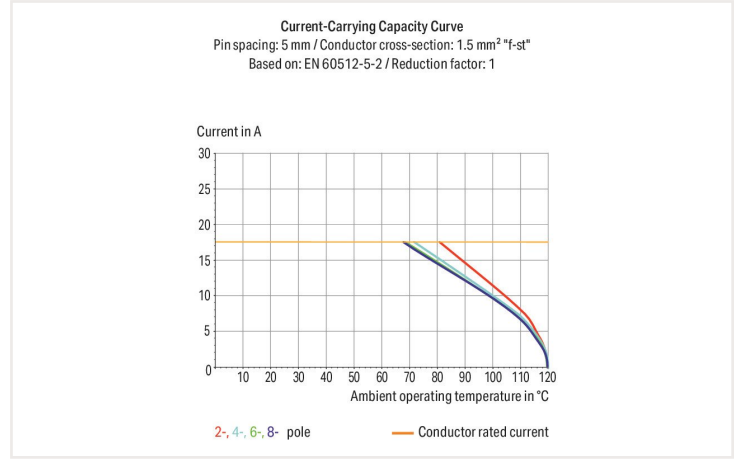


Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 4.2 \text{ mm}$



Dimensions in mm



- 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 UL	
Ratings per	IEC/EN 60664-1	Approvals per	UL 1059		
Nominal voltage (III/3)	320 V	Rated voltage UL (Use Group B)	300 V		
Rated impulse voltage (III/3)	4 kV	Rated current UL (Use Group B)	10 A		
Rated voltage (III/2)	320 V	Rated voltage UL (Use Group C)	300 V		
Rated impulse voltage (III/2)	4 kV	Rated current UL (Use Group C)	10 A		
Nominal voltage (II/2)	630 V	Rated voltage UL (Use Group D)	300 V		
Rated surge voltage (II/2)	4 kV	Rated current UL (Use Group D)	10 A		
Rated current	17.5 A				
Legend (ratings)	(III / 2) Δ Overvoltage category III / Pollution degree 2				

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 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	90°
Pole number	3

Physical data

Pin spacing	5 mm / 0.197 inch
Width	14.2 mm / 0.559 inch
Depth	7.8 mm / 0.307 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 (in-line)
Number of solder pins per potential	2

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	0.049 MJ
Weight	1.9 g

Environmental requirements

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

PU (SPU)	228 Pieces
Country of origin VKOrg Germany	CH
GTIN	4055144090291
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 2086-3103	↓
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Documentation

Additional Information

Technical Section	03.04.2019	pdf 1949.09 KB	↓
		pdf 535.32 KB	↓

CAD/CAE-Data

CAD data

2D/3D Models 2086-3103	↓
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CAE data

ZUKEN Portal 2086-3103	↓
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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; uninsulated; electro-tin plated

Item no.: 216-131

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; 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; uninsulated; electro-tin plated

Item no.: 216-152

Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; 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; 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 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored

Item no.: 216-121

Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; 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; 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 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored

Item no.: 216-103

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated



Item no.: 216-143

Ferrule; Sleeve for 1 mm² / 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 mm² / 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 mm² / 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 0,5mm²

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 0,5mm²

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.