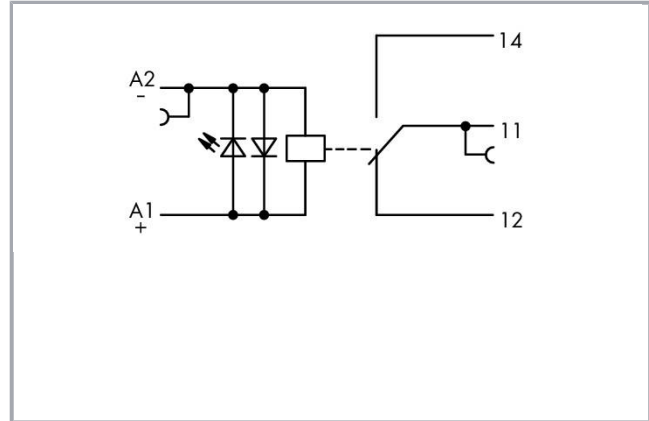
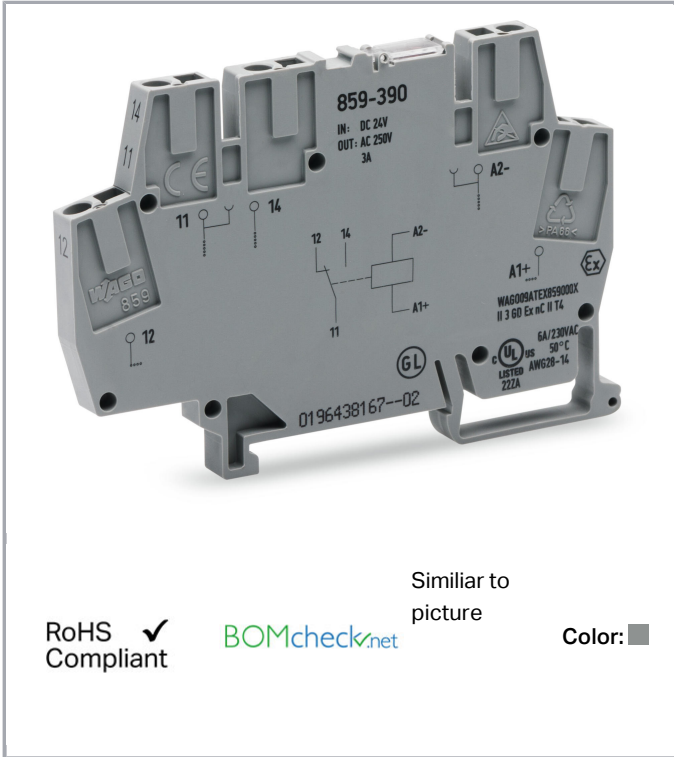


