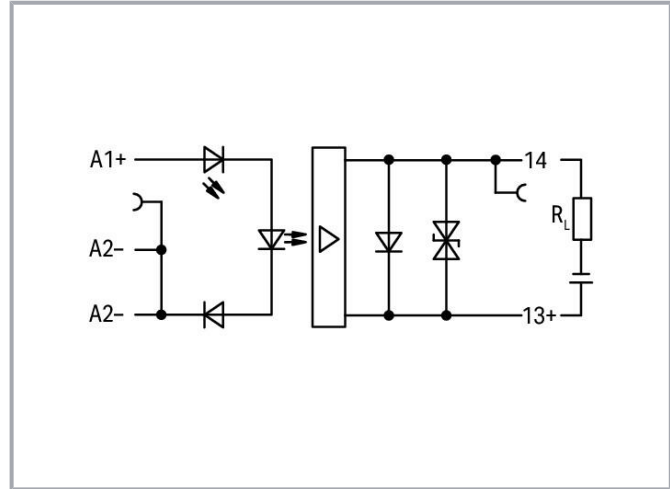
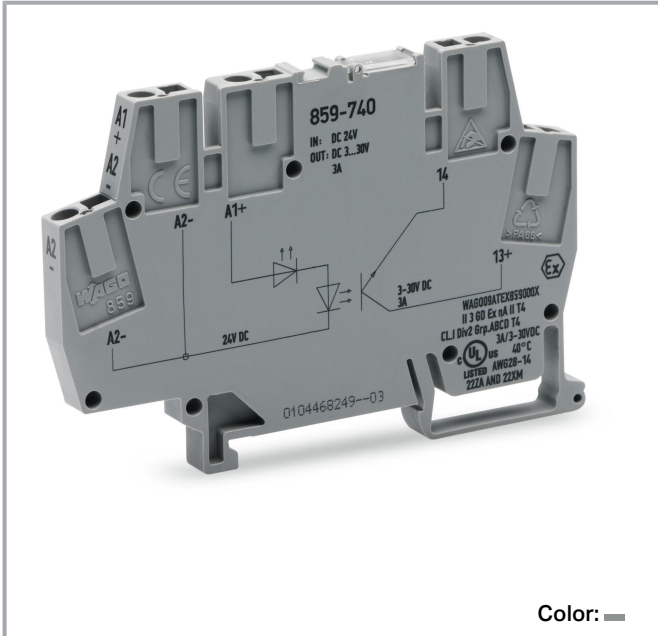


Data sheet | Item number: 859-740

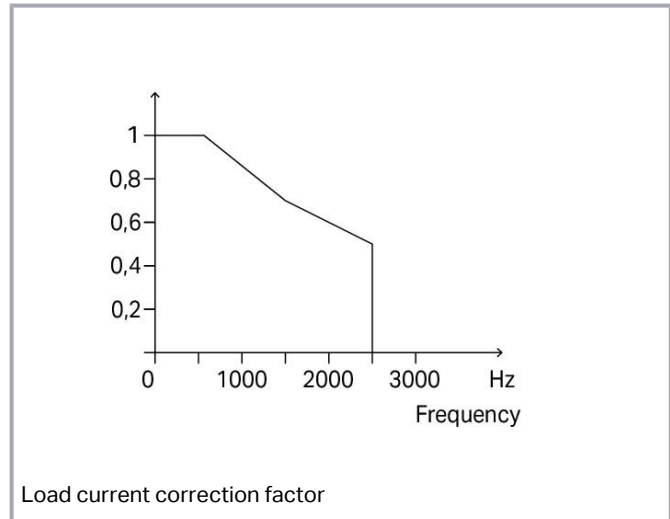
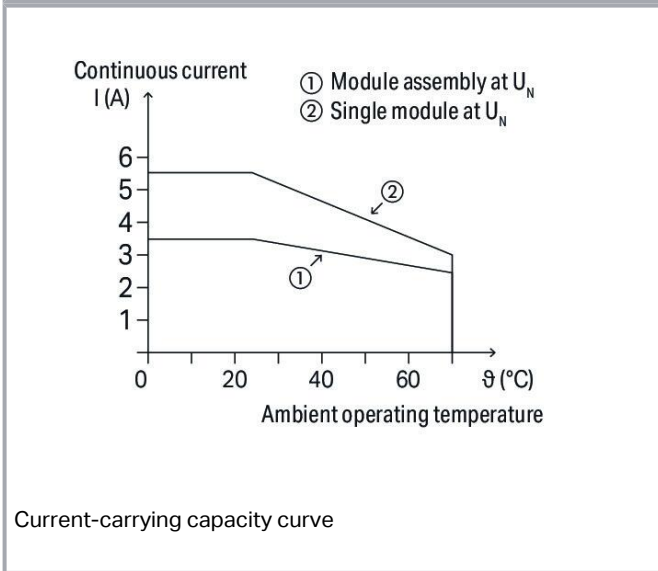
Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range: 3 ... 30 VDC; Limiting continuous current: 5 A; 2-wire connection; Module width: 6 mm; gray



