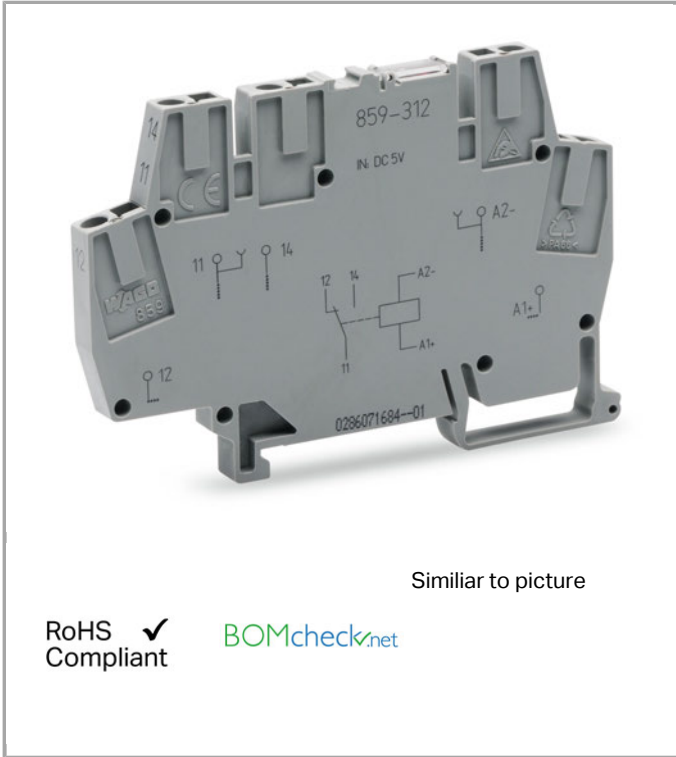


Data sheet | Item number: 859-312

Relay module; Nominal input voltage: 5 VDC; 1 changeover contact; with gold contacts; Red status indicator; Module width: 6 mm



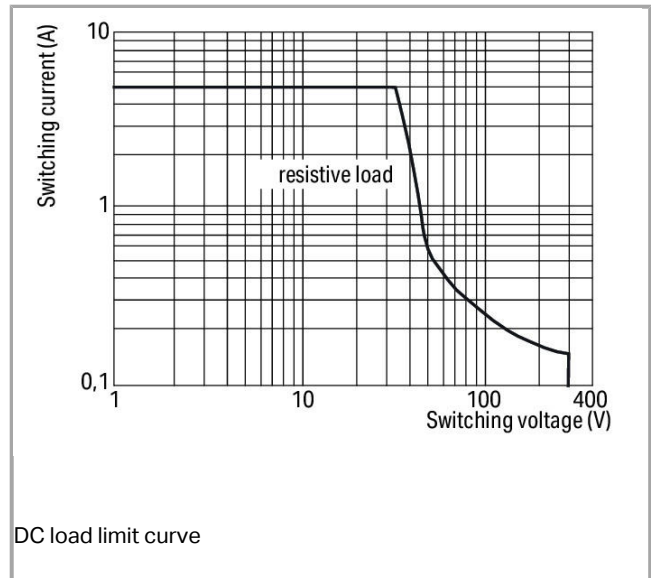
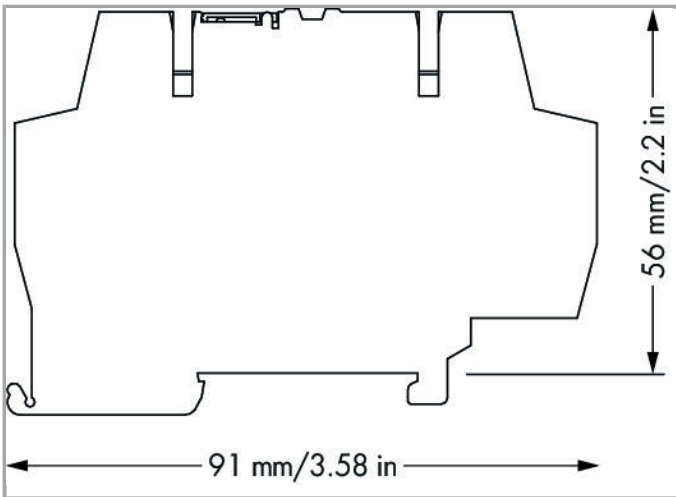
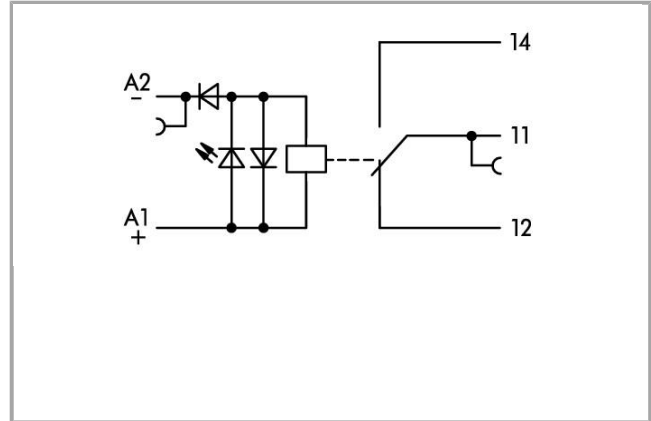
859-312



