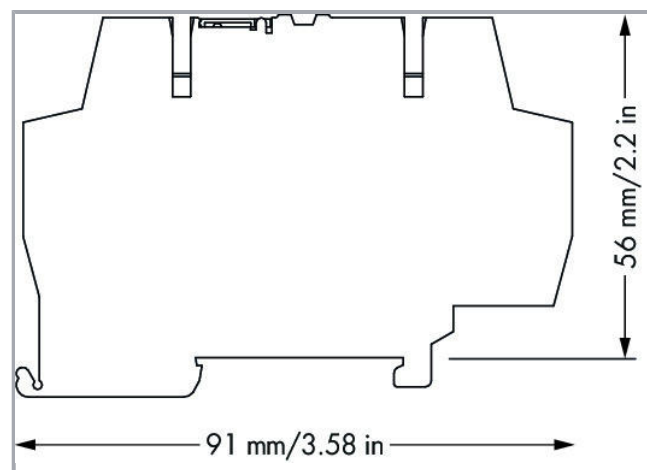
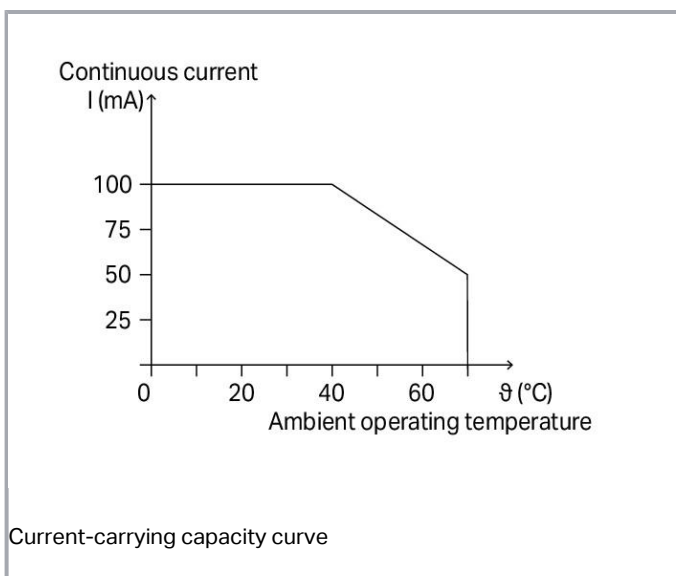
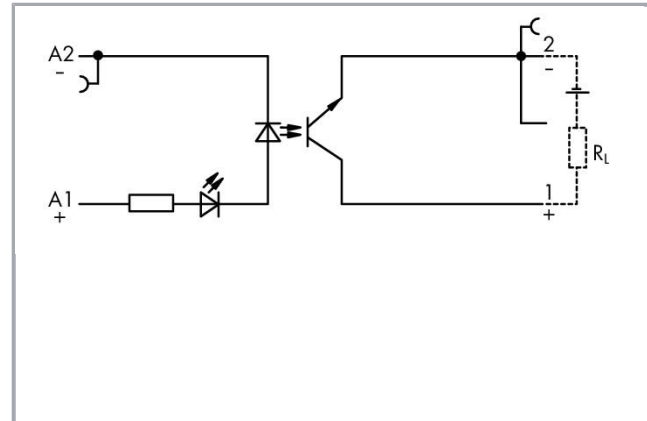
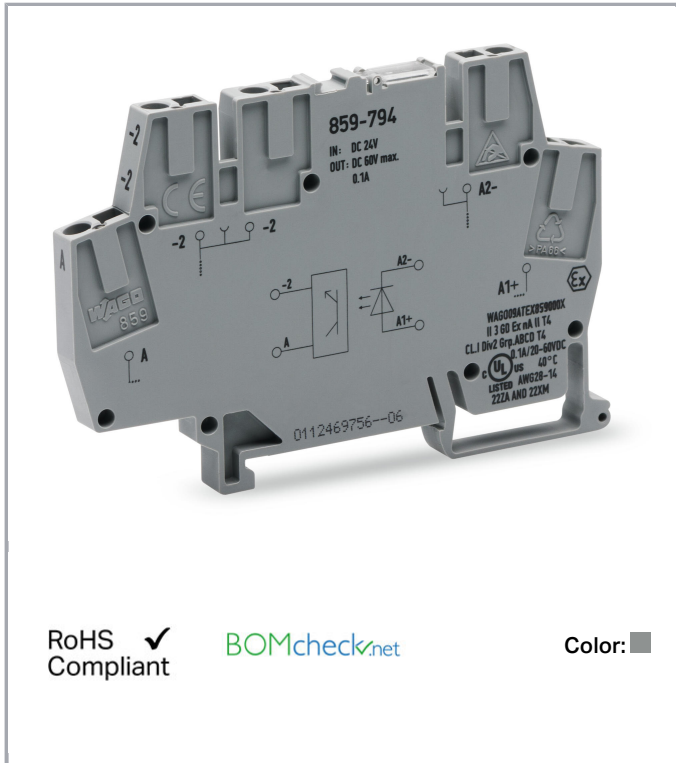


