

Data Sheet | Item Number: 2604-3102

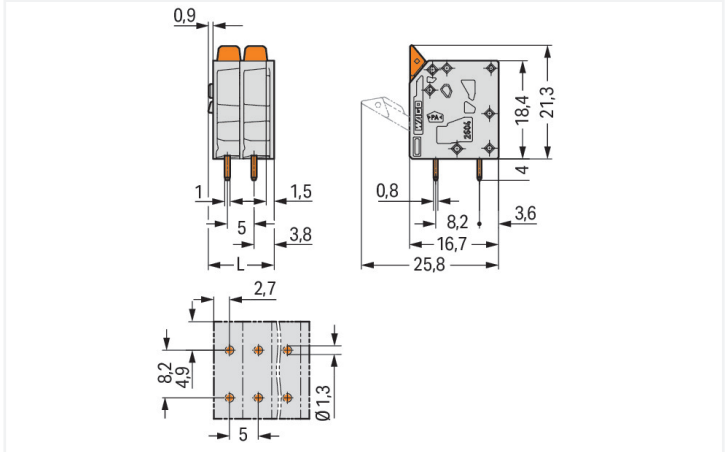
PCB terminal block; lever; 4 mm²; Pin spacing 5 mm; 2-pole; Push-in CAGE CLAMP®; gray

<https://www.wago.com/2604-3102>

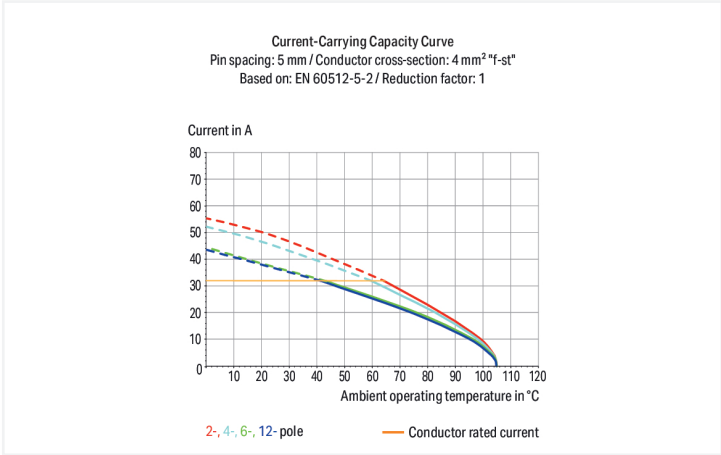


Color: ■ gray

Similar to illustration



Dimensions in mm
L = (pole no. – 1) x pin spacing + 7.4 mm



PCB terminal block, 2604 Series, lever

This PCB terminal block (item number 2604-3102) is designed to connect conductors quickly and easily. It is a universal connector that can be used practically anywhere, for example, as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. This PCB terminal block has a rated voltage of 400 V and can handle currents up to 32 A, making it suitable for high-load applications. Strip lengths must be between 9 mm and 11 mm when connecting conductors to this PCB terminal block. This product incorporates 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 dimensions are 12.4 x 25.3 x 16.7 mm (width x height x depth). Depending on the conductor type, this PCB terminal block is suitable for conductor cross sections ranging from 0.2 mm² to 4 mm². It comes with one level and two clamping points that you can use to connect two potentials / 2 poles. The clamping spring is made of chrome-nickel spring steel (CrNi), the gray housing is made of polyamide (PA66) for insulation, and the contacts are made of electrolytic copper (ECu). The contact surface is coated with tin. A lever 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 a 90° angle.. The solder pins are organized over the entire terminal strip (in-line). They are 0.8 x 1 mm and 4 mm in length. Each potential has two solder pins.

Notes	
Variants:	Other pole numbers Direct marking Other colors 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	400 V	630 V	Rated current	20 A	-	10 A
Rated surge voltage	4 kV	4 kV	4 kV				
Rated current	32 A	32 A	32 A				

Approvals per CSA			
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	20 A	-	5 A

Connection data

Clamping units	2	Connection 1	
Total number of potentials	2	Connection technology	Push-in CAGE CLAMP®
Number of connection types	1	Actuation type	Lever
Number of levels	1	Solid conductor	0.2 ... 4 mm² / 24 ... 12 AWG
		Fine-stranded conductor	0.2 ... 4 mm² / 24 ... 12 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm²
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm²
		Fine-stranded conductor; with twin ferrule	0.25 ... 1.5 mm²
		Strip length	9 ... 11 mm / 0.35 ... 0.43 inches
		Conductor connection direction to PCB	90 °
		Pole number	2

Physical data

Pin spacing	5 mm / 0.197 inches
Width	12.4 mm / 0.488 inches
Height	25.3 mm / 0.996 inches
Height from the surface	21.3 mm / 0.839 inches
Depth	16.7 mm / 0.657 inches
Solder pin length	4 mm
Solder pin dimensions	0.8 x 1 mm
Drilled hole diameter with tolerance	1.3 (+0.1) mm

PCB contact

PCB contact	THT
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	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	0.082 MJ
Actuator color	orange
Weight	3.6 g

