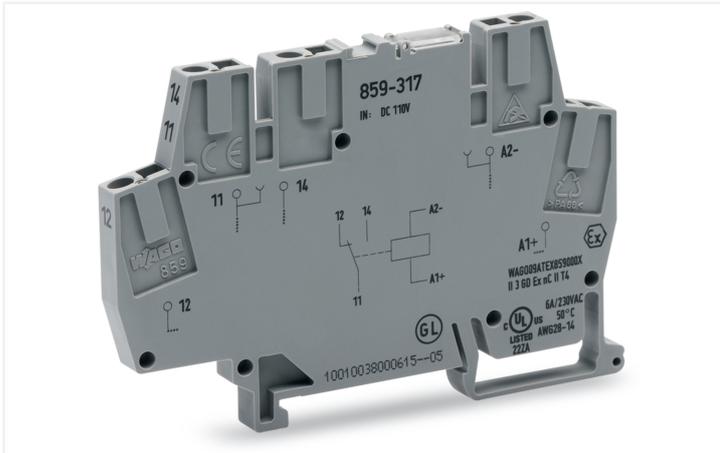


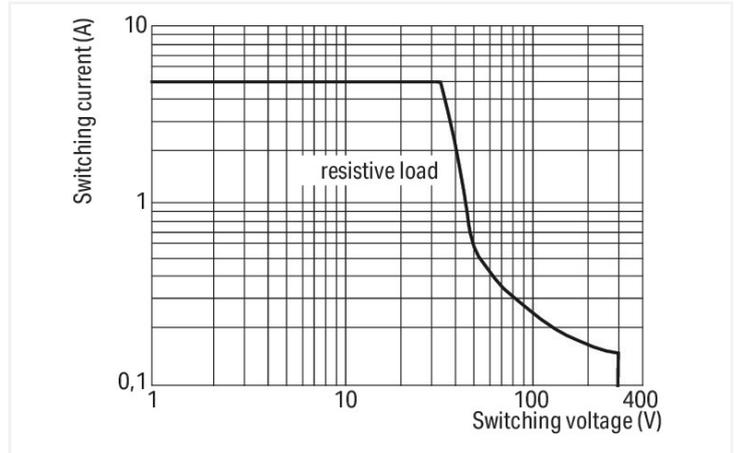
# Data Sheet | Item Number: 859-317

Relay module; Nominal input voltage: 110 VDC; 1 changeover contact; with gold contacts; Railway; Red status indicator; Module width: 6 mm; 2,50 mm<sup>2</sup>; gray

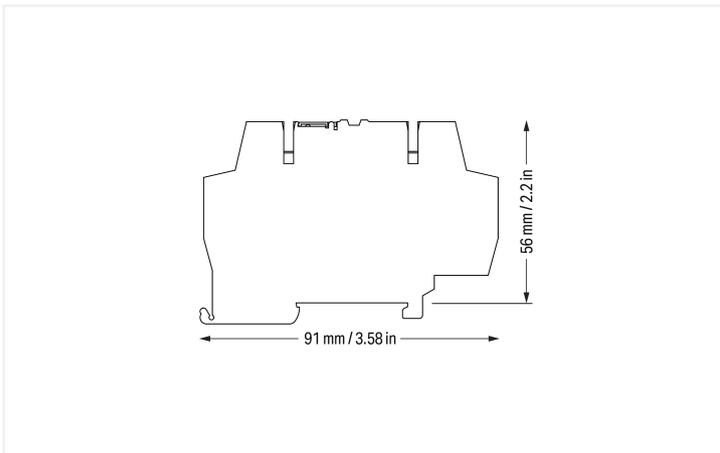
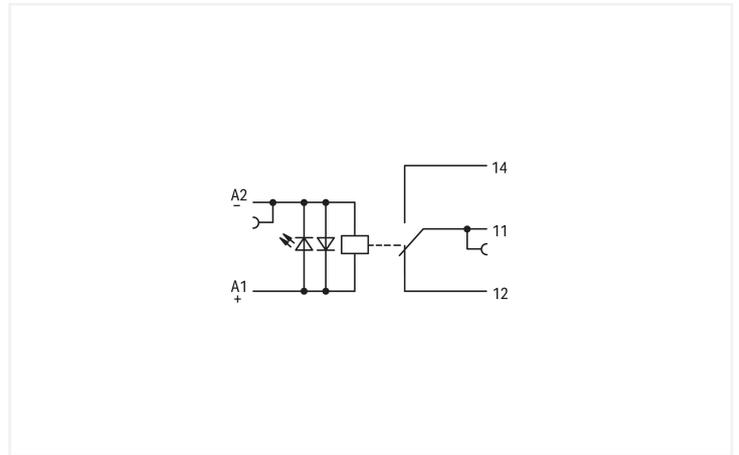
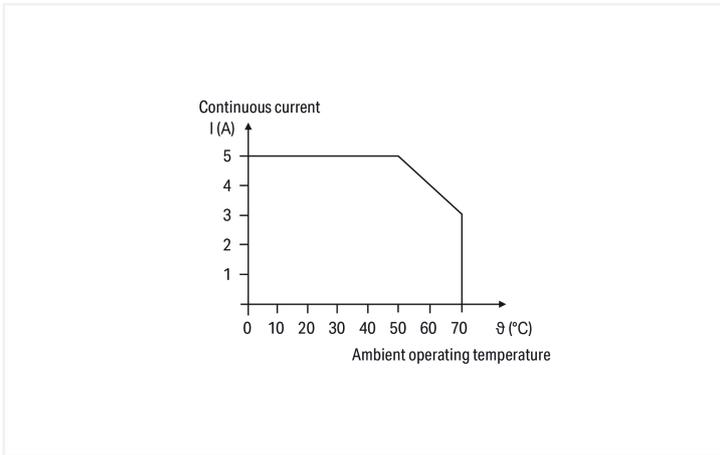
<https://www.wago.com/859-317>