# Data sheet | Item number: 859-390

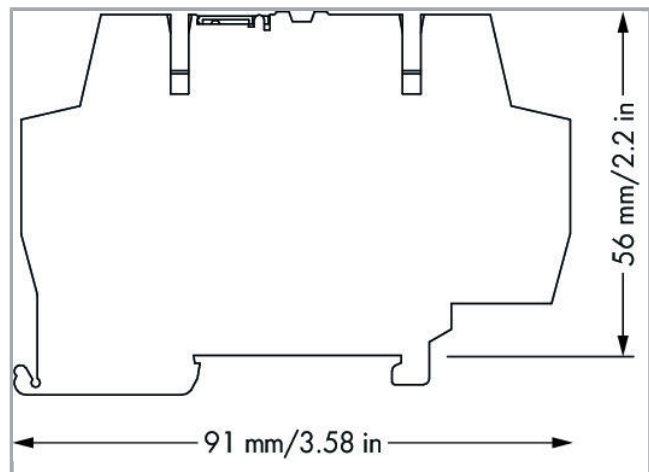
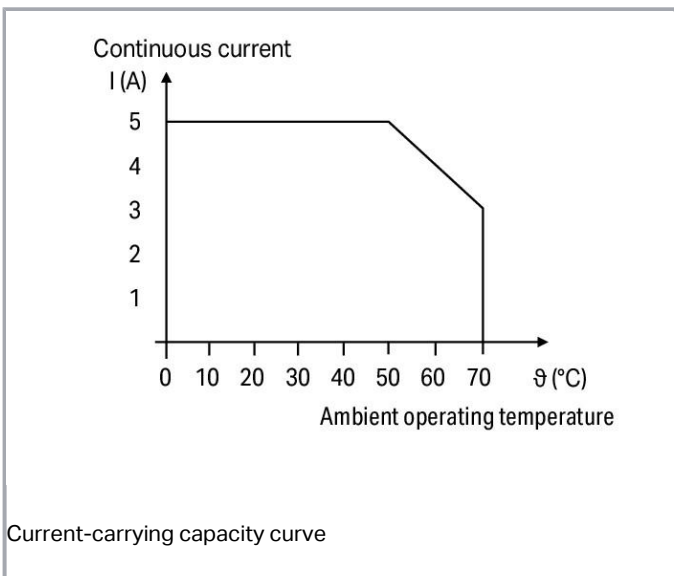
Relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Path;  
Red status indicator; Module width: 6 mm; 2,50 mm<sup>2</sup>; gray



[www.wago.com/859-390](http://www.wago.com/859-390)



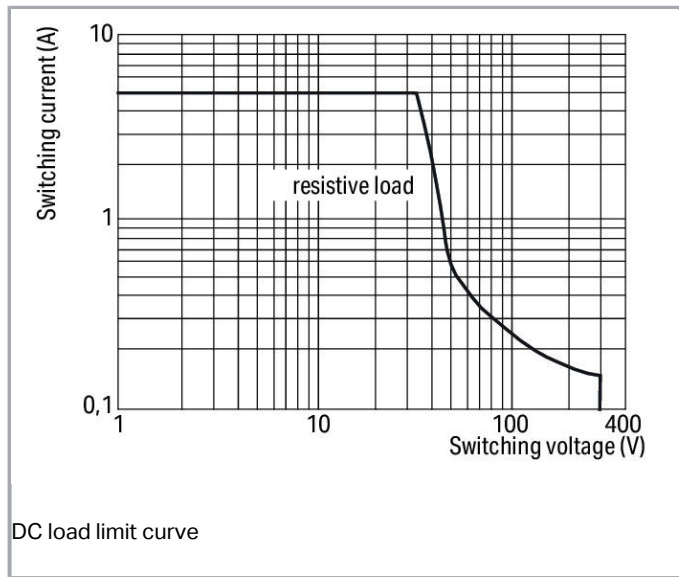
RoHS  Compliant Similar to picture Color:



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.



## Item description

### Note:

To protect the relay coils and contacts, inductive loads must be dampened with an effective protection circuit.

## Data

### Technical Data

#### Control circuit

Nominal input voltage $U_N$	DC 24 V
Input voltage range	-30 ... +25 %
Nominal input current at $U_N$	12 mA

#### Load circuit:

Number of changeover/switchover contacts	1
Contact material (relay)	AgSnO <sub>2</sub>
Limiting continuous current	5 A
Max. switching voltage	AC 250 V
Max. switching power (resistive)	AC 1250 VA; DC (see load limit curve)
Recommended minimum load	10 V / 10 mA; 24 V / 1 mA
Pull-in time (typ.)	15 ms

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



Drop-out time (typ.)	25 ms
Bounce time (typ)	3.5 ms
Electrical life (N.O.; resistive load; 23 °C)	50 x 10 <sup>3</sup> switching operations
Mechanical life	5 x 10 <sup>6</sup> switching operations
Max. switching load with load/without load	6 min <sup>-1</sup> / 180 min <sup>-1</sup>

## Signaling

Status indication	Red LED
-------------------	---------

## Safety and protection:

Rated voltage	250 V
Rated impulse voltage	4 kV
Pollution degree	2
Dielectric strength, control/load circuit (AC, 1 min)	4 kVrms
Dielectric strength open contact (AC, 1 min)	1 kVrms

