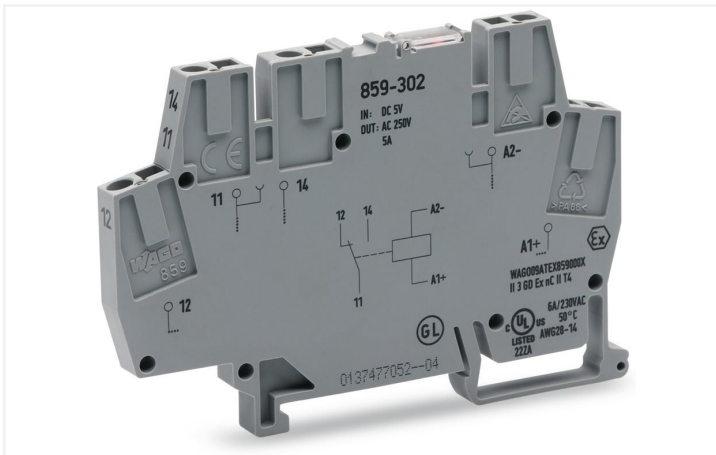


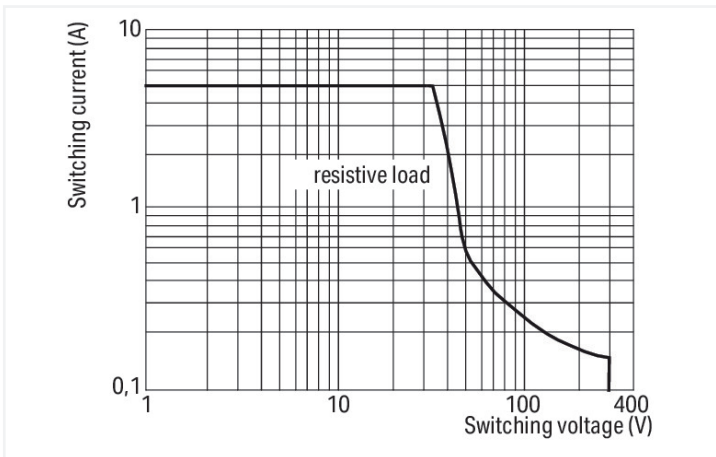
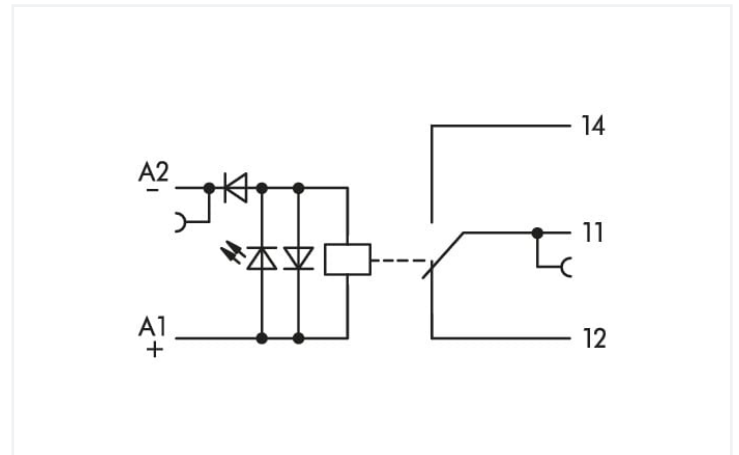
Data Sheet | Item Number: 859-302

Relay module; Nominal input voltage: 5 VDC; 1 changeover contact; Red status indicator; Module width: 6 mm; 2,50 mm²; gray

