

## Data sheet | Item number: 224-114

2-conductor lighting connector; push-button on lighting side; Lighting side: for all conductor types; Inst. side: for solid conductors; 224 Series; max. 2.5 mm<sup>2</sup>; Surrounding air temperature: max 75°C; 2,50 mm<sup>2</sup>; black

[www.wago.com/224-114](http://www.wago.com/224-114)



### Item description

#### Note:

#### Terminating Aluminum Conductors

WAGO spring clamp terminal blocks are suitable for solid aluminum conductors up to 4 mm<sup>2</sup>/12 AWG if WAGO "Alu-Plus" Contact Paste is used for termination.

"Alu-Plus" Contact Paste Advantages:

- Automatically destroys the oxide film during clamping.
- Prevents fresh oxidation at the clamping point.
- Prevents electrolytic corrosion between aluminum and copper conductors (in the same terminal block).
- Provides long-term protection against corrosion.

For spring clamp connections with PUSH WIRE® connection technology, **WAGO recommends that the aluminum conductor first be cleaned and then immediately inserted into the clamping unit filled with "Alu-Plus" contact paste.**

It is also possible to apply WAGO "Alu-Plus" **additionally** on the whole surface of the aluminum conductor before termination.

Please note that the nominal currents must be adapted to the reduced conductivity of the aluminum conductors::

2.5 mm<sup>2</sup> = 16 A

Subject to changes. Please also observe the further product documentation!

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

4 mm<sup>2</sup> = 22 A**Safety information 1:**

in grounded power lines

**Data****Electrical data****Ratings per IEC/EN**

Ratings per	EN 60664
Nominal voltage (II/2)	400 V
Rated surge voltage (II/2)	4 kV
Rated current	24 A
Legend (ratings)	(II / 2) ≙ Overvoltage category II / Pollution degree 2

**Connection data**

Connection type (1)	Installation side
Connection technology	PUSH WIRE®
Number of connection points	2
Actuation type	Push-in
Connectable conductor materials	Copper Aluminum
Solid conductor	1 ... 2.5 mm <sup>2</sup> / 16 ... 14 AWG
Strip length	9 ... 11 mm / 0.35 ... 0.43 inch
Connection type 2	Lighting side
Connection technology 2	CAGE CLAMP®
Number of connection points 2	1
Solid conductor 2	0.5 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG
Fine-stranded conductor 2	0.5 ... 2.5 mm <sup>2</sup> / 20 ... 16 AWG
Total number of connection points	3
Total number of potentials	1
Wiring direction	Side-entry wiring

**Physical data**

Width	9.5 mm / 0.374 inch
Height	15.5 mm / 0.61 inch
Depth	20.5 mm / 0.807 inch

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## Material data

Color	black
Fire load	0.052 MJ
Weight	2.5 g

## Environmental requirements



Surrounding air temperature (operation)	60 °C
Continuous operating temperature	120 °C

## Commercial data

Packaging type	box
Country of origin	CH
GTIN	4044918583787
Customs tariff number	85369010000

## Approvals / Certificates

### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CSA DEKRA Certification B.V.	C22.2	1053495
	VDE VDE Prüf- und Zertifizierungsinstitut	EN 60998	40022792

### Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	18- HG1755093- PDA
	BV Bureau Veritas S.A.	EN 60998	11914/DO BV
	DNV GL	EN 60998	TAE000015T

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### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Germany GmbH	EN 60998	CCA- 2617-A1
	UL UL International Germany GmbH	EN 60998	D-05895- A1 (EN60998- 1 EN60998- 2-2)

### Optional accessories

#### General accessories

	Item no.: 249-130 Syringe; Contents: 20 ml Alu-Plus contact paste	<a href="http://www.wago.com/249-130">www.wago.com/249-130</a>
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### Downloads

#### Documentation

#### Bid Text

224-114 docx - Datei	21.02.2019	docx 16.1 kB	Download
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224-114 X81 - Datei	19.02.2019	xml 3.6 kB	Download
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#### Additional Information

Technical explanations	03.04.2019	pdf 2.2 MB	Download
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## CAD/CAE-Data

### CAD data

2D/3D Models 224-114	URL	Download
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### CAE data

WSCAD Universe 224-114	URL	Download
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ZUKEN Portal 224-114	URL	Download
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EPLAN Data Portal 224-114	URL	Download
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## Environmental Product Compliance