Color: ■ gray



DC load limit curve



## Notes

Note	To prevent damaging the gold layer, 30 V switching voltages and 50 mA currents must not be exceeded. Higher switching power eventually evaporates the gold layer. The resulting deposits in the housing may reduce service life. To protect the relay coils and contacts, inductive loads must be dampened with an effective protection circuit.
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## Technical data

## Control circuit

Nominal input voltage $U_N$	110 VDC
Input voltage range	-30 ... +25 %
Nominal input current at $U_N$	4 mA

## Load circuit

Number of changeover/switchover contacts	1
Contact material (relay)	AgNi + Au
Limiting continuous current	5 A
Switching Voltage, Max.	250 VAC
Switching power (resistive) max.	AC 1250 VA; DC (see load limit curve)
Switching capacity	AC-15: 3 A / 250 VAC; DC-13: 2 A / 24 VDC
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 (NO; resistive load; 23 °C)	50 x 10 <sup>8</sup> switching operations
Mechanical life	5 x 10 <sup>8</sup> switching operations
Switching frequency with/without load (max.)	6 min <sup>-1</sup> / 180 min <sup>-1</sup>

## Signaling

Status indicator	Red LED
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## Safety and protection

Rated Voltage	300 V
Rated impulse withstand voltage	4 kV
Oversoltage category	III
Pollution degree	2
Dielectric strength (control/load circuit) (AC, 1 min)	4 kVrms
Dielectric strength (open contact) (AC, 1 min)	1 kVrms
Insulation type (control/load circuit)	Reinforced insulation (safe isolation)
Insulation type (adjacent devices)	Reinforced insulation (safe isolation)
Protection type	IP20; in connected state or when using 859-525 end plate

## 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
Fine-stranded conductor; with insulated ferrule	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 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

### Mechanical data

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

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Insulation material (main housing)	Polyamide (PA66)
Material group	I
Flammability class per UL94	V0
Fire load	0.43 MJ
Weight	22.2 g

### Environmental requirements

Ambient temperature (operation at $U_N$ )	-40 ... +70 °C
Ambient temperature (storage)	-40 ... +70 °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 61810-1 EN 61373 UL 508 DNV
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### Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
PU (SPU)	10 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143603522
Customs tariff number	85364900990

### Product Classification

UNSPSC	39122334
eCl@ss 10.0	27-37-16-01
eCl@ss 9.0	27-37-16-01
ETIM 9.0	EC001437
ETIM 10.0	EC001437
ECCN	NO US CLASSIFICATION

**Environmental Product Compliance**

CAS-No.	7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(a)
SCIP notification number (Austria)	25ab52d5-e397-4175-9631-847c9f2e461b
SCIP notification number (Belgium)	5e86f264-329c-46ba-b3bd-892069986410
SCIP notification number (Bulgaria)	3f16e1fe-09f5-4a3f-93fa-1cb9f6406380
SCIP notification number (Czech Republic)	2a0e08f1-773a-4b3b-bd87-414090157e1d
SCIP notification number (Denmark)	4779c19e-7914-498c-83de-f5c863c176a4
SCIP notification number (Finland)	b7ec3a4e-1198-4f55-812c-3a71e8058965
SCIP notification number (France)	7f9c7156-3f32-47e1-afbb-b53edd14b82d
SCIP notification number (Germany)	bd820025-b119-43c4-acb7-ca37b7dd755a
SCIP notification number (Hungary)	6f2240b7-772f-425a-ae0d-9ba8b77bdace
SCIP notification number (Italy)	4ffc7c7e-a32b-4e14-bc90-b5c438195eef
SCIP notification number (Netherlands)	5502de0f-6cb1-4f59-978d-4d90d5ad94fe
SCIP notification number (Poland)	f74722ce-c9cb-4dec-949a-7fa3658d7324
SCIP notification number (Romania)	a012d22b-9184-4ab0-bc28-5593dc949689
SCIP notification number (Sweden)	0e156a98-40ed-40ea-af91-5877a5e533b3

**Approvals / Certificates**

**General approvals** **Declarations of conformity and manufacturer's declarations**



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03078
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

**Approvals for marine applications**



Approval	Standard	Certificate Name
DNV DNV Germany GmbH	DNV-CG-0339, Aug.2021	TAA00001D1