Similar to picture

RoHS  Compliant

[BOMcheck.net](https://www.bomcheck.net)



DC load limit curve

Item description

Note:

—

- To prevent the gold layer from being damaged, 30 VDC switching voltages and 50 mA currents shall not be exceeded. Higher switching power evaporates the gold layer. The resulting deposits in the housing may reduce the service life.
- 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 5 V
Input voltage range	-15 +20 %
Nominal input current at $U_N$	31 mA

#### Load circuit:

Number of changeover/switchover contacts	1
Contact material (relay)	AgNi + Au
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	1 V / 1 mA / 1 mW
Pull-in time (typ.)	15 ms
Drop-out time (typ.)	25 ms
Bounce time (typ.)	3.5 ms
Electrical life (N.O.; resistive load; 23 °C)	$50 \times 10^3$ switching operations
Mechanical life	$5 \times 10^6$ switching operations
Max. switching load with load/without load	$6 \text{ min}^{-1} / 180 \text{ min}^{-1}$

#### 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®
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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

Weight	22.5 g
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### Environmental Requirements

Pollution degree	2
Surrounding air (operating) temperature at U <sub>N</sub>	-40 50 °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)
Country of origin	DE
GTIN	4055143603119
Customs Tariff No.	85364900990

















### Compatible products
















### Marking accessories

	<b>Item no.: 2009-145</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; white	2009-145
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	<b>Item no.: 2009-145/000-002</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; yellow	/000-002	2009-145
	<b>Item no.: 2009-145/000-005</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; red	/000-005	2009-145
	<b>Item no.: 2009-145/000-006</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; blue	/000-006	2009-145
	<b>Item no.: 2009-145/000-007</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; gray	/000-007	2009-145
	<b>Item no.: 2009-145/000-012</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; orange	/000-012	2009-145
	<b>Item no.: 2009-145/000-023</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; green	/000-023	2009-145
	<b>Item no.: 2009-145/000-024</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; violet	/000-024	2009-145
	<b>Item no.: 210-110</b> Fiber-tip pen		210-110
	<b>Item no.: 248-501</b> Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card		248-501
	<b>Item no.: 248-501/000-002</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow	/000-002	248-501
	<b>Item no.: 248-501/000-005</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white	/000-005	248-501
	<b>Item no.: 248-501/000-006</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white	/000-006	248-501
	<b>Item no.: 248-501/000-007</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white	/000-007	248-501
	<b>Item no.: 248-501/000-012</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white	/000-012	248-501
	<b>Item no.: 248-501/000-017</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white	/000-017	248-501