[www.wago.com/859-740](http://www.wago.com/859-740)



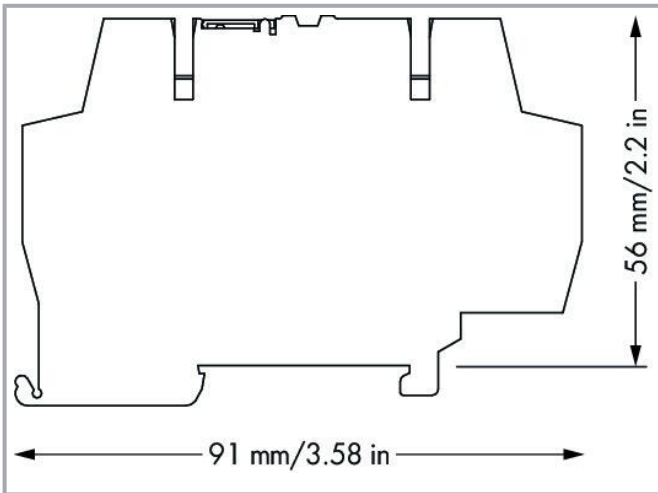
Color: —



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

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

**Data****Notes**

## 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.

**Technical data****Control Circuit**

Nominal input voltage $U_N$	DC 24 V
Input voltage range (low level)	DC 0 ... 6.5 V
Input voltage range (high level)	DC 16 ... 30 V
Nominal input current at $U_N$	8 mA
Input current range	1 ... 12 mA

**Load circuit**

Number of make/switch-on contacts	1
Circuit type	2-wire connection
Limiting continuous current	5.5 A
Peak output current	25 A

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



Nominal output voltage	DC 24 V
Output voltage range	DC 3 ... 30 V
Voltage drop at output (max.)	≤ DC 0.4 V
Leakage current at rated voltage	≤ 10 µA
Turn-on time	≤ 30 µs
Turn-off time	≤ 100 µs
Rise time (t <sub>10-90</sub> )	16 µs
Drop-out time (t <sub>90-10</sub> )	16 µs
Switching frequency	≤ 2.5 kHz

## Signaling

Status indicator	Yellow LED
------------------	------------

## Safety and protection

Rated voltage	300 V
Overvoltage category	II
Pollution degree	2
Dielectric strength (control/load circuit) (AC, 1 min)	2.5 kVrms
Insulation type (control/load circuit)	Basic insulation
Insulation type (between adjacent devices of the same type)	Reinforced insulation (safe isolation)
Insulation type (to adjacent devices of different types)	Basic insulation
Protection type	IP20; in connected state or when using 859-525 end plate

## Connection data

Connection technology	CAGE CLAMP®
Solid conductor	0.2 ... 2.5 mm <sup>2</sup> / 24 ... 14 AWG
Fine-stranded conductor	0.2 ... 2.5 mm <sup>2</sup> / 24 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.2 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.2 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Strip length	5 ... 6 mm / 0.2 ... 0.24 inches

