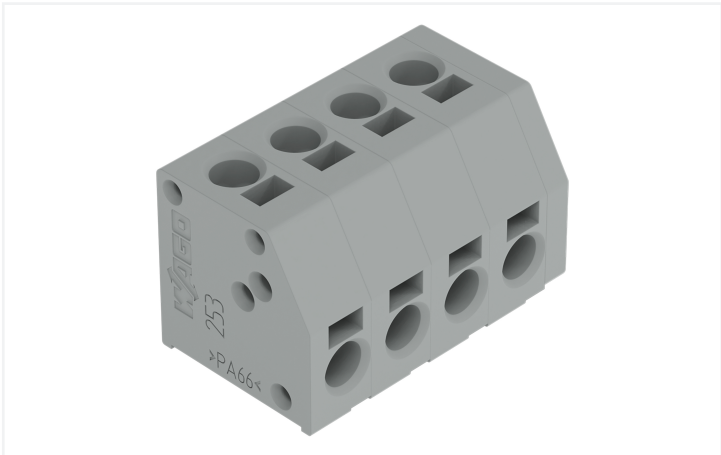


Data Sheet | Item Number: 253-102

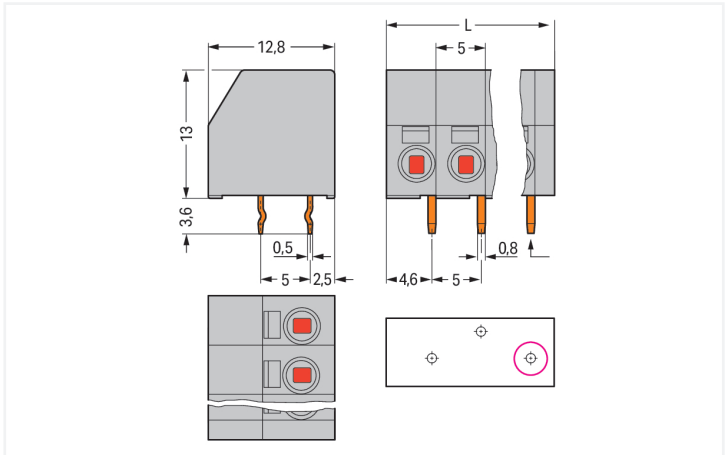
2-conductor PCB terminal block; 1.5 mm²; Pin spacing 5 mm; 2-pole; PUSH WIRE®; gray

<https://www.wago.com/253-102>



Color: ■ gray

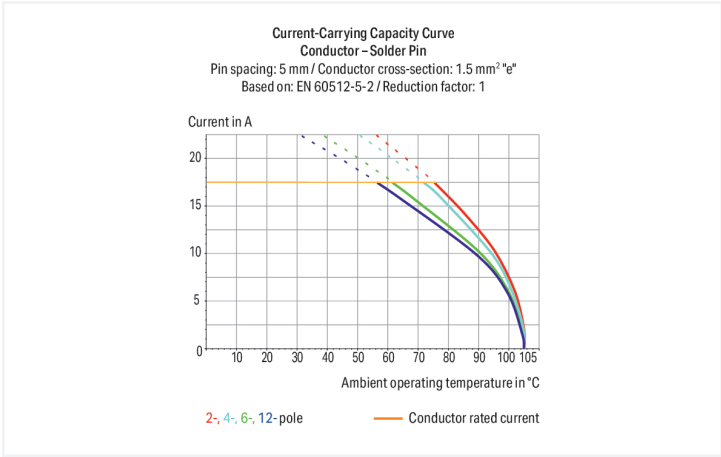
Similar to illustration



Dimensions in mm

L = (pole no. x pin spacing) + 2 mm

First solder pin, front right (red circle)



PCB terminal block, 253 Series, solder pin dimensions 0.5 x 0.8 mm

Easily, quickly and safely connect conductors with this PCB terminal block (item number 253-102). You can rely on proven safety with these PCB terminal blocks, perfect for a wide range of applications when designing your devices. Rated current and voltage are important parameters when selecting a PCB terminal block, as they indicate possible applications and uses. This product has a rated voltage of 320 V and a rated current of 17.5 A, making it suitable for high-load applications. Conductors can only be connected to this PCB terminal block if their strip length is between 8.5 mm and 9.5 mm. This product incorporates two conductor terminals and utilizes PUSH WIRE® and PUSH WIRE®. Our PUSH WIRE® connection uses the stiffness of the conductor to overcome the clamping spring's contact force, allowing you to clamp the conductor in place more quickly and easily. The item's dimensions are 12 x 16.6 x 12.8 mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.5 mm² to 1.5 mm² on one side and for conductor cross sections ranging from 0.5 mm² to 1.5 mm² on the other side. It has one level. Two potentials can connect two poles using the four clamping points. The clamping spring is made of chrome-nickel spring steel (CrNi), the contacts are made of electrolytic copper (ECu), and the gray housing is made of polyamide (PA66) for insulation. Tin is used for coating the contact surfaces. An operating tool is used to operate this PCB terminal block. THT is used to solder the PCB terminal block. The conductor is designed to be inserted into the board at an angle of 0°. The solder pins measure 0.5 x 0.8 mm in cross-section and 3.6 mm in length and are organized over the entire terminal strip (staggered). There are one solder pin per potential.



