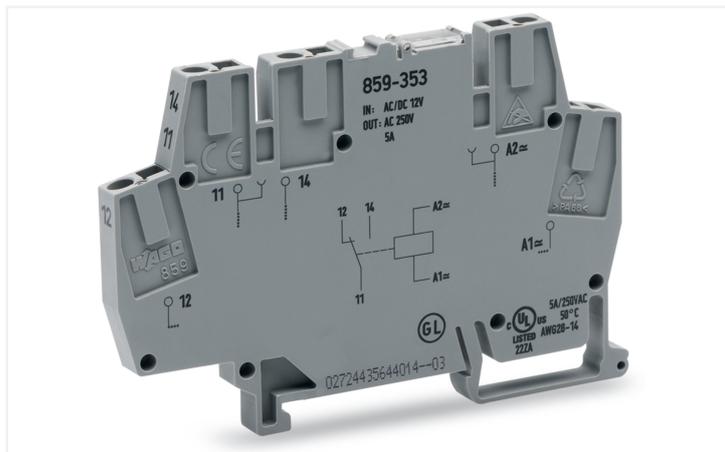


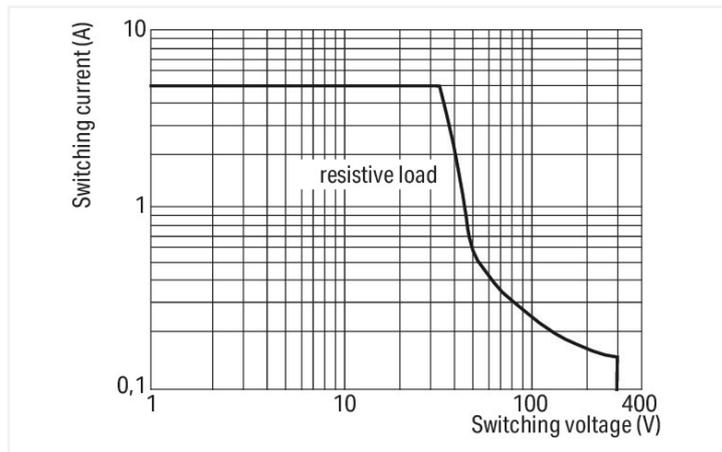
# Data Sheet | Item Number: 859-353

Relay module; Nominal input voltage: 12 V AC/DC; 1 changeover contact; Red status indicator; Module width: 6 mm; 2,50 mm<sup>2</sup>; gray

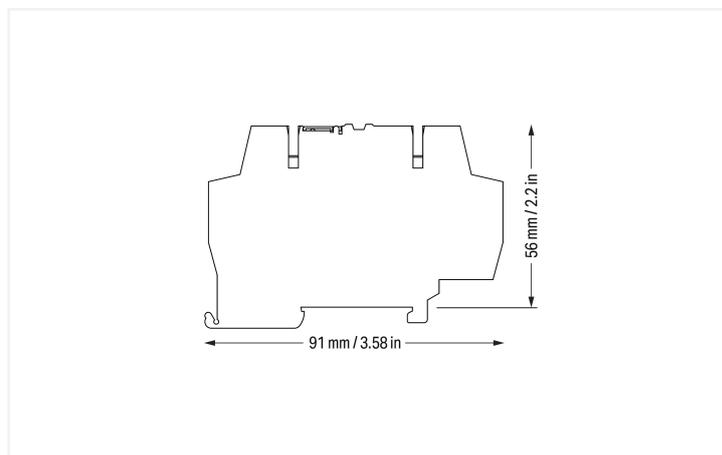
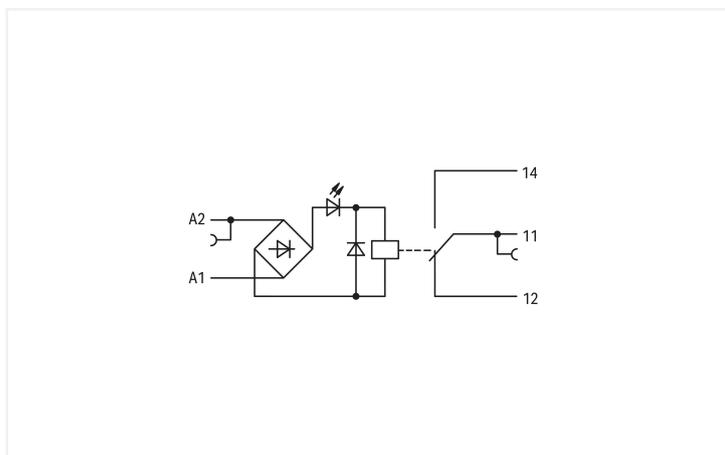
<https://www.wago.com/859-353>



Color: ■ gray



DC load limit curve



## Notes

Note To protect the relay coils and contacts, inductive loads must be dampened with an effective protection circuit.

