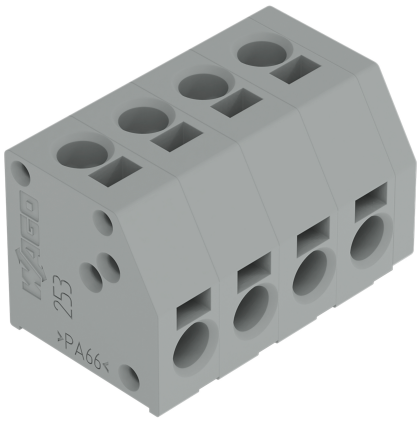
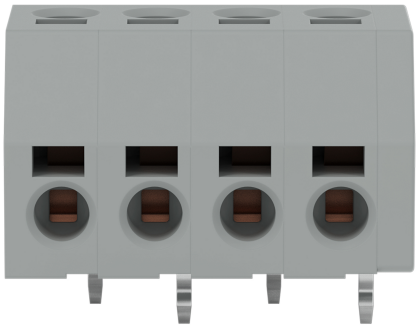
Data Sheet | Item Number: 253-104

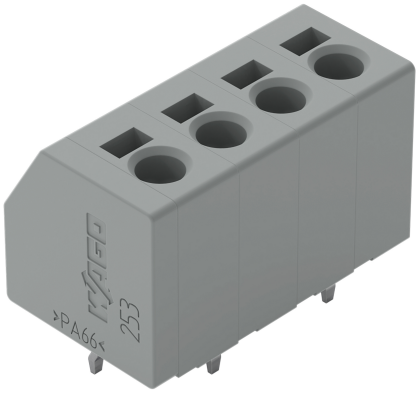
2-conductor PCB terminal block; 1.5 mm²; Pin spacing 5 mm; 4-pole; PUSH WIRE®; gray

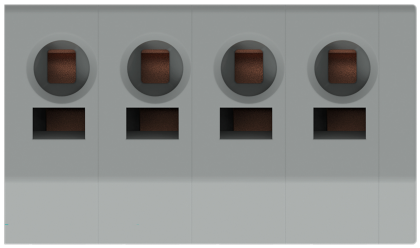
https://www.wago.com/253-104

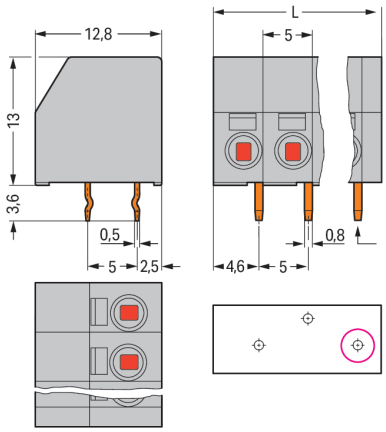




Color: gray







Dimensions in mm

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

First solder pin, front right (red circle)

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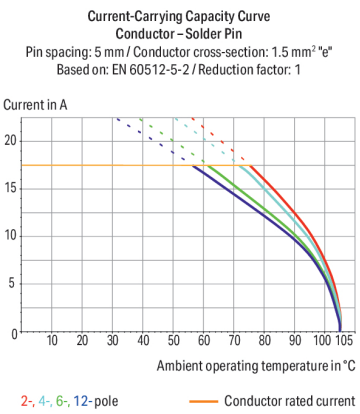

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PCB terminal block, 253 Series, PUSH WIRE®

This PCB terminal block (item number 253-104) is designed for quick and easy connections. It is perfect for custom installations with different mounting types. Rated current and voltage are key factors to consider when choosing 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 should only be connected to this PCB terminal block if their strip length is between 8.5 mm and 9.5 mm. This product features two conductor terminals and utilizes PUSH WIRE® as well as PUSH WIRE®. Our tried-and-tested PUSH WIRE® connection offers the fastest method for clamping conductors. It utilizes the conductor's stiffness to overcome the clamping spring's contact force. The dimensions are 22 x 16.6 x 12.8 mm (width x height x depth). Depending on the type of conductor, 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 from 0.5 mm² to 1.5 mm² on the other side. It comes with one level and eight clamping points that you can use to connect four potentials / 4 poles. The gray housing is made of polyamide (PA66) for insulation, the contacts are made of electrolytic copper (ECu), and the clamping spring is made of chrome-nickel spring steel (CrNi). The contact surface is coated with tin. This PCB terminal block is operated with an operating tool. THT is used to assemble the PCB terminal block. The conductor is designed to be inserted at an angle of 0°.. The solder pins, which are 0.5 x 0.8 mm in cross-section and 3.6 mm long, are arranged 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/.

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Electrical data

Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	320 V	320 V	630 V
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

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

Connection data

Clamping units	8
Total number of potentials	4
Number of connection types	2
Number of levels	1

Connection 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	4

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	22 mm / 0.866 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

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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	0.078 MJ
Weight	3.7 g

Environmental requirements

Limit temperature range	-60 … +105 °C

Commercial data

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	220 (55) pcs
Packaging type	Box
Country of origin	CN
GTIN	4044918689243
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

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Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7649
CCA DEKRA Certification B.V.	EN 60998	NTR NL 6580
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

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 253-104

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB

CAD/CAE-Data

CAD data

2D/3D Models 253-104

CAE data

EPLAN Data Portal 253-104

ZUKEN Portal 253-104

PCB Design

Symbol and Footprint via SamacSys 253-104

Symbol and Footprint via Ultra Librarian 253-104

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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

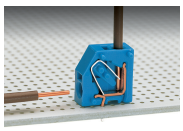
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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

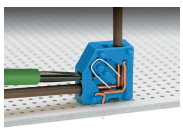
Installation Notes

Conductor termination



Inserting a conductor via push-in termination.

Conductor removal



Removing a conductor via 2.5 mm screwdriver.

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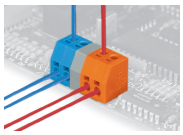
Installation



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

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