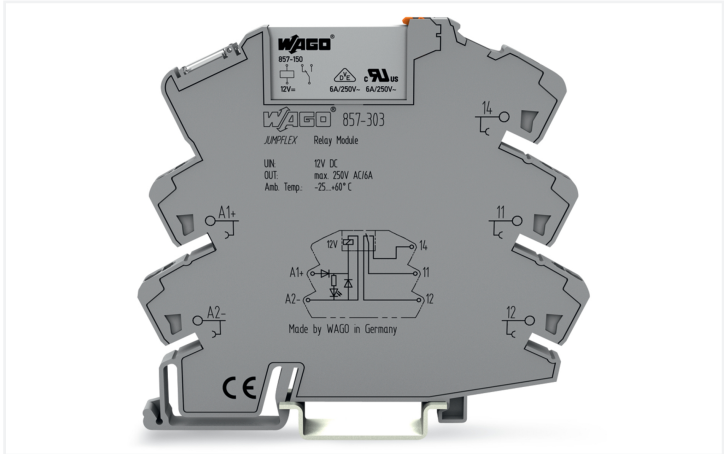


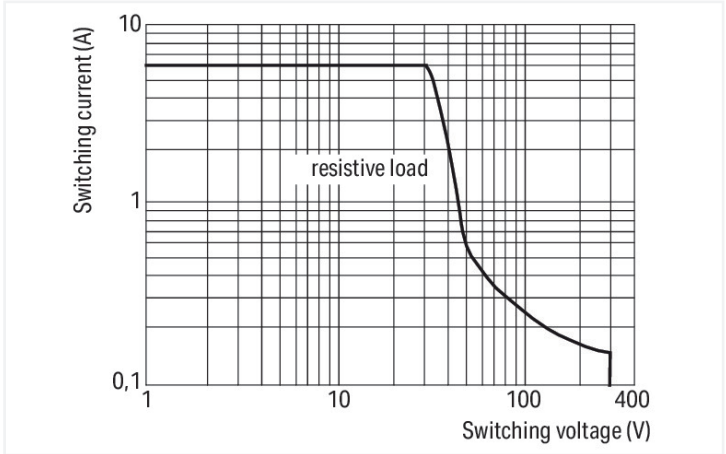
Data Sheet | Item Number: 857-303

Relay module; Nominal input voltage: 12 VDC; 1 changeover contact; Limiting continuous current: 6 A; Yellow status indicator; Module width: 6 mm; 2,50 mm²; gray

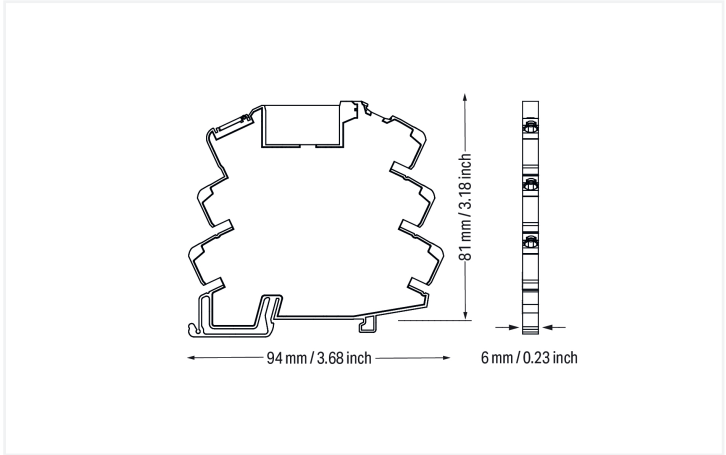
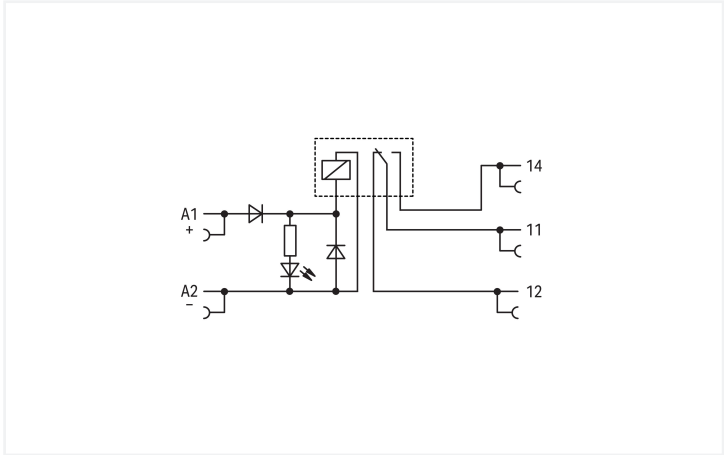
<https://www.wago.com/857-303>