## Physical data

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

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

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## Mechanical data

Mounting type	DIN-35 rail
Mounting position	horizontal (standing/lying); vertical

## Material Data

Color	gray
Fire load	0.443 MJ
Weight	18.5 g

## Environmental requirements

Ambient temperature (operation at $U_N$ )	-40 ... +70 °C
Ambient temperature UL (operation at $U_N$ )	-40 ... +40 °C
Ambient temperature (storage)	-40 ... +85 °C
Processing temperature	-25 ... +50 °C
Temperature range of connection cable	$\geq (T_{\text{ambient}} + 20 \text{ K})$
Relative humidity	5 ... 95 % (no condensation permissible)
Operating altitude (max.)	2000 m

## Standards and specifications

Standards/specifications	EN 61010-2-201 EN 61000-6-2 EN 61000-6-3
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## Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-26-15-03
eCl@ss 9.0	27-26-15-03
ETIM 8.0	EC001504
ETIM 7.0	EC001504
PU (SPU)	10 pcs
Packaging type	Box
Country of origin	CN
GTIN	4055143605427
Customs tariff number	85365005000

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


## Environmental Product Compliance

RoHS Compliance Status


Compliant, No Exemption

## Approvals / Certificates




### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC_Certificate_RU_C-DE.AM02.B.00115_19

### Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

### Approvals for hazardous areas

Logo	Approval	Additional Approval Text	Certificate name
	CCC CNEX	CNCA-C23-01	2021312304000982 (Ex ec IIC T4 Gc)
	UKEx WAGO GmbH & Co. KG	EN 60079-0	WAGO22UKEX007X_ec
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	ANSI/ISA 12.12.01	E198726

## Optional accessories

### Jumpers

Jumper		
	Item no.: 859-408 Jumper; for jumper slot; 8-way; insulated; light gray	<a href="http://www.wago.com/859-408">www.wago.com/859-408</a>

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



**Item no.: 859-404/000-005**  
Jumper; for jumper slot; 4-way; insulated; red

[www.wago.com/859-404/000-005](http://www.wago.com/859-404/000-005)



**Item no.: 859-404/000-006**  
Jumper; for jumper slot; 4-way; insulated; blue

[www.wago.com/859-404/000-006](http://www.wago.com/859-404/000-006)



**Item no.: 859-405/000-005**  
Jumper; for jumper slot; 5-way; insulated; red

[www.wago.com/859-405/000-005](http://www.wago.com/859-405/000-005)



**Item no.: 859-405/000-029**  
Jumper; for jumper slot; 5-way; insulated; yellow

[www.wago.com/859-405/000-029](http://www.wago.com/859-405/000-029)



**Item no.: 859-405**  
Jumper; for jumper slot; 5-way; insulated; light gray

[www.wago.com/859-405](http://www.wago.com/859-405)



**Item no.: 859-404/000-029**  
Jumper; for jumper slot; 4-way; insulated; yellow

[www.wago.com/859-404/000-029](http://www.wago.com/859-404/000-029)



**Item no.: 859-406**  
Jumper; for jumper slot; 6-way; insulated; light gray

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



**Item no.: 859-405/000-006**  
Jumper; for jumper slot; 5-way; insulated; blue

[www.wago.com/859-405/000-006](http://www.wago.com/859-405/000-006)



**Item no.: 859-406/000-005**  
Jumper; for jumper slot; 6-way; insulated; red

[www.wago.com/859-406/000-005](http://www.wago.com/859-406/000-005)



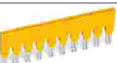
**Item no.: 859-409/000-029**  
Jumper; for jumper slot; 9-way; insulated; yellow

