

Data Sheet | Item Number: 250-402/353-604

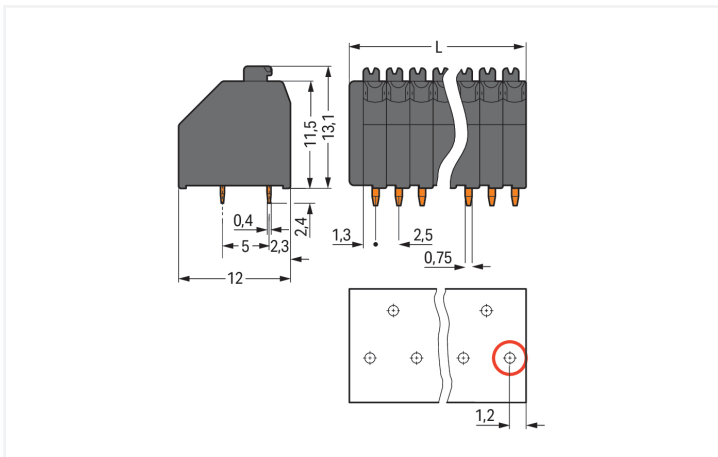
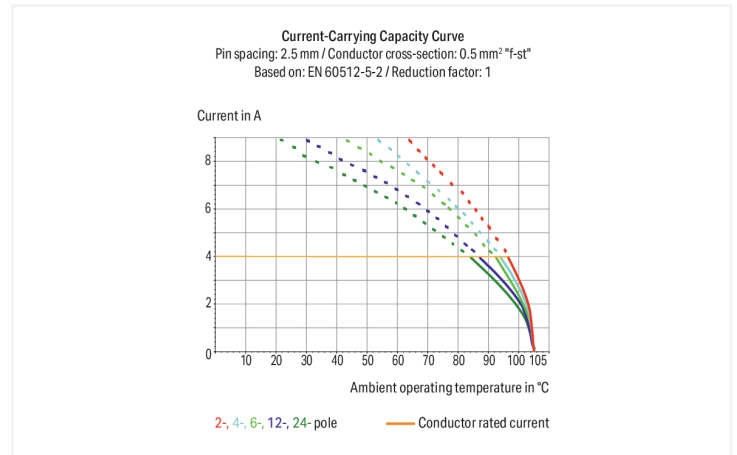
THR PCB terminal block; push-button; 0.5 mm²; Pin spacing 2.5 mm; 2-pole; Push-in CAGE CLAMP®; black

<https://www.wago.com/250-402/353-604>



Color: ■ black

Similar to illustration



Dimensions in mm

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

PCB terminal block, 250 Series, 45 °conductor entry to board

Our PCB terminal block (item number 250-402/353-604) makes connecting wires quick and easy. It is a universal connector that can be used almost 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. Strip lengths must be between 8.5 and 9.5 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® technology provides a universal connection solution for any type of conductor. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. The item's dimensions are (6.5 x 16.7 x 12) mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is designed for conductor cross sections ranging from 0.14 mm² to 0.5 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 at an angle of 45°.



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.
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		160 V	160 V	250 V
Rated impulse withstand voltage		2.5 kV	2.5 kV	2.5 kV
Rated current		4 A	4 A	4 A
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		300 V	-	300 V
Rated current		5 A	-	5 A
Approvals per		CSA		
Use group		B	C	D
Rated voltage		300 V	-	300 V
Rated current		5 A	-	5 A

Connection data		
Clamping units	2	
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 ... 0.5 mm² / 24 ... 20 AWG	
Fine-stranded conductor	0.2 ... 0.5 mm² / 24 ... 20 AWG	
Conductor diameter	0.4 ... 0.8 mm / 24 ... 20 AWG	
Strip length	8.5 ... 9.5 mm / 0.33 ... 0.37 inches	
Conductor connection direction to PCB	45 °	
Pole number	2	

Physical data	
Pin spacing	2.5 mm / 0.098 inches
Width	6.5 mm / 0.256 inches
Height	16.7 mm / 0.657 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



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		0.022 MJ
Weight		0.9 g
MSL per J-STD 020D		1

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

Commercial data		
PU (SPU)		720 (180) pcs
Packaging type		Box
Country of origin		CH
GTIN		4055143945059
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

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

Environmental Product Compliance

250-402/353-604

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Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB

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pdf

535.32 KB

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CAD/CAE-Data

CAD data

2D/3D Models

250-402/353-604

↓

CAE data

ZUKEN Portal

250-402/353-604

↓

PCB Design

Symbol and Footprint via SamacSys

250-402/353-604

↓

Symbol and Footprint via Ultra Librarian

250-402/353-604

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1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 Marking strip



[Item No.: 210-331/250-202](#)

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



[Item No.: 210-331/250-207](#)

Marking strips; as a DIN A4 sheet; MARKED; 1-48 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



[Item No.: 210-331/250-204](#)

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



[Item No.: 210-331/250-206](#)

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (400x); Height of marker strip: 2.3 mm/0.091 in; 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



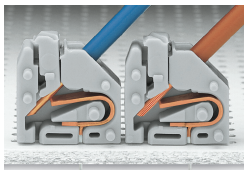
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



Item No.: 210-647
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

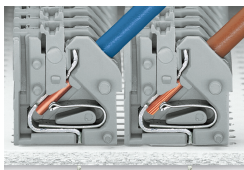
Installation Notes

Conductor termination



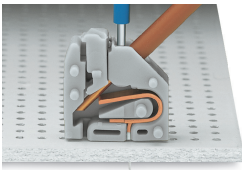
Inserting solid conductors via push-in termination.
Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.

Conductor termination

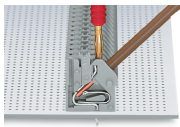


Space-saving wiring, 250 Series – 5 mm pin spacing.

Testing

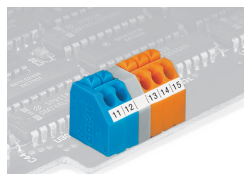
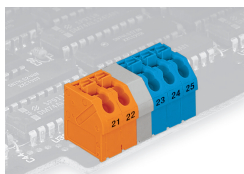


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 ... 3.5 mm pin spacing.



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.

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