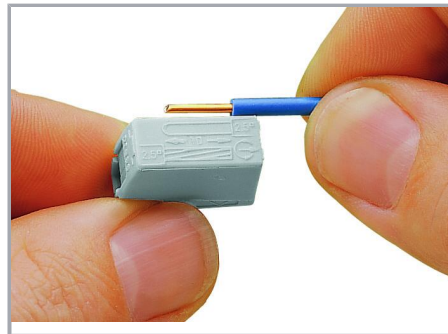
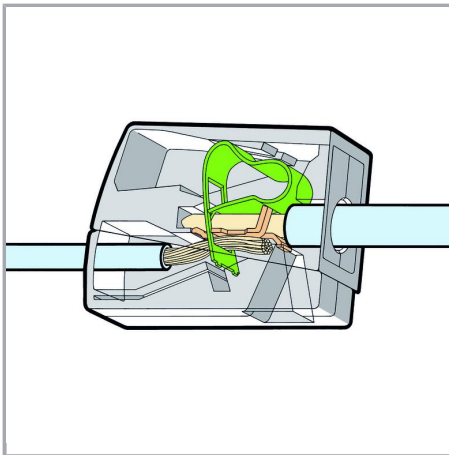
### Compliance Search

Environmental Product Compliance 224-114	URL	Download
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## Installation Notes

### Conductor termination

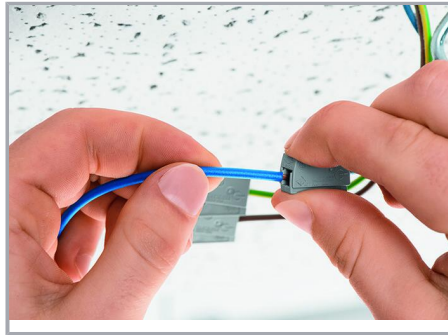


Strip conductor to 9 ... 11 mm (0.35 ... 0.43 inch).

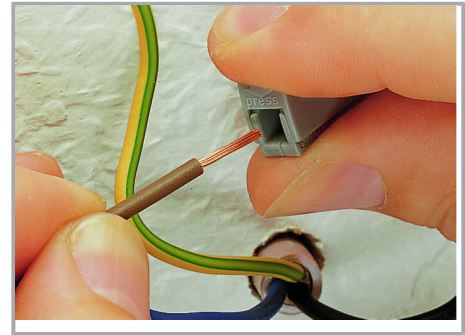
Lighting Connectors (2.5 mm<sup>2</sup>), 224 Series

### Conductor termination

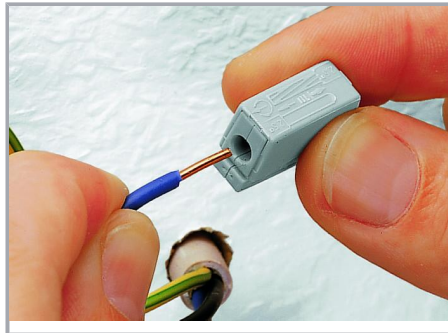
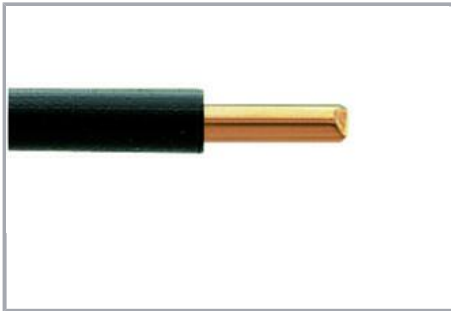
Subject to changes. Please also observe the further product documentation!



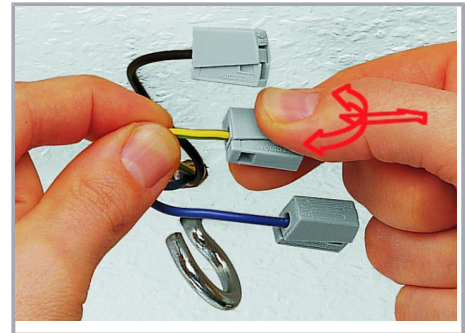
To connect: Press button fully, insert stripped conductor into square entry and release.



To remove: Press button and withdraw conductor.

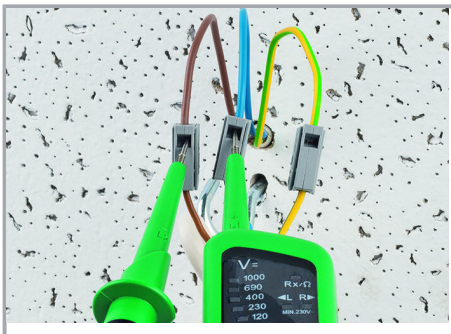


To connect: Insert stripped solid conductor into circular entry and push until it hits the backstop.



To remove: Hold conductor to be removed and twist alternately left and right while slightly pulling the connector.

### Testing



Testing via separate test ports.

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