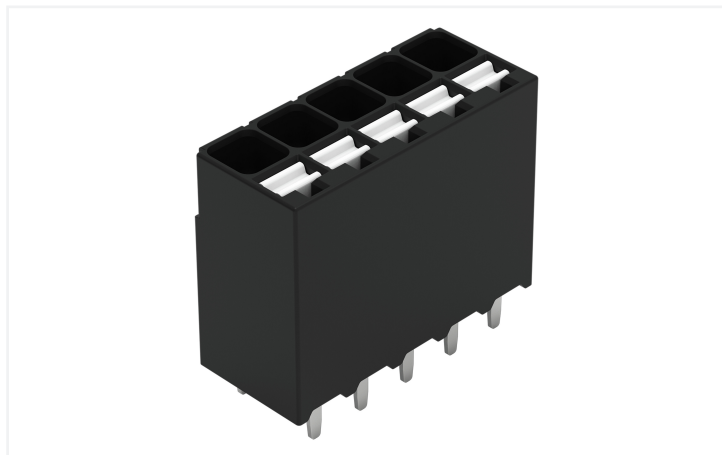


Data Sheet | Item Number: 2086-1105

THR PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.5 mm; 5-pole; Push-in
CAGE CLAMP®; black

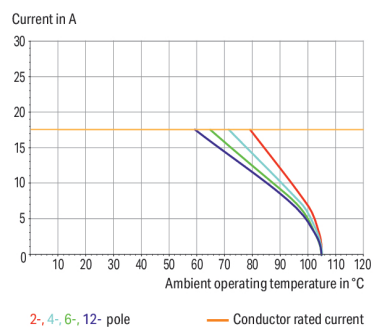
<https://www.wago.com/2086-1105>

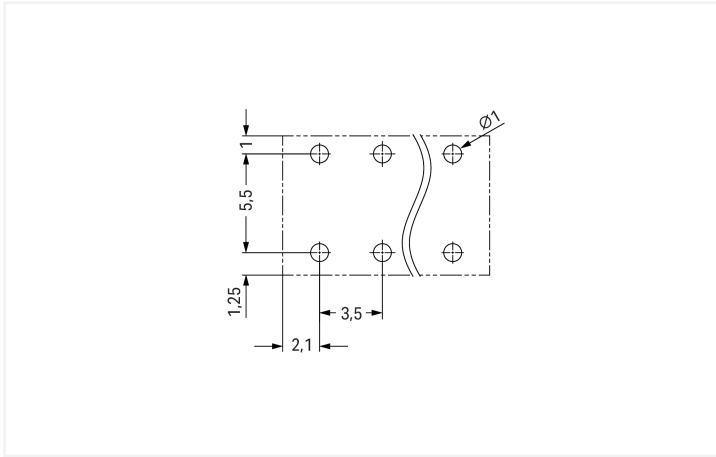


Color: ■ black

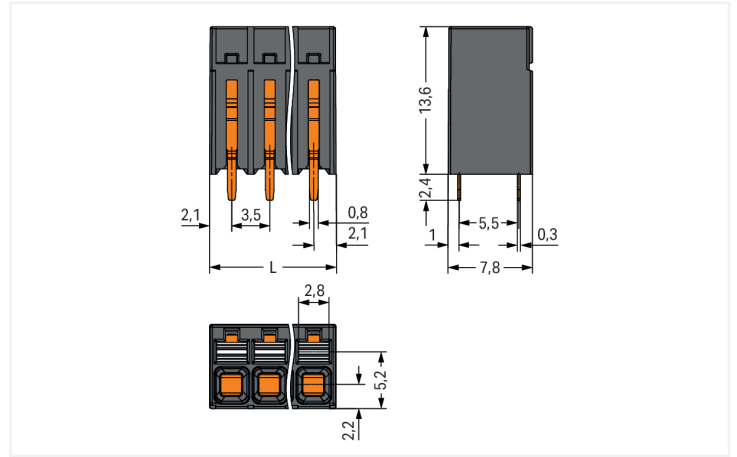


Current-Carrying Capacity Curve
Pin spacing: 3.5 mm / Conductor cross-section: 1.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 1





Dimensions in mm



Dimensions in mm

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

PCB terminal block, 2086 Series, solder pin dimensions 0.3 x 0.8 mm

This PCB terminal block (item number 2086-1105) streamlines wire connections, making them both quick and easy. You can count on tried and tested safety with these PCB terminal blocks, perfect for a wide variety of applications when designing your devices. Conductors can only be connected to this PCB terminal block if their strip length is between 8 and 9 mm. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this connector delivers reliable performance. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. Solid and fine-stranded conductors with ferrules can be inserted without the need for tools—all thanks to its pluggable design. The dimensions are (18.2 x 16 x 7.8) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.14 mm² to 1.5 mm².

Tin is used for coating the contact surfaces. This PCB terminal block is operated with a push-button. THR is used to assemble the PCB terminal block. The conductor is designed to be inserted into the board at a 90° angle..

Notes	
Note	<p>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.</p>

Electrical data

Ratings per	IEC/EN 60664-1		
Overtoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	160 V	160 V	320 V
Rated impulse withstand 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	5
Total number of potentials	5
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	5

Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	18.2 mm / 0.717 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

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	0.019 MJ
Weight	2.5 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

PU (SPU)	180 pcs
Packaging type	Box
Country of origin	CH
GTIN	4066966141443
Customs tariff number	85369010000

Product Classification

UNSPSC	39121409
ETIM 9.0	EC002643
ETIM 10.0	EC002643
ECCN	NO US CLASSIFICATION

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 2086-1105	↓
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Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB	
		pdf 535.32 KB	

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 2086-1105	ZUKEN Portal 2086-1105

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.: 216-302

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-201

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-101

Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored



Item No.: 216-202

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-102

Ferrule; Sleeve for 0.75 mm² / 18 AWG; 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.: 216-104

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.