

## Item description

### Note:

Inductive loads have to be attenuated by an appropriate protective circuit in order to protect relay coils and contacts.

## 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.



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	LED red
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## 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
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## Material Data

Color	gray
Weight	22.9 g

Subject to changes.

## Environmental Requirements

Surrounding air (operating) temperature at U <sub>N</sub>	-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.

## Compatible products

### check



**Item no.: 859-500**

Test pin; 1 mm Ø; with solder connection for test wire

[www.wago.com/859-500](http://www.wago.com/859-500)

### ferrule



**Item no.: 216-221**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white

[www.wago.com/216-221](http://www.wago.com/216-221)



**Item no.: 216-222**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray

[www.wago.com/216-222](http://www.wago.com/216-222)



**Item no.: 216-223**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

[www.wago.com/216-223](http://www.wago.com/216-223)



**Item no.: 216-224**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

[www.wago.com/216-224](http://www.wago.com/216-224)

**Item no.: 216-321**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

[www.wago.com/216-321](http://www.wago.com/216-321)



**Item no.: 216-322**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; green

[www.wago.com/216-322](http://www.wago.com/216-322)

### tools



**Item no.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft

[www.wago.com/210-720](http://www.wago.com/210-720)

### Jumper



**Item no.: 859-402**

Push-in type jumper bar; 2-way; Nominal current 18 A; insulated; light gray

[www.wago.com/859-402](http://www.wago.com/859-402)



**Item no.: 859-402/000-005**

Push-in type jumper bar; 2-way; Nominal current 18 A; insulated; red

[www.wago.com/859-402/000-005](http://www.wago.com/859-402/000-005)



**Item no.: 859-402/000-006**

Push-in type jumper bar; 2-way; Nominal current 18 A; insulated; blue

[www.wago.com/859-402/000-006](http://www.wago.com/859-402/000-006)



**Item no.: 859-402/000-029**

Push-in type jumper bar; 2-way; Nominal current 18 A; insulated; yellow

[www.wago.com/859-402/000-029](http://www.wago.com/859-402/000-029)

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](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

	<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.



**Item no.: 859-406/000-006**  
Push-in type jumper bar; 6-way; Nominal current 18 A; insulated; blue

[www.wago.com/859-406/000-006](http://www.wago.com/859-406/000-006)



**Item no.: 859-406/000-029**  
Push-in type jumper bar; 6-way; Nominal current 18 A; insulated; yellow

[www.wago.com/859-406/000-029](http://www.wago.com/859-406/000-029)



**Item no.: 859-407**  
Push-in type jumper bar; 7-way; Nominal current 18 A; insulated; light gray

[www.wago.com/859-407](http://www.wago.com/859-407)



**Item no.: 859-407/000-005**  
Push-in type jumper bar; 7-way; Nominal current 18 A; insulated; red

[www.wago.com/859-407/000-005](http://www.wago.com/859-407/000-005)



**Item no.: 859-407/000-006**  
Push-in type jumper bar; 7-way; Nominal current 18 A; insulated; blue

[www.wago.com/859-407/000-006](http://www.wago.com/859-407/000-006)



**Item no.: 859-407/000-029**  
Push-in type jumper bar; 7-way; Nominal current 18 A; insulated; yellow

[www.wago.com/859-407/000-029](http://www.wago.com/859-407/000-029)



**Item no.: 859-408**  
Push-in type jumper bar; 8-way; Nominal current 18 A; insulated; light gray

[www.wago.com/859-408](http://www.wago.com/859-408)



**Item no.: 859-408/000-005**  
Push-in type jumper bar; 8-way; Nominal current 18 A; insulated; red

[www.wago.com/859-408/000-005](http://www.wago.com/859-408/000-005)



**Item no.: 859-408/000-006**  
Push-in type jumper bar; 8-way; Nominal current 18 A; insulated; blue

[www.wago.com/859-408/000-006](http://www.wago.com/859-408/000-006)



**Item no.: 859-408/000-029**  
Push-in type jumper bar; 8-way; Nominal current 18 A; insulated; yellow

[www.wago.com/859-408/000-029](http://www.wago.com/859-408/000-029)



**Item no.: 859-409**  
Push-in type jumper bar; 9-way; Nominal current 18 A; insulated; light gray

[www.wago.com/859-409](http://www.wago.com/859-409)



**Item no.: 859-409/000-005**  
Push-in type jumper bar; 9-way; Nominal current 18 A; insulated; red

[www.wago.com/859-409/000-005](http://www.wago.com/859-409/000-005)



**Item no.: 859-409/000-006**  
Push-in type jumper bar; 9-way; Nominal current 18 A; insulated; blue

[www.wago.com/859-409/000-006](http://www.wago.com/859-409/000-006)



**Item no.: 859-409/000-029**  
Push-in type jumper bar; 9-way; Nominal current 18 A; insulated; yellow

[www.wago.com/859-409/000-029](http://www.wago.com/859-409/000-029)

**Item no.: 859-410**

Subject to changes.