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



**Item no.: 859-410/000-005**  
Jumper; for jumper slot; 10-way; insulated; red

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



**Item no.: 859-410/000-029**  
Jumper; for jumper slot; 10-way; insulated; yellow















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











**Item no.: 859-410**  
Jumper; for jumper slot; 10-way; insulated; light gray

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

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

	<b>Item no.: 859-410/000-006</b> Jumper; for jumper slot; 10-way; insulated; blue	<a href="http://www.wago.com/859-410/000-006">www.wago.com/859-410/000-006</a>
	<b>Item no.: 859-403/000-005</b> Jumper; for jumper slot; 3-way; insulated; red	<a href="http://www.wago.com/859-403/000-005">www.wago.com/859-403/000-005</a>
	<b>Item no.: 859-402/000-029</b> Jumper; for jumper slot; 2-way; insulated; yellow	<a href="http://www.wago.com/859-402/000-029">www.wago.com/859-402/000-029</a>
	<b>Item no.: 859-403/000-029</b> Jumper; for jumper slot; 3-way; insulated; yellow	<a href="http://www.wago.com/859-403/000-029">www.wago.com/859-403/000-029</a>
	<b>Item no.: 859-403/000-006</b> Jumper; for jumper slot; 3-way; insulated; blue	<a href="http://www.wago.com/859-403/000-006">www.wago.com/859-403/000-006</a>
	<b>Item no.: 859-408/000-005</b> Jumper; for jumper slot; 8-way; insulated; red	<a href="http://www.wago.com/859-408/000-005">www.wago.com/859-408/000-005</a>
	<b>Item no.: 859-408/000-029</b> Jumper; for jumper slot; 8-way; 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> Jumper; for jumper slot; 9-way; insulated; light gray	<a href="http://www.wago.com/859-409">www.wago.com/859-409</a>
	<b>Item no.: 859-408/000-006</b> Jumper; for jumper slot; 8-way; insulated; blue	<a href="http://www.wago.com/859-408/000-006">www.wago.com/859-408/000-006</a>
	<b>Item no.: 859-403</b> Jumper; for jumper slot; 3-way; insulated; light gray	<a href="http://www.wago.com/859-403">www.wago.com/859-403</a>
	<b>Item no.: 859-409/000-005</b> Jumper; for jumper slot; 9-way; insulated; red	<a href="http://www.wago.com/859-409/000-005">www.wago.com/859-409/000-005</a>
	<b>Item no.: 859-404</b> Jumper; for jumper slot; 4-way; insulated; light gray	<a href="http://www.wago.com/859-404">www.wago.com/859-404</a>
	<b>Item no.: 859-409/000-006</b> Jumper; for jumper slot; 9-way; insulated; blue	<a href="http://www.wago.com/859-409/000-006">www.wago.com/859-409/000-006</a>
	<b>Item no.: 859-402/000-006</b> Jumper; for jumper slot; 2-way; insulated; blue	<a href="http://www.wago.com/859-402/000-006">www.wago.com/859-402/000-006</a>

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

	<b>Item no.: 859-402</b> Jumper; for jumper slot; 2-way; insulated; light gray	<a href="http://www.wago.com/859-402">www.wago.com/859-402</a>
	<b>Item no.: 859-402/000-005</b> Jumper; for jumper slot; 2-way; insulated; red	<a href="http://www.wago.com/859-402/000-005">www.wago.com/859-402/000-005</a>
	<b>Item no.: 859-406/000-006</b> Jumper; for jumper slot; 6-way; 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> Jumper; for jumper slot; 6-way; insulated; signal yellow	<a href="http://www.wago.com/859-406/000-029">www.wago.com/859-406/000-029</a>
	<b>Item no.: 859-407/000-006</b> Jumper; for jumper slot; 7-way; insulated; blue	<a href="http://www.wago.com/859-407/000-006">www.wago.com/859-407/000-006</a>
	<b>Item no.: 859-407/000-005</b> Jumper; for jumper slot; 7-way; insulated; red	<a href="http://www.wago.com/859-407/000-005">www.wago.com/859-407/000-005</a>
	<b>Item no.: 859-407/000-029</b> Jumper; for jumper slot; 7-way; insulated; yellow	<a href="http://www.wago.com/859-407/000-029">www.wago.com/859-407/000-029</a>
	<b>Item no.: 859-407</b> Jumper; for jumper slot; 7-way; insulated; light gray	<a href="http://www.wago.com/859-407">www.wago.com/859-407</a>