Notes	
Variants:	Other pole numbers Other colors Mixed-color PCB connector strips 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		Approvals per		UL 1059	
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	300 V	-	300 V
Nominal voltage	320 V	320 V	630 V	Rated current	8 A	-	5 A
Rated surge voltage	4 kV	4 kV	4 kV				
Rated current	17.5 A	17.5 A	17.5 A				

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

Connection data

Connection 1	
Clamping units	4
Total number of potentials	2
Number of connection types	2
Number of levels	1
Connection type	PUSH WIRE® connection
Connection technology	PUSH WIRE®
Number of connection points	1
Actuation type	Operating tool
Solid conductor	0.5 ... 1.5 mm² / 20 ... 16 AWG
Strip length	8.5 ... 9.5 mm / 0.33 ... 0.37 inches
Note (strip length)	7 ... 8 mm / 0.28 ... 0.31 inch (for wiring on both sides)
Conductor connection direction to PCB	0 °
Pole number	2

Connection 2	
Connection type	PUSH WIRE® connection
Connection technology	PUSH WIRE®
Number of connection points	1
Solid conductor	0.5 ... 1.5 mm² / 20 ... 16 AWG
Strip length	8.5 ... 9.5 mm / 0.33 ... 0.37 inches
Note (strip length)	7 ... 8 mm / 0.28 ... 0.31 inch (for wiring on both sides)
Conductor connection direction to PCB	90 °



Physical data		
Pin spacing	5 mm / 0.197 inches	
Width	12 mm / 0.472 inches	
Height	16.6 mm / 0.654 inches	
Height from the surface	13 mm / 0.512 inches	
Depth	12.8 mm / 0.504 inches	
Solder pin length	3.6 mm	
Solder pin dimensions	0.5 x 0.8 mm	
Drilled hole diameter with tolerance	1.1 ^(+0.1) mm	

PCB contact		
PCB contact	THT	
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	gray	
Material group	I	
Insulation material (main housing)	Polyamide (PA66)	
Flammability class per UL94	V0	
Clamping spring material	Chrome-nickel spring steel (CrNi)	
Contact material	Electrolytic copper (E _{Cu})	
Contact Plating	Tin	
Fire load	0.044 MJ	
Weight	2 g	






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

Commercial data		
Product Group	4 (Printed Circuit Connectors)	
PU (SPU)	400 (100) pcs	
Packaging type	Box	
Country of origin	CN	
GTIN	4044918689151	
Customs tariff number	85369010000	


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 8.0	EC002643	
ECCN	NO US CLASSIFICATION	

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption


Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
<div></div>					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7649	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	EN 60998	NTR NL 6580	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	EN 60998	2126302.02			
cURus Underwriters Laboratories Inc.	UL 1059	E45172			
ENEC DEKRA Certification B.V.	EN 60947	71-101931			
UL UL International Germany GmbH	UL 1977	E45171			




Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 253-102	



Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

CAD/CAE-Data

CAD data		CAE data	
2D/3D Models 253-102		EPLAN Data Portal 253-102	
		ZUKEN Portal 253-102	



PCB Design	
Symbol and Footprint via SamacSys 253-102	
Symbol and Footprint via Ultra Librarian 253-102	

1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 Marking strip



Item No.: 210-833
Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white



Item No.: 210-332/500-202
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-205
Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-204
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/500-206
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.1.2 Tool

1.1.2.1 Operating tool



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



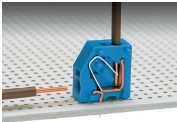
Item No.: 210-648
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short



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

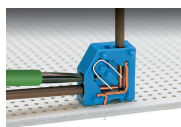
Installation Notes

Conductor termination



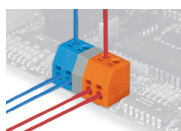
Inserting a conductor via push-in termination.

Conductor removal



Removing a conductor via 2.5 mm screwdriver.

Installation



Mixed-color terminal strips (with or without spacer) are available upon request.