# Data sheet | Item number: 859-794

Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range: 0 ... 24 VDC; Limiting continuous current: 0.1 A; Module width: 6 mm; gray



[www.wago.com/859-794](http://www.wago.com/859-794)



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.



## Item description

### Note:

Optocouplers and solid state relays are designed for use in signal processing networks, which are not supplied by the low-voltage power supply networks.

## Data

### Technical Data

#### Control circuit

Nominal input voltage $U_N$	DC 24 V
Input voltage range (low level)	DC 0 ... 5 V
Input voltage range (high level)	DC 16 ... 30 V
Nominal input current at $U_N$	4.2 mA

#### Load circuit:

Circuit type	2-conductor termination
Limiting continuous current	0.1 A
Output voltage range	DC 9 ... 60 V
Max. voltage drop at output	$\leq$ DC 2 V
Leakage current at nominal voltage	$\leq$ 25 $\mu$ A
Turn-on time	$\leq$ 20 $\mu$ s
Drop-out time	$\leq$ 120 $\mu$ s
Switching frequency	$\leq$ 1.5 kHz

#### Signaling

Status indication	LED red
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#### Safety and protection:

Dielectric strength, control/load circuit (AC, 1 min)	2.5 kVrms
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#### 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

Subject to changes.



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
Fire load	0.478 MJ
Weight	18.4 g

### 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 60664-1; EN 61000-6-2; EN 61000-6-3; EN 50121-3-2; EN 61373; UL 508
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### Commercial data

Product Group	6 (Interface Electronics)
Packaging type	BOX
Country of origin	DE
GTIN	4055143606325
Customs Tariff No.	85365005000

### Approvals / Certificates

#### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL	UL 508	E175199

Subject to changes.



UL International Netherlands B.V. (ORDINARY LOCATIONS)

Sec.4

## Compatible products

### 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)

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?

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

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



**Item no.: 248-501**  
Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card

[www.wago.com/248-501](http://www.wago.com/248-501)



**Item no.: 248-501/000-002**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

[www.wago.com/248-501/000-002](http://www.wago.com/248-501/000-002)



**Item no.: 248-501/000-005**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

[www.wago.com/248-501/000-005](http://www.wago.com/248-501/000-005)



**Item no.: 248-501/000-006**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

[www.wago.com/248-501/000-006](http://www.wago.com/248-501/000-006)



**Item no.: 248-501/000-007**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

[www.wago.com/248-501/000-007](http://www.wago.com/248-501/000-007)



**Item no.: 248-501/000-012**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

[www.wago.com/248-501/000-012](http://www.wago.com/248-501/000-012)



**Item no.: 248-501/000-017**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

[www.wago.com/248-501/000-017](http://www.wago.com/248-501/000-017)



**Item no.: 248-501/000-023**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

[www.wago.com/248-501/000-023](http://www.wago.com/248-501/000-023)



**Item no.: 248-501/000-024**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet

[www.wago.com/248-501/000-024](http://www.wago.com/248-501/000-024)



**Item no.: 248-502**  
Mini-WSB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white

[www.wago.com/248-502](http://www.wago.com/248-502)



**Item no.: 248-502/000-024**  
Mini-WSB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; violet

[www.wago.com/248-502/000-024](http://www.wago.com/248-502/000-024)



**Item no.: 248-503**  
Mini-WSB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white

[www.wago.com/248-503](http://www.wago.com/248-503)



**Item no.: 248-503/000-024**  
Mini-WSB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; violet

[www.wago.com/248-503/000-024](http://www.wago.com/248-503/000-024)

**Item no.: 248-504**

Subject to changes.