## Connection data

Connection technology	CAGE CLAMP®
Solid conductor	0,08 ... 2,5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0,08 ... 2,5 mm <sup>2</sup> / 28 ... 14 AWG
Strip length	5 ... 6 mm / 0.2 ... 0.24 inch

## Geometrical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-35 rail	56 mm / 2.205 inch
Depth	91 mm / 3.583 inch

## Mechanical data

Type of mounting	DIN-35 rail
------------------	-------------

## Material Data

Color	gray
Weight	22.9 g

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

## Environmental Requirements

Surrounding air (operating) temperature at $U_N$	-40 ... 70 °C
Surrounding air (storage) temperature	-40 ... 70 °C
Processing temperature	-25 ... +50 °C

## Standards and specifications




Standards/specifications	EN 61010-2-201; EN 61810-1; EN 61373; GL; UL 508
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## Commercial data


Product Group	6 (Interface Electronics)
Packaging type	BOX
Country of origin	CN
GTIN	4055143607629
Customs Tariff No.	85364900990

## Approvals / Certificates

### Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAA00001D1
	<b>NK</b> Nippon Kaiji Kyokai	-	TA17255M
	<b>PRS</b> Polski Rejestr Statków	-	TE/2186 /880590/18

### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UL</b> UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4

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

## Counterpart

## Compatible products

### Test Accessories

<b>Item no.: 859-500</b> Test pin; 1 mm Ø; with solder connection for test wire	<a href="http://www.wago.com/859-500">www.wago.com/859-500</a>
--	--

### ferrule



<b>Item no.: 216-221</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	<a href="http://www.wago.com/216-221">www.wago.com/216-221</a>
--	--

<b>Item no.: 216-222</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	<a href="http://www.wago.com/216-222">www.wago.com/216-222</a>
--	--



<b>Item no.: 216-223</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	<a href="http://www.wago.com/216-223">www.wago.com/216-223</a>
--	--



<b>Item no.: 216-224</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	<a href="http://www.wago.com/216-224">www.wago.com/216-224</a>
--	--

<b>Item no.: 216-321</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-321">www.wago.com/216-321</a>
--	--



<b>Item no.: 216-322</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	<a href="http://www.wago.com/216-322">www.wago.com/216-322</a>
---	--

### tools

<b>Item no.: 210-720</b> Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	<a href="http://www.wago.com/210-720">www.wago.com/210-720</a>
---	--

### Marking accessories

<b>Item no.: 2009-145</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	<a href="http://www.wago.com/2009-145">www.wago.com/2009-145</a>
--	--


<b>Item no.: 2009-145/000-002</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white /000-002	<a href="http://www.wago.com/2009-145">www.wago.com/2009-145</a>
---	--

<b>Item no.: 2009-145/000-005</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red /000-005	<a href="http://www.wago.com/2009-145">www.wago.com/2009-145</a>
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Subject to changes. Please also observe the further product documentation!

**Item no.: 2009-145/000-006** [www.wago.com/2009-145/000-006](http://www.wago.com/2009-145/000-006)  
 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue


**Item no.: 2009-145/000-007** [www.wago.com/2009-145/000-007](http://www.wago.com/2009-145/000-007)  
 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white


 **Item no.: 2009-145/000-012** [www.wago.com/2009-145/000-012](http://www.wago.com/2009-145/000-012)  
 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange


**Item no.: 2009-145/000-023** [www.wago.com/2009-145/000-023](http://www.wago.com/2009-145/000-023)  
 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green

**Item no.: 2009-145/000-024** [www.wago.com/2009-145/000-024](http://www.wago.com/2009-145/000-024)  
 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

**Item no.: 210-110** [www.wago.com/210-110](http://www.wago.com/210-110)  
 Fiber-tip pen

 **Item no.: 248-501** [www.wago.com/248-501](http://www.wago.com/248-501)  
 Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card