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)

#### End plate



**Item no.: 859-525**  
End and intermediate plate; 1 mm thick; gray

[www.wago.com/859-525](http://www.wago.com/859-525)

#### Marking accessories



**Item no.: 2009-145**  
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; white

[www.wago.com/2009-145](http://www.wago.com/2009-145)



**Item no.: 2009-145/000-002**  
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

[www.wago.com/2009-145/000-002](http://www.wago.com/2009-145/000-002)



**Item no.: 2009-145/000-005**  
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; red

[www.wago.com/2009-145/000-005](http://www.wago.com/2009-145/000-005)



**Item no.: 2009-145/000-006**  
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; blue

[www.wago.com/2009-145/000-006](http://www.wago.com/2009-145/000-006)



**Item no.: 2009-145/000-007**  
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; gray

[www.wago.com/2009-145/000-007](http://www.wago.com/2009-145/000-007)



**Item no.: 2009-145/000-012**  
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; orange

[www.wago.com/2009-145/000-012](http://www.wago.com/2009-145/000-012)



**Item no.: 2009-145/000-023**  
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; green

[www.wago.com/2009-145/000-023](http://www.wago.com/2009-145/000-023)



**Item no.: 2009-145/000-024**  
Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; violet

[www.wago.com/2009-145/000-024](http://www.wago.com/2009-145/000-024)

















**Item no.: 210-110**  
Fiber-tip pen

[www.wago.com/210-110](http://www.wago.com/210-110)

Subject to changes.



	<p><b>Item no.: 248-501</b>                      Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card</p>	<a href="http://www.wago.com/248-501">www.wago.com/248-501</a>
	<p><b>Item no.: 248-501/000-002</b>                      Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow</p>	<a href="http://www.wago.com/248-501/000-002">www.wago.com/248-501/000-002</a>
	<p><b>Item no.: 248-501/000-005</b>                      Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red</p>	<a href="http://www.wago.com/248-501/000-005">www.wago.com/248-501/000-005</a>
	<p><b>Item no.: 248-501/000-006</b>                      Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue</p>	<a href="http://www.wago.com/248-501/000-006">www.wago.com/248-501/000-006</a>
	<p><b>Item no.: 248-501/000-007</b>                      Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray</p>	<a href="http://www.wago.com/248-501/000-007">www.wago.com/248-501/000-007</a>
	<p><b>Item no.: 248-501/000-012</b>                      Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange</p>	<a href="http://www.wago.com/248-501/000-012">www.wago.com/248-501/000-012</a>
	<p><b>Item no.: 248-501/000-017</b>                      Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green</p>	<a href="http://www.wago.com/248-501/000-017">www.wago.com/248-501/000-017</a>
	<p><b>Item no.: 248-501/000-023</b>                      Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green</p>	<a href="http://www.wago.com/248-501/000-023">www.wago.com/248-501/000-023</a>
	<p><b>Item no.: 248-501/000-024</b>                      Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet</p>	<a href="http://www.wago.com/248-501/000-024">www.wago.com/248-501/000-024</a>
	<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>	<a href="http://www.wago.com/248-502">www.wago.com/248-502</a>
	<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>	<a href="http://www.wago.com/248-502/000-024">www.wago.com/248-502/000-024</a>
	<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>	<a href="http://www.wago.com/248-503">www.wago.com/248-503</a>
	<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>	<a href="http://www.wago.com/248-503/000-024">www.wago.com/248-503/000-024</a>
	<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>	<a href="http://www.wago.com/248-504">www.wago.com/248-504</a>

Subject to changes.



**Item no.: 248-504/000-024**

Mini-WSB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; violet

[www.wago.com/248-504/000-024](http://www.wago.com/248-504/000-024)



**Item no.: 248-505/000-024**

Mini-WSB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; violet

[www.wago.com/248-505/000-024](http://www.wago.com/248-505/000-024)



**Item no.: 248-506**

Mini-WSB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white

[www.wago.com/248-506](http://www.wago.com/248-506)

## Downloads

### Documentation

#### Bid Text

859-390 X81 - Datei	Feb 19, 2019	xml 4.6 kB	Download
859-390 docx - Datei	Feb 20, 2019	docx 17.4 kB	Download

#### 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

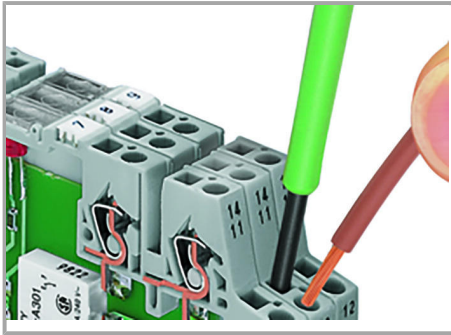
EPLAN Data Portal 859-390	Download
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WSCAD Universe 859-390	Download
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Subject to changes.

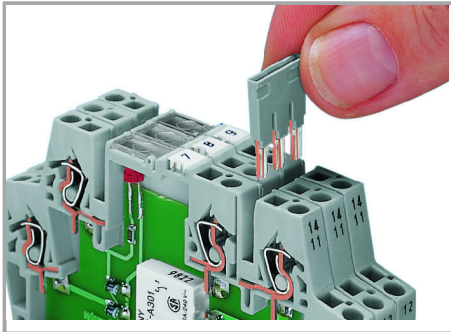
## Installation Notes

### Inserting a conductor



### Connection of conductor

### Jumpered



### Easy commoning using adjacent jumpers

### Marking



### Marking using miniature WSB quick marking card

Subject to changes.