Environmental requirements																																																										
Limit temperature range	-60 ... +105 °C	Environmental Testing (Environmental Conditions) <table><tr><td>Test specification</td><td>DIN EN 50155 (VDE 0115-200):2022-06</td></tr><tr><td colspan="2">Railway applications – Rolling stock – Electronic equipment</td></tr><tr><td>Test procedure</td><td>DIN EN 61373 (VDE 0115-0106):2011-04</td></tr><tr><td colspan="2">Railway applications – Rolling stock equipment – Shock and vibration tests</td></tr><tr><td>Spectrum/Installation location</td><td>Service life test, Category 1, Class A/B</td></tr><tr><td>Function test with noise-like vibration</td><td>Test passed according to Section 8 of the standard</td></tr><tr><td>Frequency</td><td>f₁ = 5 Hz to f₂ = 150 Hz</td></tr><tr><td>Acceleration</td><td>0.101g (highest test level used for all axes)</td></tr><tr><td>Test duration per axis</td><td>10 min.</td></tr><tr><td>Test directions</td><td>X, Y and Z axes</td></tr><tr><td>Monitoring for contact faults/interruptions</td><td>Passed</td></tr><tr><td>Voltage drop measurement before and after each axis</td><td>Passed</td></tr><tr><td>Simulated service life test through increased levels of noise-like vibration</td><td>Test passed according to Section 9 of the standard</td></tr><tr><td>Frequency</td><td>f₁ = 5 Hz to f₂ = 150 Hz</td></tr><tr><td>Acceleration</td><td>0.572g (highest test level used for all axes)</td></tr><tr><td>Test duration per axis</td><td>5 h</td></tr><tr><td>Test directions</td><td>X, Y and Z axes</td></tr><tr><td>Extended test scope: Monitoring for contact faults/interruptions</td><td>Passed</td></tr><tr><td>Extended test scope: Voltage drop measurement before and after each axis</td><td>Passed</td></tr><tr><td>Shock test</td><td>Test passed according to Section 10 of the standard</td></tr><tr><td>Shock form</td><td>Half sine</td></tr><tr><td>Acceleration</td><td>5g (highest test level used for all axes)</td></tr><tr><td>Shock duration</td><td>30 ms</td></tr><tr><td>Number of shocks per axis</td><td>3 pos. und 3 neg.</td></tr><tr><td>Test directions</td><td>X, Y and Z axes</td></tr><tr><td>Extended test scope: Monitoring for contact faults/interruptions</td><td>Passed</td></tr><tr><td>Extended test scope: Voltage drop measurement before and after each axis</td><td>Passed</td></tr><tr><td>Vibration and shock stress for rolling stock equipment</td><td>Passed</td></tr></table>	Test specification	DIN EN 50155 (VDE 0115-200):2022-06	Railway applications – Rolling stock – Electronic equipment		Test procedure	DIN EN 61373 (VDE 0115-0106):2011-04	Railway applications – Rolling stock equipment – Shock and vibration tests		Spectrum/Installation location	Service life test, Category 1, Class A/B	Function test with noise-like vibration	Test passed according to Section 8 of the standard	Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz	Acceleration	0.101g (highest test level used for all axes)	Test duration per axis	10 min.	Test directions	X, Y and Z axes	Monitoring for contact faults/interruptions	Passed	Voltage drop measurement before and after each axis	Passed	Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard	Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz	Acceleration	0.572g (highest test level used for all axes)	Test duration per axis	5 h	Test directions	X, Y and Z axes	Extended test scope: Monitoring for contact faults/interruptions	Passed	Extended test scope: Voltage drop measurement before and after each axis	Passed	Shock test	Test passed according to Section 10 of the standard	Shock form	Half sine	Acceleration	5g (highest test level used for all axes)	Shock duration	30 ms	Number of shocks per axis	3 pos. und 3 neg.	Test directions	X, Y and Z axes	Extended test scope: Monitoring for contact faults/interruptions	Passed	Extended test scope: Voltage drop measurement before and after each axis	Passed	Vibration and shock stress for rolling stock equipment	Passed
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Vibration and shock stress for rolling stock equipment	Passed																																																									
Processing temperature	-35 ... +60 °C																																																									
Continuous operating temperature	-60 ... +105 °C																																																									



Commercial data		
PU (SPU)		170 pcs
Packaging type		Box
Country of origin		PL
GTIN		4066966435481
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



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 60947-7-4	NL-61583
KEMA/KEUR DEKRA Certification B.V.	EN 60947-7-4	71-100535
UL Underwriters Laboratories Inc.	UL 1059	E45172

Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Z00004411.000

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 2604-3102	

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	



CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 2604-3102	ZUKEN Portal 2604-3102

PCB Design	
Symbol and Footprint via SamacSys 2604-3102	
Symbol and Footprint via Ultra Librarian 2604-3102	

1 Compatible Products
1.1 Optional Accessories
1.1.1 Ferrule
1.1.1.1 Ferrule

			
Item No.: 216-241 Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	Item No.: 216-242 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	Item No.: 216-243 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	Item No.: 216-244 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black
			
Item No.: 216-246 Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	Item No.: 216-106 Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; silver-colored		

Installation Notes
Conductor termination



Insert fine-stranded conductors – and remove all conductors – via operating tool.

Conductor termination



Insert solid conductors via push-in termination.