**Approvals for hazardous areas**



Approval	Standard	Certificate Name
CCC CNEX	CNCA-C23-01	2021312304000982 (Ex ec nC IIC T4 Gc)
UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA-GO22UKEX007X_ec nC

**Downloads**

**Environmental Product Compliance**

<b>Compliance Search</b>			
Environmental Product Compliance 859-317			<a href="#">↓</a>

**Documentation**

<b>Bid Text</b>			
859-317	19.02.2019	xml 4.96 KB	<a href="#">↓</a>
859-317	20.02.2019	docx 17.22 KB	<a href="#">↓</a>

<b>Instruction Leaflet</b>			
CCC Ex (Additional information)	26.04.2023	pdf 132.68 KB	<a href="#">↓</a>
Relay modules, Opto-coupler modules	V 2.0.0 19.01.2022	pdf 2066.27 KB	<a href="#">↓</a>

**CAD/CAE-Data**

<b>CAD data</b>	
2D/3D Models 859-317	<a href="#">↓</a>

<b>CAE data</b>	
EPLAN Data Portal 859-317	<a href="#">↓</a>
WSCAD Universe 859-317	<a href="#">↓</a>
ZUKEN Portal 859-317	<a href="#">↓</a>

**1 Compatible Products**

**1.1 Optional Accessories**

**1.1.1 End plate**

**1.1.1.1 End plate**



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

**1.1.1.2 Intermediate plate**



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

1.1.2 Ferrule

1.1.2.1 Ferrule



**Item No.: 216-321**  
 Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-322**  
 Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-221**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



**Item No.: 216-222**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-223**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-224**  
 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

1.1.3 Jumper

1.1.3.1 Jumper



**Item No.: 859-410/000-006**  
 Jumper; for jumper slot; 10-way; insulated; blue



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



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



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



**Item No.: 859-402/000-006**  
 Jumper; for jumper slot; 2-way; insulated; blue



**Item No.: 859-402**  
 Jumper; for jumper slot; 2-way; insulated; light gray



**Item No.: 859-402/000-005**  
 Jumper; for jumper slot; 2-way; insulated; red



**Item No.: 859-402/000-029**  
 Jumper; for jumper slot; 2-way; insulated; yellow



**Item No.: 859-403/000-006**  
 Jumper; for jumper slot; 3-way; insulated; blue



**Item No.: 859-403**  
 Jumper; for jumper slot; 3-way; insulated; light gray



**Item No.: 859-403/000-005**  
 Jumper; for jumper slot; 3-way; insulated; red



**Item No.: 859-403/000-029**  
 Jumper; for jumper slot; 3-way; insulated; yellow



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



**Item No.: 859-404**  
 Jumper; for jumper slot; 4-way; insulated; light gray



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



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



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



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



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



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



**Item No.: 859-406/000-006**  
 Jumper; for jumper slot; 6-way; insulated; blue



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



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



**Item No.: 859-406/000-029**  
 Jumper; for jumper slot; 6-way; insulated; yellow



**Item No.: 859-407/000-006**  
 Jumper; for jumper slot; 7-way; insulated; blue



**Item No.: 859-407**  
 Jumper; for jumper slot; 7-way; insulated; light gray



**Item No.: 859-407/000-005**  
 Jumper; for jumper slot; 7-way; insulated; red



**Item No.: 859-407/000-029**  
 Jumper; for jumper slot; 7-way; insulated; yellow



**Item No.: 859-408/000-006**  
 Jumper; for jumper slot; 8-way; insulated; blue



**Item No.: 859-408**  
 Jumper; for jumper slot; 8-way; insulated; light gray



**Item No.: 859-408/000-005**  
 Jumper; for jumper slot; 8-way; insulated; red



**Item No.: 859-408/000-029**  
 Jumper; for jumper slot; 8-way; insulated; yellow



**Item No.: 859-409/000-006**  
 Jumper; for jumper slot; 9-way; insulated; blue



**Item No.: 859-409**  
 Jumper; for jumper slot; 9-way; insulated; light gray



**Item No.: 859-409/000-005**  
 Jumper; for jumper slot; 9-way; insulated; red



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

## 1.1.4 Marking

### 1.1.4.1 Marker



**Item No.: 2009-145**

Mini-WSB In-line; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 248-502**

Mini-WSB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white



**Item No.: 248-503**

Mini-WSB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white



**Item No.: 248-504**

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



**Item No.: 248-506**

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



**Item No.: 248-501**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

### 1.1.4.2 Marking device



**Item No.: 210-110**

Fiber-tip pen

## 1.1.5 Test and measurement

### 1.1.5.1 Testing accessories



**Item No.: 859-500**

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>

## 1.1.6 Tool

### 1.1.6.1 Operating tool



**Item No.: 210-720**

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

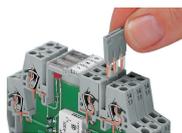
## Installation Notes

### Conductor termination



Conductor termination

## Commoning



Easy commoning using adjacent jumpers

## Marking



Marking via Mini-WSB Quick Marking System