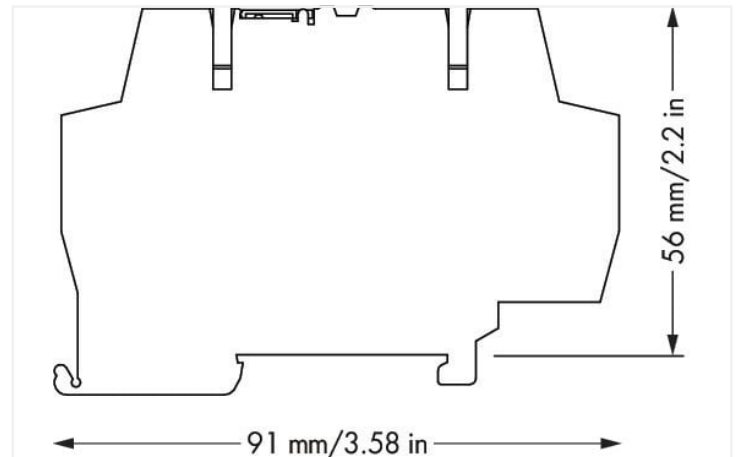
<https://www.wago.com/859-302>



Color: ■ gray



DC load limit curve



Dimensions in mm

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	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)	AgSnO ₂
Limiting continuous current	5 A
Inrush current (resistive) max.	(AC) 20 A / 0.02 s
Switching voltage (max.)	AC 250 V
Switching power (resistive) max.	AC 1250 VA; DC (see load limit curve)
Switching capacity	AC-15: 3 A / AC 250 V; DC-13: 2 A / DC 24 V
Recommended minimum load	10 V / 10 mA; 24 V / 1 mA
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 ³ switching operations
Mechanical life	5 x 10 ⁶ switching operations

Load circuit

Switching frequency with/without load (max.)	6 min ⁻¹ / 180 min ⁻¹
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Signaling

Status indicator	Red LED
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Safety and protection

Rated voltage	300 V
Rated surge voltage	4 kV
Overvoltage 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 ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.08 ... 1.5 mm ² / 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

Color	gray
Fire load	0.338 MJ
Weight	22 g

Environmental requirements

Ambient temperature (operation at U _N)	-40 ... +50 °C
Surrounding air temperature (storage)	-40 ... +70 °C
Processing temperature	-25 ... +50 °C
Temperature range of connection cable	≥ (T _{ambient} + 20 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)
eCl@ss 10.0	27-37-16-01
eCl@ss 9.0	27-37-16-01
ETIM 8.0	EC001437
ETIM 7.0	EC001437
PU (SPU)	10 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143602587
Customs tariff number	85364900990

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4

Approvals for marine applications



Approval	Standard	Certificate Name
DNV DNV Germany GmbH	DNV-CG-0339, Aug. 2021	TAA00001D1
PRS Polski Rejestr Statków	-	TE/2186/880590/18

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

Compliance Search

Environmental Product Compliance 859-302



Documentation

Bid Text			
859-302	19.02.2019	xml 4.47 KB	↓
859-302	20.02.2019	docx 16.74 KB	↓

Instruction Leaflet			
CCC Ex (Additional information)		pdf 132.68 KB	↓
Relay modules, Opto-coupler modules	V 2.0.0 19.01.2022	pdf 2066.27 KB	↓

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 859-302 ↓	EPLAN Data Portal 859-302 ↓
	WSCAD Universe 859-302 ↓
	ZUKEN Portal 859-302 ↓

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 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-322
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-221
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



Item No.: 216-222
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-223
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red






