Mini-WSB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white [www.wago.com/248-504](http://www.wago.com/248-504)



**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)

**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)



**Item no.: 859-403**  
Push-in type jumper bar; 3-way; Nominal current 18 A; insulated; light gray [www.wago.com/859-403](http://www.wago.com/859-403)



**Item no.: 859-403/000-005**  
Push-in type jumper bar; 3-way; Nominal current 18 A; insulated; red [www.wago.com/859-403/000-005](http://www.wago.com/859-403/000-005)



**Item no.: 859-403/000-006**  
Push-in type jumper bar; 3-way; Nominal current 18 A; insulated; blue [www.wago.com/859-403/000-006](http://www.wago.com/859-403/000-006)



**Item no.: 859-403/000-029**  
Push-in type jumper bar; 3-way; Nominal current 18 A; insulated; yellow [www.wago.com/859-403/000-029](http://www.wago.com/859-403/000-029)

















**Item no.: 859-404**  
Push-in type jumper bar; 4-way; Nominal current 18 A; insulated; light gray [www.wago.com/859-404](http://www.wago.com/859-404)

















**Item no.: 859-404/000-005**  
Push-in type jumper bar; 4-way; Nominal current 18 A; insulated; red [www.wago.com/859-404/000-005](http://www.wago.com/859-404/000-005)

Subject to changes.

	<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>
	<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>






**Item no.: 859-408**

Subject to changes.

	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>
	<b>Item no.: 859-410</b> Push-in type jumper bar; 10-way; Nominal current 18 A; insulated; light gray	<a href="http://www.wago.com/859-410">www.wago.com/859-410</a>
	<b>Item no.: 859-410/000-005</b> Push-in type jumper bar; 10-way; Nominal current 18 A; insulated; red	<a href="http://www.wago.com/859-410/000-005">www.wago.com/859-410/000-005</a>
	<b>Item no.: 859-410/000-006</b> Push-in type jumper bar; 10-way; Nominal current 18 A; insulated; blue	<a href="http://www.wago.com/859-410/000-006">www.wago.com/859-410/000-006</a>
	<b>Item no.: 859-410/000-029</b> Push-in type jumper bar; 10-way; Nominal current 18 A; insulated; yellow	<a href="http://www.wago.com/859-410/000-029">www.wago.com/859-410/000-029</a>
<b>tools</b>		
	<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>
<b>ferrule</b>		
	<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>

Subject to changes.



	<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>
<b>check</b>		
	<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>

## Downloads

### Documentation

#### Bid Text

859-794 X81 - Datei	Feb 19, 2019	xml 4.0 kB	Download
859-794 docx - Datei	Feb 20, 2019	docx 15.8 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 859-794	URL	Download
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### CAE data

Subject to changes.

EPLAN Data Portal 859-794

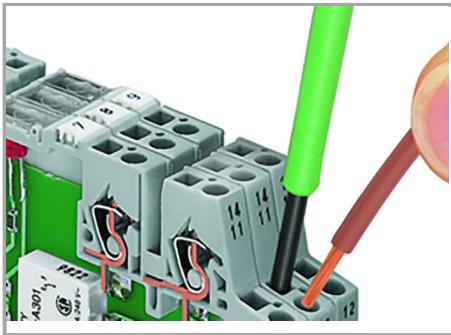
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WSCAD Universe 859-794

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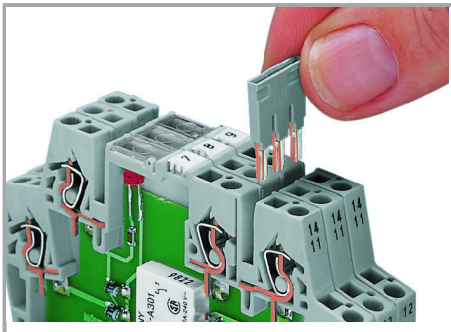
## Installation Notes

### Inserting a conductor



Connection of conductor

### Jumpered



Easy commoning using adjacent jumpers

### Marking

Subject to changes.



Marking using miniature WSB quick marking card

Subject to changes.