 **Item no.: 248-501/000-002** [www.wago.com/248-501/000-002](http://www.wago.com/248-501/000-002)  
 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow


 **Item no.: 248-501/000-005** [www.wago.com/248-501/000-005](http://www.wago.com/248-501/000-005)  
 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

**Item no.: 248-501/000-006** [www.wago.com/248-501/000-006](http://www.wago.com/248-501/000-006)  
 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue








**Item no.: 248-501/000-007** [www.wago.com/248-501/000-007](http://www.wago.com/248-501/000-007)  
 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

**Item no.: 248-501/000-012** [www.wago.com/248-501/000-012](http://www.wago.com/248-501/000-012)  
 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange













**Item no.: 248-501/000-017** [www.wago.com/248-501/000-017](http://www.wago.com/248-501/000-017)  
 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

 **Item no.: 248-501/000-023** [www.wago.com/248-501/000-023](http://www.wago.com/248-501/000-023)  
 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

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











	<p><b>Item no.: 248-501/000-024</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet</p>	<p><a href="http://www.wago.com/248-501/000-024">www.wago.com/248-501/000-024</a></p>
	<p><b>Item no.: 248-502</b> Mini-WSB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white</p>	<p><a href="http://www.wago.com/248-502">www.wago.com/248-502</a></p>
	<p><b>Item no.: 248-502/000-024</b> Mini-WSB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; violet</p>	<p><a href="http://www.wago.com/248-502/000-024">www.wago.com/248-502/000-024</a></p>
	<p><b>Item no.: 248-503</b> Mini-WSB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white</p>	<p><a href="http://www.wago.com/248-503">www.wago.com/248-503</a></p>
	<p><b>Item no.: 248-503/000-024</b> Mini-WSB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; violet</p>	<p><a href="http://www.wago.com/248-503/000-024">www.wago.com/248-503/000-024</a></p>
	<p><b>Item no.: 248-504</b> Mini-WSB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white</p>	<p><a href="http://www.wago.com/248-504">www.wago.com/248-504</a></p>
	<p><b>Item no.: 248-504/000-024</b> Mini-WSB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; violet</p>	<p><a href="http://www.wago.com/248-504/000-024">www.wago.com/248-504/000-024</a></p>
	<p><b>Item no.: 248-505/000-024</b> Mini-WSB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; violet</p>	<p><a href="http://www.wago.com/248-505/000-024">www.wago.com/248-505/000-024</a></p>
	<p><b>Item no.: 248-506</b> Mini-WSB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white</p>	<p><a href="http://www.wago.com/248-506">www.wago.com/248-506</a></p>
<b>End plate</b>		
	<p><b>Item no.: 859-525</b> End and intermediate plate; 1 mm thick; gray</p>	<p><a href="http://www.wago.com/859-525">www.wago.com/859-525</a></p>
<b>Jumper</b>		
	<p><b>Item no.: 859-402</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated; light gray</p>	<p><a href="http://www.wago.com/859-402">www.wago.com/859-402</a></p>
	<p><b>Item no.: 859-402/000-005</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated; red</p>	<p><a href="http://www.wago.com/859-402/000-005">www.wago.com/859-402/000-005</a></p>
	<p><b>Item no.: 859-402/000-006</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated; blue</p>	<p><a href="http://www.wago.com/859-402/000-006">www.wago.com/859-402/000-006</a></p>
	<p><b>Item no.: 859-402/000-029</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated; yellow</p>	<p><a href="http://www.wago.com/859-402/000-029">www.wago.com/859-402/000-029</a></p>