Item No.: 216-224
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black

1.1.3 Jumper

1.1.3.1 Jumper









<p>Item No.: 859-410/000-006 Jumper; for jumper slot; 10-way; insulated; blue</p> 	<p>Item No.: 859-410 Jumper; for jumper slot; 10-way; insulated; light gray</p> 	<p>Item No.: 859-410/000-005 Jumper; for jumper slot; 10-way; insulated; red</p> 	<p>Item No.: 859-410/000-029 Jumper; for jumper slot; 10-way; insulated; yellow</p> 
<p>Item No.: 859-402/000-006 Jumper; for jumper slot; 2-way; insulated; blue</p> 	<p>Item No.: 859-402 Jumper; for jumper slot; 2-way; insulated; light gray</p> 	<p>Item No.: 859-402/000-005 Jumper; for jumper slot; 2-way; insulated; red</p> 	<p>Item No.: 859-402/000-029 Jumper; for jumper slot; 2-way; insulated; yellow</p> 
<p>Item No.: 859-403/000-006 Jumper; for jumper slot; 3-way; insulated; blue</p> 	<p>Item No.: 859-403 Jumper; for jumper slot; 3-way; insulated; light gray</p> 	<p>Item No.: 859-403/000-005 Jumper; for jumper slot; 3-way; insulated; red</p> 	<p>Item No.: 859-403/000-029 Jumper; for jumper slot; 3-way; insulated; yellow</p> 
<p>Item No.: 859-404/000-006 Jumper; for jumper slot; 4-way; insulated; blue</p> 	<p>Item No.: 859-404 Jumper; for jumper slot; 4-way; insulated; light gray</p> 	<p>Item No.: 859-404/000-005 Jumper; for jumper slot; 4-way; insulated; red</p> 	<p>Item No.: 859-404/000-029 Jumper; for jumper slot; 4-way; insulated; yellow</p> 
<p>Item No.: 859-405/000-006 Jumper; for jumper slot; 5-way; insulated; blue</p> 	<p>Item No.: 859-405 Jumper; for jumper slot; 5-way; insulated; light gray</p> 	<p>Item No.: 859-405/000-005 Jumper; for jumper slot; 5-way; insulated; red</p> 	<p>Item No.: 859-405/000-029 Jumper; for jumper slot; 5-way; insulated; yellow</p> 
<p>Item No.: 859-406/000-006 Jumper; for jumper slot; 6-way; insulated; blue</p> 	<p>Item No.: 859-406 Jumper; for jumper slot; 6-way; insulated; light gray</p> 	<p>Item No.: 859-406/000-005 Jumper; for jumper slot; 6-way; insulated; red</p> 	<p>Item No.: 859-406/000-029 Jumper; for jumper slot; 6-way; insulated; signal yellow</p> 
<p>Item No.: 859-407/000-006 Jumper; for jumper slot; 7-way; insulated; blue</p> 	<p>Item No.: 859-407 Jumper; for jumper slot; 7-way; insulated; light gray</p> 	<p>Item No.: 859-407/000-005 Jumper; for jumper slot; 7-way; insulated; red</p> 	<p>Item No.: 859-407/000-029 Jumper; for jumper slot; 7-way; insulated; yellow</p> 
<p>Item No.: 859-408/000-006 Jumper; for jumper slot; 8-way; insulated; blue</p> 	<p>Item No.: 859-408 Jumper; for jumper slot; 8-way; insulated; light gray</p> 	<p>Item No.: 859-408/000-005 Jumper; for jumper slot; 8-way; insulated; red</p> 	<p>Item No.: 859-408/000-029 Jumper; for jumper slot; 8-way; insulated; yellow</p> 
<p>Item No.: 859-409/000-006 Jumper; for jumper slot; 9-way; insulated; blue</p> 	<p>Item No.: 859-409 Jumper; for jumper slot; 9-way; insulated; light gray</p> 	<p>Item No.: 859-409/000-005 Jumper; for jumper slot; 9-way; insulated; red</p> 	<p>Item No.: 859-409/000-029 Jumper; for jumper slot; 9-way; insulated; yellow</p> 

1.1.4 Marking

1.1.4.1 Marker



<p>Item No.: 2009-145 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white</p> 	<p>Item No.: 248-502 Mini-WSB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white</p> 	<p>Item No.: 248-503 Mini-WSB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white</p> 	<p>Item No.: 248-504 Mini-WSB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white</p> 
<p>Item No.: 248-506 Mini-WSB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white</p> 	<p>Item No.: 248-501 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white</p> 		

1.1.4.2 Marking devices



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 0,5mm²

1.1.6 Tool

1.1.6.1 Operating tool

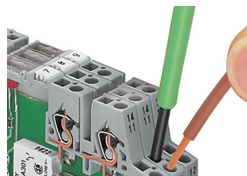


Item No.: 210-720

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

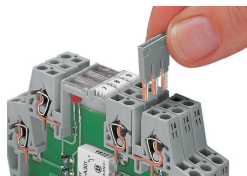
Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking



Marking via Mini-WSB Quick Marking System