

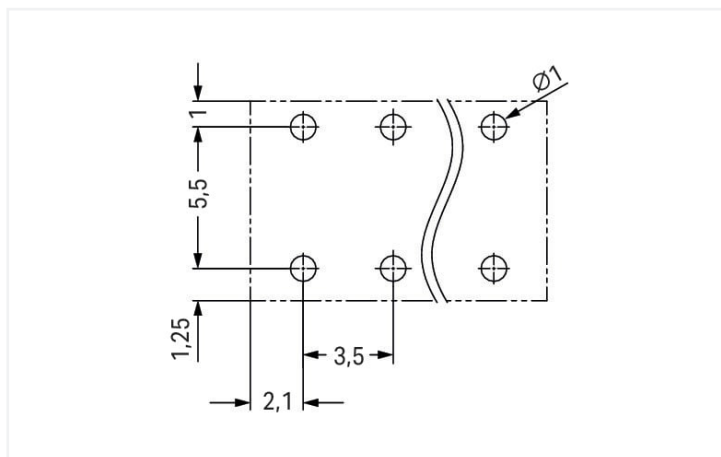
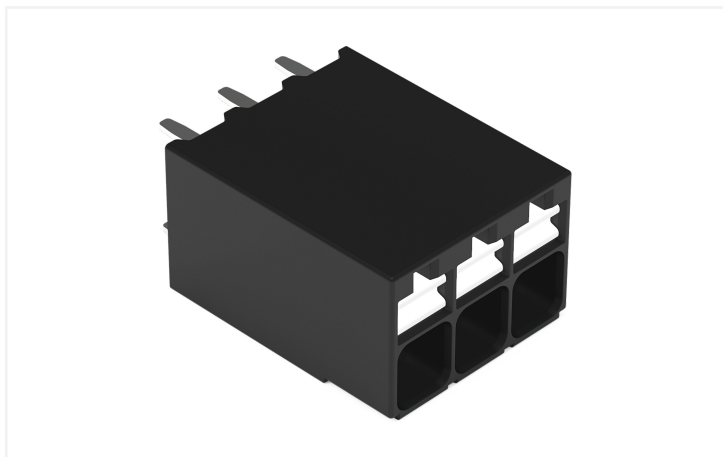
Data Sheet | Item Number: 2086-1103

THR PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; Push-in
CAGE CLAMP®; 1,50 mm²; black

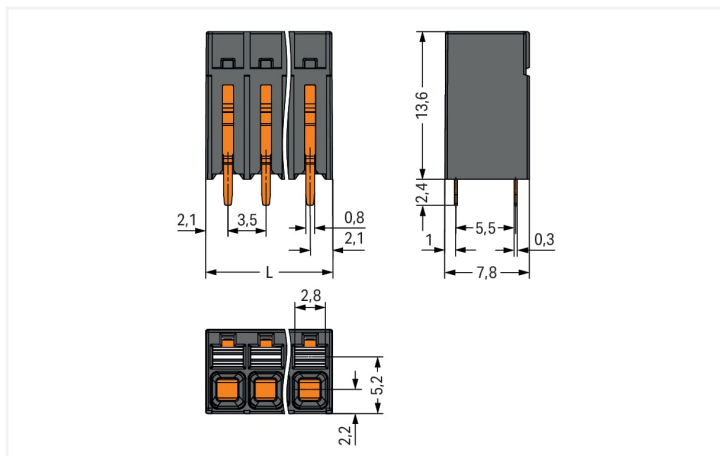
<https://www.wago.com/2086-1103>



Color: ■ black

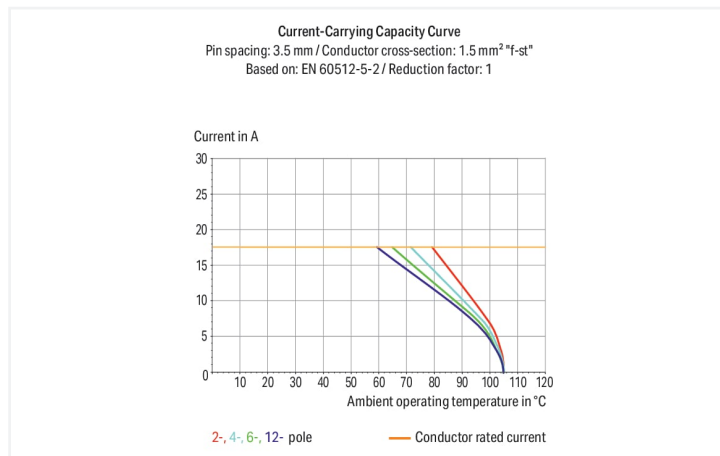


Dimensions in mm



Dimensions in mm

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



- Ideal for compact device connection, panel feedthrough and tight spaces
- Push-in CAGE CLAMP® termination of solid and ferruled fine-stranded conductors
- SMD and THR variants available
- Push-button moves in direction of conductor connection
- Conductor connection and mating direction parallel or perpendicular to the PCB
- Optionally available with in-line or staggered pins (3.5 and 5 mm pin spacing)

Notes

Note

Application notes: Suitable for lead-free, reflow-soldering profiles per DIN EN 61760-1 and IEC 60068-2-58 up to max. 260 °C peak temperature. Due to application-specific variables (component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.

Electrical data

Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	160 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV
Rated current	17.5 A	17.5 A	17.5 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	14 A	-	10 A

Approvals per	CSA		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	14 A	-	14 A

Connection data

Clamping units	3
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 inches
Conductor connection direction to PCB	90°
Pole number	3

Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	11.2 mm / 0.441 inches
Height	16 mm / 0.63 inches
Height from the surface	13.6 mm / 0.535 inches
Depth	7.8 mm / 0.307 inches
Solder pin length	2.4 mm
Solder pin dimensions	0.3 x 0.8 mm
Plated through-hole diameter (THR)	1 (+0.1) mm

Mechanical data

Suitable	suitable for Single Pair Ethernet (SPE)
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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 specifications can be found here
Color	black
Material group	I
Insulation material (main housing)	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	0.041 MJ
Weight	1.5 g
MSL per J-STD 020D	1

Environmental requirements

Limit temperature range	-60 ... +105 °C
Processing temperature	-35 ... +60 °C
Continuous operating temperature	-60 ... +105 °C

Commercial data

ETIM 9.0	EC002643
ETIM 8.0	EC002643
PU (SPU)	288 pcs
Packaging type	Box
Country of origin	CH
GTIN	4066966001624
Customs tariff number	85369010000

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 60947-7-4	NL-74022
CSA CSA Group	C22.2	80060692
KEMA/KEUR DEKRA Certification B.V.	EN 60947-7-4	71-119449
UL Underwriters Laboratories Inc.	UL 1059	E45172

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 2086-1103	↓

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	↓
		pdf 535.32 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 2086-1103	↓

CAE data	
ZUKEN Portal 2086-1103	↓

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule

<p>Item No.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; un-insulated; electro-tin plated; yellow</p>	<p>Item No.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; un-insulated; electro-tin plated; light turquoise</p>	<p>Item No.: 216-241 Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white</p>	<p>Item No.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; electro-tin plated; white</p>
<p>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</p>	<p>Item No.: 216-101 Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored</p>	<p>Item No.: 216-242 Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>	<p>Item No.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; gray</p>
<p>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</p>	<p>Item No.: 216-102 Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored</p>	<p>Item No.: 216-103 Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated</p>	<p>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</p>
<p>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</p>	<p>Item No.: 216-104 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored</p>		

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.