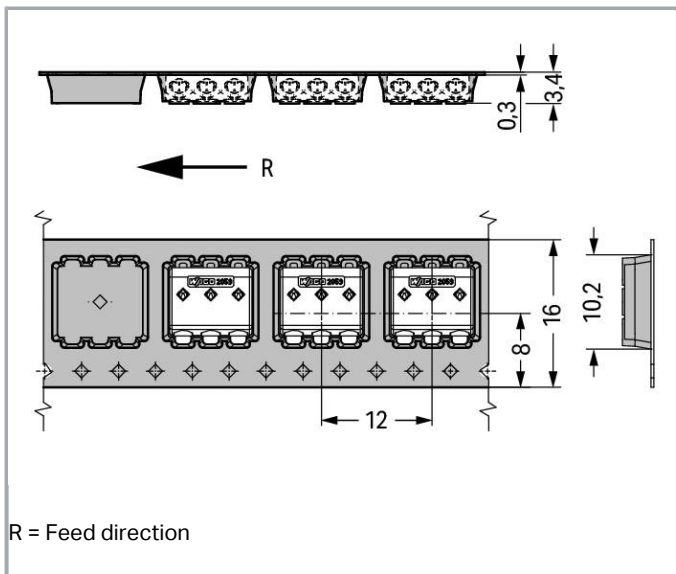
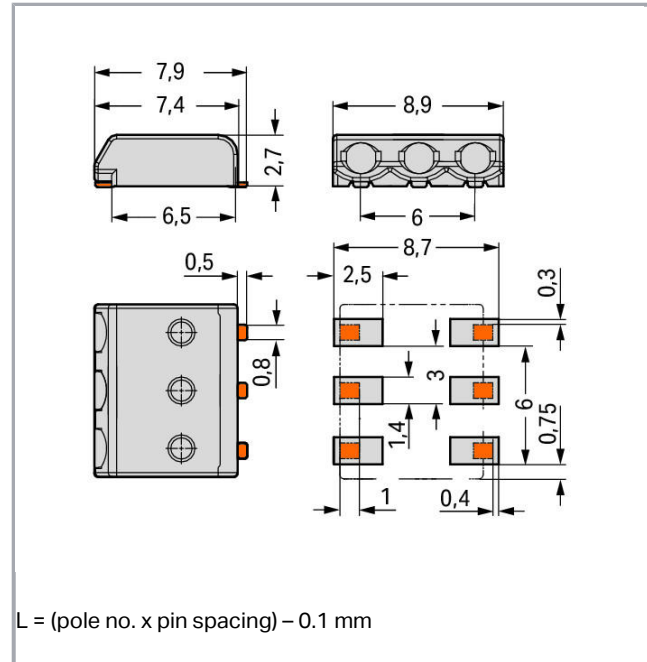
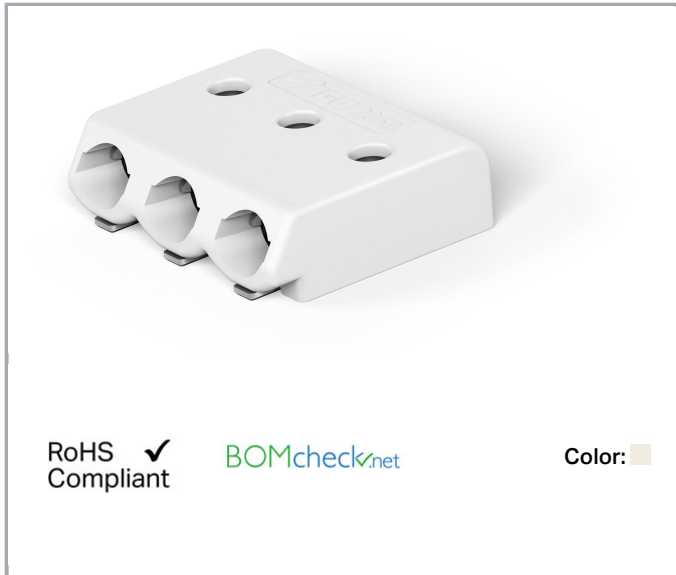


Data sheet | Item number: 2059-303/998-403

SMD PCB terminal block; 0.5 mm²; Pin spacing 3 mm; 3-pole; PUSH WIRE®; in tape-and-reel packaging; 0,50 mm²; white



www.wago.com/2059-303_998-403



Item description

Subject to changes.

WAGO Kontakttechnik GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



- SMD PCB terminal blocks with PUSH WIRE® connection technology
- Push-in termination of solid conductors
- Easy conductor removal, e.g., via operating tool
- Just 2.7 mm tall
- Assemble terminal blocks without pole loss
- Available in tape-and-reel packaging for automated assembly

Note:

Application note:

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 customer-specific variables (e.g., component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.