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

	<b>Item no.: 859-403</b> Push-in type jumper bar; 3-way; Nominal current 18 A; insulated; light gray	<a href="http://www.wago.com/859-403">www.wago.com/859-403</a>
	<b>Item no.: 859-403/000-005</b> Push-in type jumper bar; 3-way; Nominal current 18 A; insulated; red	<a href="http://www.wago.com/859-403/000-005">www.wago.com/859-403/000-005</a>
	<b>Item no.: 859-403/000-006</b> Push-in type jumper bar; 3-way; Nominal current 18 A; insulated; blue	<a href="http://www.wago.com/859-403/000-006">www.wago.com/859-403/000-006</a>
	<b>Item no.: 859-403/000-029</b> Push-in type jumper bar; 3-way; Nominal current 18 A; insulated; yellow	<a href="http://www.wago.com/859-403/000-029">www.wago.com/859-403/000-029</a>
	<b>Item no.: 859-404</b> Push-in type jumper bar; 4-way; Nominal current 18 A; insulated; light gray	<a href="http://www.wago.com/859-404">www.wago.com/859-404</a>
	<b>Item no.: 859-404/000-005</b> Push-in type jumper bar; 4-way; Nominal current 18 A; insulated; red	<a href="http://www.wago.com/859-404/000-005">www.wago.com/859-404/000-005</a>
	<b>Item no.: 859-404/000-006</b> Push-in type jumper bar; 4-way; Nominal current 18 A; insulated; blue	<a href="http://www.wago.com/859-404/000-006">www.wago.com/859-404/000-006</a>
	<b>Item no.: 859-404/000-029</b> Push-in type jumper bar; 4-way; Nominal current 18 A; insulated; yellow	<a href="http://www.wago.com/859-404/000-029">www.wago.com/859-404/000-029</a>
	<b>Item no.: 859-405</b> Push-in type jumper bar; 5-way; Nominal current 18 A; insulated; light gray	<a href="http://www.wago.com/859-405">www.wago.com/859-405</a>
	<b>Item no.: 859-405/000-005</b> Push-in type jumper bar; 5-way; Nominal current 18 A; insulated; red	<a href="http://www.wago.com/859-405/000-005">www.wago.com/859-405/000-005</a>
	<b>Item no.: 859-405/000-006</b> Push-in type jumper bar; 5-way; Nominal current 18 A; insulated; blue	<a href="http://www.wago.com/859-405/000-006">www.wago.com/859-405/000-006</a>
	<b>Item no.: 859-405/000-029</b> Push-in type jumper bar; 5-way; Nominal current 18 A; insulated; yellow	<a href="http://www.wago.com/859-405/000-029">www.wago.com/859-405/000-029</a>
	<b>Item no.: 859-406</b> Push-in type jumper bar; 6-way; Nominal current 18 A; insulated; light gray	<a href="http://www.wago.com/859-406">www.wago.com/859-406</a>
	<b>Item no.: 859-406/000-005</b> Push-in type jumper bar; 6-way; Nominal current 18 A; insulated; red	<a href="http://www.wago.com/859-406/000-005">www.wago.com/859-406/000-005</a>