## Technical data

### Control circuit

Nominal input voltage $U_N$	12 VAC/VDC
Input voltage range	-15 ... +10 %
Nominal input current at $U_N$	15 mA

### Load circuit

Number of changeover/switchover contacts	1
Contact material (relay)	AgSnO <sub>2</sub>
Limiting continuous current	5 A
Inrush current (resistive) max.	(AC) 20 A / 0.02 s
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	10 V / 10 mA; 24 V / 1 mA
Pull-in time (typ.)	15 ms
Drop-out time (typ.)	25 ms

### Load circuit

Bounce time (typ.)	3.5 ms
Electrical life (NO; resistive load; 23 °C)	50 x 10 <sup>3</sup> switching operations
Mechanical life	5 x 10 <sup>6</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
Overtoltage 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	0.48 MJ
Weight	22.7 g

### Environmental requirements

Ambient temperature (operation at $U_N$ )	-40 ... +50 °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	4055143603874
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.	1303-86-2 7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Diboron trioxide Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(a)
SCIP notification number (Austria)	7c147c11-7abf-4c57-8a92-8c7df03378e9
SCIP notification number (Belgium)	39b7cae3-e37e-4fc8-949f-e7449c3f3434
SCIP notification number (Bulgaria)	98cf4835-9d2b-4edb-9992-e926a2f06add
SCIP notification number (Czech Republic)	9a44cce0-d38f-4b1a-a8bc-4bdf207d5299
SCIP notification number (Denmark)	a82200fd-5e3f-44d5-be44-2b62986c6cac
SCIP notification number (Finland)	15f442c8-1a74-4c63-9c38-3d9c63daaa23
SCIP notification number (France)	34719bfb-8a7f-4a6f-a6b6-64c6fb56243d
SCIP notification number (Germany)	78327e40-14e8-4340-ab2f-6afee2ebb747
SCIP notification number (Hungary)	02efc13f-d696-4a20-9f7a-e8305ce90dab
SCIP notification number (Italy)	40cd76aa-b32f-48c9-afd4-2e1c5f5f71d8
SCIP notification number (Netherlands)	cf33c98a-7707-44d2-9c4b-18821efd2329
SCIP notification number (Poland)	9d724e28-9c37-4bac-bd34-b334e8fdb27
SCIP notification number (Romania)	a54012e8-3ee9-4cd6-9adc-1e3673b69851
SCIP notification number (Sweden)	21c2c12d-b409-45fe-bbee-5d1074b4c09d

Approvals / Certificates

General approvals



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

Declarations of conformity and manufacturer's declarations

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
PRS Polski Rejestr Statków	-	TE/1098/880590/23

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 859-353	<a href="#">↓</a>

Documentation

Bid Text			
859-353	19.02.2019	xml 4.48 KB	<a href="#">↓</a>
859-353	20.02.2019	docx 16.75 KB	<a href="#">↓</a>

Instruction Leaflet			
Relay modules, Opto-coupler modules	V 2.0.0 19.01.2022	pdf 2066.27 KB	<a href="#">↓</a>

CAD/CAE-Data

CAD data	
2D/3D Models 859-353	<a href="#">↓</a>

CAE data	
EPLAN Data Portal 859-353	<a href="#">↓</a>
WSCAD Universe 859-353	<a href="#">↓</a>
ZUKEN Portal 859-353	<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

1.1.3.1 Jumper



**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 Inline; 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

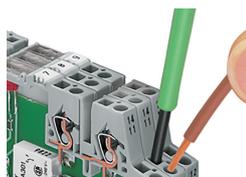


**Item No.: 210-720**

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

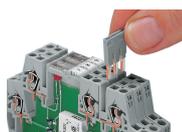
## Installation Notes

### Conductor termination



Conductor termination

### Commoning



Easy commoning using adjacent jumpers

### Marking



Marking via Mini-WSB Quick Marking System