Note:

Depending on reflow soldering temperatures and times, color deviations may occur. These deviations will have no impact on functionality.

Recommendation:

Recommendation for SMD stencil:

Material thickness, 150 µm. Pattern layout identical to solder pad layout.

Data

Electrical data

Ratings per IEC/EN 60664-1

Rated voltage (III / 3)	63 V
Rated impulse voltage (III / 3)	2.5 kV
Rated voltage (III / 2)	160 V
Rated impulse voltage (III / 2)	2.5 kV
Rated voltage (II / 2)	320 V
Rated impulse voltage (II / 2)	2.5 kV
Rated current	3 A
Legend (ratings)	(III / 2) ≙ Overvoltage category III / Pollution degree 2

Subject to changes.

Approvals per UL 1977

Rated voltage per UL 1977 (factory wiring only)	250 V
Rated current per UL 1977 (factory wiring only)	3 A

Connection data

Connection technology	PUSH WIRE®
Actuation type	Operating tool
Solid conductor	0.14 ... 0.34 mm ² / 26 ... 22 AWG
Strip length	4 ... 5.5 mm / 0.16 ... 0.22 inch
Conductor entry angle to the PCB	0°
No. of poles	3
Solid conductor (2)	0.5 mm ² / 20 AWG
Note (conductor cross-section) 2	No reconnection of smaller conductor cross-sections (0.5 mm ² / 20 AWG)
Strip length (2)	6 ... 7.5 mm / 0.24 ... 0.3 inch
Total number of connection points	3
Total number of potentials	3
Number of connection types	1
Number of levels	1
Note (conductor cross-section)	For conductors that are not rigid enough (26 AWG), the clamping unit must be opened using an operating tool.

Geometrical Data

Pin spacing	3 mm / 0.118 inch
Width	8.9 mm / 0.35 inch
Height	2.7 mm / 0.106 inch
Depth	7.9 mm / 0.311 inch
Reel diameter of tape-and-reel packaging	330 mm
Tape width	16 mm

PCB contact

PCB contact	SMD
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Material Data

Color	white
Material group	I

Subject to changes.

Insulating material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	tin-plated
Weight	0.2 g

Environmental Requirements





Limit temperature range	-60 ... +105 °C
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Commercial data

Product Group	33 (Printed Circuit)
Packaging type	BOX
Country of origin	CH
GTIN	4055143082693
Customs Tariff No.	85369010000

Approvals / Certificates

Country specific Approvals


Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	NTR NL-7680
	CCA DEKRA Certification B.V.	EN 60838	NTR NL-7720
	KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-103560
	KEMA/KEUR DEKRA Certification B.V.	EN 60838	71-106226

UL-Approvals

Certificate




Subject to changes.



Logo	Approval	Additional Approval Text	name
	UL Underwriters Laboratories Inc.	UL 1977	E45171

Compatible products

General accessories

	Item no.: 2059-903 Board-to-Board Link; Pin spacing 3 mm; 3-pole; Length: 15.3 mm; white	www.wago.com/2059-903
	Item no.: 2059-903/018-000 Board-to-Board Link; Pin spacing 3 mm; 3-pole; Length: 17.5 mm; white	www.wago.com/2059-903/018-000
	Item no.: 2059-903/021-000 Board-to-Board Link; Pin spacing 3 mm; 3-pole; Length: 20.5 mm; white	www.wago.com/2059-903/021-000

tools

	Item no.: 2059-189 Operating tool; made of insulating material; for 2059 Series	www.wago.com/2059-189
	Item no.: 206-859 Operating tool; for 2059 Series	www.wago.com/206-859

Downloads

Documentation

Additional Information

Technical explanations	Apr 3, 2019	pdf 3.6 MB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 2059-303/998-403	URL	Download
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PCB Design

Symbol and Footprint 2059-303/998-403	URL	Download
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Subject to changes.

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CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

Installation Notes

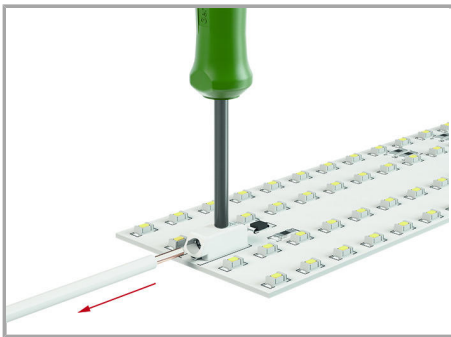
Inserting a conductor

Subject to changes.



Inserting solid conductors via push-in termination.

Inserting a conductor



Easy conductor removal (e.g., via 206-859 Operating Tool)

Subject to changes.