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



	<b>Item no.: 859-406/000-006</b> Push-in type jumper bar; 6-way; Nominal current 18 A; insulated; blue	<a href="http://www.wago.com/859-406/000-006">www.wago.com/859-406/000-006</a>
	<b>Item no.: 859-406/000-029</b> Push-in type jumper bar; 6-way; Nominal current 18 A; insulated; yellow	<a href="http://www.wago.com/859-406/000-029">www.wago.com/859-406/000-029</a>
	<b>Item no.: 859-407</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated; light gray	<a href="http://www.wago.com/859-407">www.wago.com/859-407</a>
	<b>Item no.: 859-407/000-005</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated; red	<a href="http://www.wago.com/859-407/000-005">www.wago.com/859-407/000-005</a>
	<b>Item no.: 859-407/000-006</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated; blue	<a href="http://www.wago.com/859-407/000-006">www.wago.com/859-407/000-006</a>
	<b>Item no.: 859-407/000-029</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated; yellow	<a href="http://www.wago.com/859-407/000-029">www.wago.com/859-407/000-029</a>
	<b>Item no.: 859-408</b> Push-in type jumper bar; 8-way; Nominal current 18 A; insulated; light gray	<a href="http://www.wago.com/859-408">www.wago.com/859-408</a>
	<b>Item no.: 859-408/000-005</b> Push-in type jumper bar; 8-way; Nominal current 18 A; insulated; red	<a href="http://www.wago.com/859-408/000-005">www.wago.com/859-408/000-005</a>
	<b>Item no.: 859-408/000-006</b> Push-in type jumper bar; 8-way; Nominal current 18 A; insulated; blue	<a href="http://www.wago.com/859-408/000-006">www.wago.com/859-408/000-006</a>
	<b>Item no.: 859-408/000-029</b> Push-in type jumper bar; 8-way; Nominal current 18 A; insulated; yellow	<a href="http://www.wago.com/859-408/000-029">www.wago.com/859-408/000-029</a>
	<b>Item no.: 859-409</b> Push-in type jumper bar; 9-way; Nominal current 18 A; insulated; light gray	<a href="http://www.wago.com/859-409">www.wago.com/859-409</a>
	<b>Item no.: 859-409/000-005</b> Push-in type jumper bar; 9-way; Nominal current 18 A; insulated; red	<a href="http://www.wago.com/859-409/000-005">www.wago.com/859-409/000-005</a>
	<b>Item no.: 859-409/000-006</b> Push-in type jumper bar; 9-way; Nominal current 18 A; insulated; blue	<a href="http://www.wago.com/859-409/000-006">www.wago.com/859-409/000-006</a>
	<b>Item no.: 859-409/000-029</b> Push-in type jumper bar; 9-way; Nominal current 18 A; insulated; yellow	<a href="http://www.wago.com/859-409/000-029">www.wago.com/859-409/000-029</a>

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



Item no.: 859-410

Push-in type jumper bar; 10-way; Nominal current 18 A; insulated; light gray

[www.wago.com/859-410](http://www.wago.com/859-410)

Item no.: 859-410/000-005

Push-in type jumper bar; 10-way; Nominal current 18 A; insulated; red

[www.wago.com/859-410/000-005](http://www.wago.com/859-410/000-005)



Item no.: 859-410/000-006

Push-in type jumper bar; 10-way; Nominal current 18 A; insulated; blue

[www.wago.com/859-410/000-006](http://www.wago.com/859-410/000-006)



Item no.: 859-410/000-029

Push-in type jumper bar; 10-way; Nominal current 18 A; insulated; yellow

[www.wago.com/859-410/000-029](http://www.wago.com/859-410/000-029)

## Downloads

### Documentation

#### Instruction Leaflet

Relay modules, Optocoupler modules	V 1.2.0 Aug 30, 2019	pdf 2.2 MB	Download
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#### Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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## CAD/CAE-Data

### CAD data

2D/3D Models 859-390	URL	Download
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### CAE data

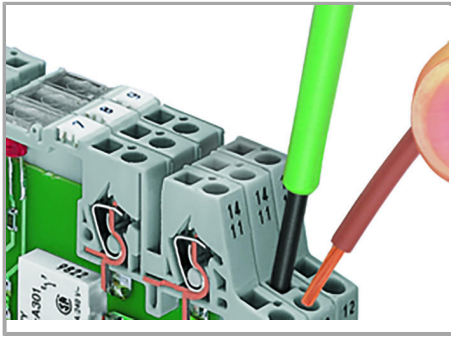
EPLAN Data Portal 859-390	URL	Download
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WSCAD Universe 859-390	URL	Download
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## Installation Notes

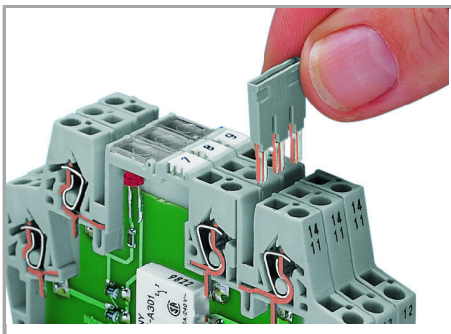
### Inserting a conductor

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



Connection of conductor

### Jumpered



Easy commoning using adjacent jumpers

### Marking



Marking using miniature WSB quick marking card

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