Data Sheet | Item Number: 250-208/353-604/997-406

THR PCB terminal block; push-button; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; Push-in CAGE CLAMP®; in tape-and-reel packaging; black

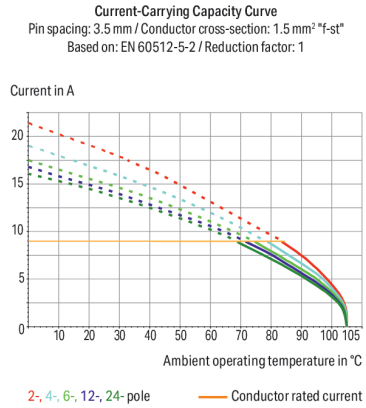
https://www.wago.com/250-208/353-604/997-406

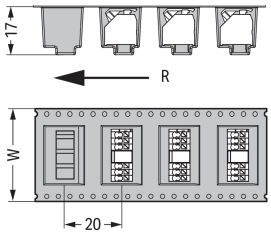


Color: ■ black

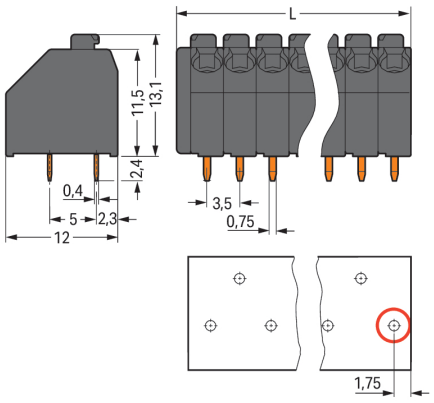


Similar to illustration





Dimensions in mm
W = tape widthR = feed direction



Dimensions in mm
L = (pole no. x pin spacing) + 1.5 mmFirst solder pin, front right (red circle)

PCB terminal block, 250 Series, black

Connect conductors quickly and securely with this PCB terminal block (item number 250-208/353-604/997-406). It is a universal connector that can be used practically anywhere, e.g., as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Conductors should only be connected to this PCB terminal block if their strip length is between 8.5 and 9.5 mm . Featuring one conductor terminal along with Push-in CAGE CLAMP®, this product is highly versatile. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, boasting a key feature: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. Dimensions: (29.5 x 15.5 x 12) mm (width x height x depth). Depending on the conductor type, this PCB terminal block is ideal for conductor cross sections ranging from 0.2 mm² to 1.5 mm².

Push-in CAGE CLAMP® spring pressure connection – for reliable installations instead of time-consuming screw connections

The contact surface is coated with tin. 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 an angle of 45°..

- Pin spacing: 3.5 mm
- Reliable soldering thanks to THR
- Actuation via push-button
- Compact sizes
- Number of poles: 8

Notes

General safety information	**NOTICE: Observe installation and safety instructions!** **To be sold only with installation instructions!**
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.
Variants:	Other pole numbers Direct marking Other versions (or variants) can be requested from WAGO Sales or configured at https://configurator.wago.com/.

Electrical data

Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	200 V	320 V	320 V
Rated impulse withstand voltage	4 kV	4 kV	4 kV
Rated current	8 A	8 A	8 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	8 A	-	5 A

Approvals per	CSA		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

Connection Data

Clamping units	8
Total number of potentials	8
Number of connection types	1
Number of levels	1

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
Solid conductor	0.2 … 1.5 mm² / 24 … 16 AWG
Fine-stranded conductor	0.2 … 1.5 mm² / 24 … 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 … 1 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 … 1 mm²
Strip length	8.5 … 9.5 mm / 0.33 … 0.37 inches

Continued on next page

Connection 1

Conductor connection direction to PCB	45 °
Pole number	8

Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	29.5 mm / 1.161 inches
Height	15.5 mm / 0.61 inches
Height from the surface	13.1 mm / 0.516 inches
Depth	12 mm / 0.472 inches
Solder pin length	2.4 mm
Solder pin dimensions	0.4 x 0.75 mm
Reel diameter of tape-and-reel packaging	330 mm
Tape width	44 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 specifications can be found here
Color	black
Material group	IIIa
Insulation material (main housing)	Polyamide (PA46)
Flammability class per UL94	V2
Clamping spring material	Copper alloy
Contact Plating	Tin
Fire load	0.091 MJ
Weight	4 g
MSL per J-STD 020D	1

Environmental requirements

Limit temperature range	-60 … +105 °C

Commercial data

PU (SPU)	160 pcs
Packaging type	Blister foil
Country of origin	DE
GTIN	4045454916343
Customs tariff number	85369010000

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Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-44-04-01
eCl@ss 9.0	27-44-04-01
ETIM 9.0	EC002643
ETIM 10.0	EC002643
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
DEKRA DEKRA Certification B.V.	EN 60947-7-4	71-141963
UR Underwriters Laboratories Inc.	UL 1059	E 45172

Downloads

Environmental Product Compliance

Compliance Search

Documentation

Safety Data Sheet

Handling and Safety Instructions of PCB Terminal Blocks with Push-In Cage Clamp	pdf 393.90 KB	

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB	
		pdf 535.32 KB	

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CAD/CAE-Data

CAD data

PCB Design

1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 Marking strip



Item No.: 210-332/350-202
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/350-204
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/350-206
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (240x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.1.2 Test and measurement

1.1.2.1 Testing accessories



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



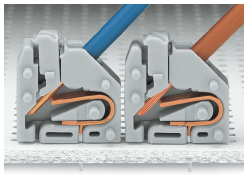
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



Item No.: 210-657
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

Installation Notes

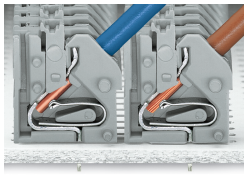
Conductor termination



Inserting solid conductors via push-in termination.
Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.

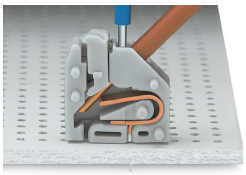
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Conductor termination

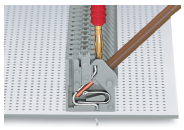


Space-saving wiring, 250 Series – 5 mm pin spacing.

Testing

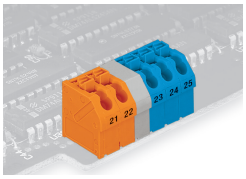


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 … 3.5 mm pin spacing.

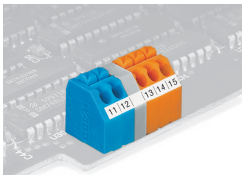


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

Marking



Labeling via self-adhesive strips or direct marking. Mixed-color terminal strips (with or without spacer) are available upon request.



Labeling via self-adhesive strips or direct marking. Mixed-color terminal strips (with or without spacer) are available upon request.