	<b>Item no.: 248-501/000-023</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white		248-501
		/000-023	
	<b>Item no.: 248-501/000-024</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white		248-501
		/000-024	
	<b>Item no.: 248-502</b> Mini-WSB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white		248-502
	<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; white		248-502
		/000-024	
	<b>Item no.: 248-503</b> Mini-WSB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white		248-503
	<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; white		248-503
		/000-024	
	<b>Item no.: 248-504</b> Mini-WSB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white		248-504
	<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; white		248-504
		/000-024	
	<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		248-505
	<b>Item no.: 248-506</b> Mini-WSB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white		248-506
<b>check</b>			
	<b>Item no.: 859-500</b> Test pin; 1 mm Ø; with solder connection for test wire		859-500
<b>Jumper</b>			
	<b>Item no.: 859-402</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated; light gray		859-402
	<b>Item no.: 859-402/000-005</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated; red		859-402
		/000-005	
	<b>Item no.: 859-402/000-006</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated; blue		859-402
		/000-006	
	<b>Item no.: 859-402/000-029</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated; yellow		859-402
		/000-029	

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

	<b>Item no.: 859-407</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated; light gray	859-407
	<b>Item no.: 859-407/000-005</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated; red	859-407 /000-005
	<b>Item no.: 859-407/000-006</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated; blue	859-407 /000-006
	<b>Item no.: 859-407/000-029</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated; yellow	859-407 /000-029
	<b>Item no.: 859-408</b> Push-in type jumper bar; 8-way; Nominal current 18 A; insulated; light gray	859-408
	<b>Item no.: 859-408/000-005</b> Push-in type jumper bar; 8-way; Nominal current 18 A; insulated; red	859-408 /000-005
	<b>Item no.: 859-408/000-006</b> Push-in type jumper bar; 8-way; Nominal current 18 A; insulated; blue	859-408 /000-006
	<b>Item no.: 859-408/000-029</b> Push-in type jumper bar; 8-way; Nominal current 18 A; insulated; yellow	859-408 /000-029
	<b>Item no.: 859-409</b> Push-in type jumper bar; 9-way; Nominal current 18 A; insulated; light gray	859-409
	<b>Item no.: 859-409/000-005</b> Push-in type jumper bar; 9-way; Nominal current 18 A; insulated; red	859-409 /000-005
	<b>Item no.: 859-409/000-006</b> Push-in type jumper bar; 9-way; Nominal current 18 A; insulated; blue	859-409 /000-006
	<b>Item no.: 859-409/000-029</b> Push-in type jumper bar; 9-way; Nominal current 18 A; insulated; yellow	859-409 /000-029
	<b>Item no.: 859-410</b> Push-in type jumper bar; 10-way; Nominal current 18 A; insulated; light gray	859-410
	<b>Item no.: 859-410/000-005</b> Push-in type jumper bar; 10-way; Nominal current 18 A; insulated; red	859-410 /000-005
	<b>Item no.: 859-410/000-006</b> Push-in type jumper bar; 10-way; Nominal current 18 A; insulated; blue	859-410 /000-006



Item no.: 859-410/000-029

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

859-410

/000-029

## ferrule



Item no.: 216-221

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

216-221



Item no.: 216-222

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

216-222



Item no.: 216-223

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

216-223



Item no.: 216-224

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

216-224

Item no.: 216-321

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

216-321



Item no.: 216-322

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

216-322

## tools



Item no.: 210-720

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

210-720

## End plate



Item no.: 859-525

End and intermediate plate; 1 mm thick; gray

859-525

## Downloads

## Documentation

## Bid Text

859-312	Oct 6, 2014	doc	Download
Relaisbaustein		27.1 kB	

## Instruction Leaflet

Relaismodule, Optokopplermodule, Sonderfunktionen		pdf	Download
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## Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf	Download
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## CAD data

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