**Tool**

Operating tool



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

Intermediate plate



<b>Item no.: 859-525</b> End and intermediate plate; 1 mm thick; gray	<a href="http://www.wago.com/859-525">www.wago.com/859-525</a>
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**Ferrule**

Ferrule



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



	<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; light turquoise	<a href="http://www.wago.com/216-322">www.wago.com/216-322</a>
<b>Marking accessories</b>		
Marking devices		
	<b>Item no.: 210-110</b> Fiber-tip pen	<a href="http://www.wago.com/210-110">www.wago.com/210-110</a>
Marker		
	<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.: 248-501</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white	<a href="http://www.wago.com/248-501">www.wago.com/248-501</a>
	<b>Item no.: 248-504</b> Mini-WSB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white	<a href="http://www.wago.com/248-504">www.wago.com/248-504</a>
	<b>Item no.: 248-503</b> Mini-WSB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white	<a href="http://www.wago.com/248-503">www.wago.com/248-503</a>
	<b>Item no.: 248-506</b> Mini-WSB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white	<a href="http://www.wago.com/248-506">www.wago.com/248-506</a>
	<b>Item no.: 248-502</b> Mini-WSB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white	<a href="http://www.wago.com/248-502">www.wago.com/248-502</a>
<b>Testing and measuring</b>		
Testing accessories		
	<b>Item no.: 859-500</b> WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 10 mm uninsulated; Test lead for soldering up to 0,5mm <sup>2</sup>	<a href="http://www.wago.com/859-500">www.wago.com/859-500</a>

## Downloads

### Documentation

#### Bid Text

859-740	2019 Feb 20	docx	Download
docx - Datei		15.7 kB	

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859-740 X81 - Datei	2019 Feb 19	xml 3.9 kB	Download
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**Instruction Leaflet**

CCC Ex (Additional information) 859-***	2023 Apr 26	pdf 135.9 kB	Download
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Relay modules, Optocoupler modules	V 2.0.0 2022 Jan 19	pdf 2.1 MB	Download
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**Additional Information**

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 Aug 18	pdf 2.2 MB	Download
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**CAD/CAE-Data**

**CAD data**

2D/3D Models 859-740	URL	Download
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**CAE data**

EPLAN Data Portal 859-740	URL	Download
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WSCAD Universe 859-740	URL	Download
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ZUKEN Portal 859-740	URL	Download
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**Environmental Product Compliance**

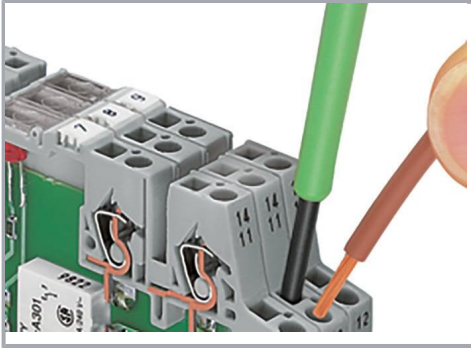
**Compliance Search**

Environmental Product Compliance 859-740 Optocoupler module; Nominal input voltage: 24 VDC; Output voltage range: 3 ... 30 VDC; Limiting continuous current: 5 A; 2-wire connection; Module width: 6 mm; gray	URL	Download
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**Installation Notes**

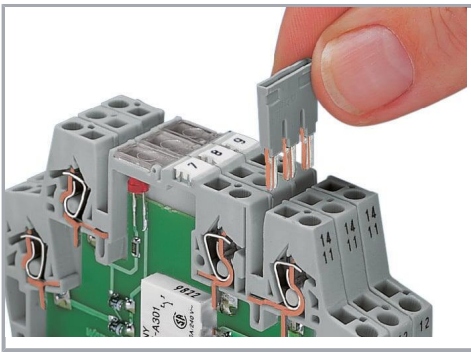
**Conductor termination**

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



Conductor termination

### Commoning



Easy commoning using adjacent jumpers

### Marking



Marking via Mini-WSB Quick Marking System

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