Color: ■ gray



DC load limit curve



Notes	
Safety Information	Adjacent devices of the same type are devices of the same design (series) that are arranged next to one another on the DIN-rail with the same orientation. An end stop (249-116) must be fitted to devices of other types for compliance with the reinforced insulation requirements.
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 VDC
Input voltage range	-15 ... +20 %
Nominal input current at U_N	17 mA
Load circuit	
Number of changeover/switchover contacts	1
Contact material (relay)	AgSnO ₂
Limiting continuous current	6 A
Inrush current (resistive) max.	(AC) 20 A / 0.02 s
Switching Voltage, Max.	250 VAC
Switching power (resistive) max.	AC 1500 VA; DC (see load limit curve)
Utilization category	AC-15: 3 A / 250 VAC DC-13: 2 A / 24 VDC
Recommended minimum load	10 V / 10 mA; 24 V / 1 mA



Load circuit	
Pull-in time (typ.)	8 ms
Drop-out time (typ.)	8 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
Switching frequency with/without load (max.)	6 min ⁻¹ / 180 min ⁻¹

Signaling	
Status indicator	Yellow LED

Safety and protection	
Rated Voltage	300 V
Rated impulse withstand voltage	4 kV
Type of circuits	Mains circuits
Overvoltage category	III
Pollution degree	2
Dielectric strength (control/load circuit) (AC, 1 min)	3.51 kVrms
Dielectric strength (open contact) (AC, 1 min)	1 kVrms
Insulation type (control/load circuit)	Reinforced insulation (safe isolation)
Insulation type (between adjacent devices of the same type)	Double insulation (safe isolation)
Insulation type (to adjacent devices of different types)	Basic insulation
Safety Information	Adjacent devices of the same type are devices of the same design (series) that are arranged next to one another on the DIN-rail with the same orientation. An end stop (249-116) must be fitted to devices of other types for compliance with the reinforced insulation requirements.
Protection type	IP20

Connection Data	
Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.34 ... 1.5 mm ² / 22 ... 16 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches

Physical data	
Width	6 mm / 0.236 inches
Height	94 mm / 3.701 inches
Depth from upper-edge of DIN-rail	81 mm / 3.189 inches

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

Material data	
Note (material data)	Information on material specifications can be found here
Color	gray
Insulation material (main housing)	Polyamide (PA66)
Material group	I
Flammability class per UL94	V0
Fire load	0.437 MJ
Weight	30.6 g



Environmental requirements		
Ambient temperature (operation at U _N)		-40 ... +60 °C
Ambient temperature (storage)		-40 ... +70 °C
Processing temperature		-25 ... +50 °C
Temperature range of connection cable		≥ (T _{ambient} + 30 K)
Relative humidity		5 ... 85 % (no condensation permissible)
Operating altitude (max.)		2000 m

Standards and Specifications		
Standards/specifications		EN 61010-2-201 EN 61810-1 EN 61373 UL 508 ATEX IECEX

Basic relay		
WAGO Basic Relay		857-150

Commercial data		
Product Group		6 (INTERFACE ELECTRONIC)
PU (SPU)		25 (1) pcs
Packaging type		Box
Country of origin		CN
GTIN		4055143135207
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, No Exemption
SCIP notification number (Austria)		033fc88e-52f8-4f79-a6c4-56de63e99e6d
SCIP notification number (Belgium)		31f958a2-fad3-48a6-ac27-8a246e119b95
SCIP notification number (Bulgaria)		0d9cd6fe-3d69-41b5-b2b2-ceb8e7fe478f
SCIP notification number (Czech Republic)		aa371129-663a-48b7-962c-9a8e5711f6c2
SCIP notification number (Denmark)		27708341-5880-4a82-980d-cd1a351a91d0
SCIP notification number (Finland)		14bbe803-88c7-40c5-8445-79c45eb0d99a
SCIP notification number (France)		7e6e14da-055d-4c93-a9b7-a8cd6b159185
SCIP notification number (Germany)		d999b37c-9c7e-4da3-b6a8-db64ad586cea
SCIP notification number (Hungary)		71d8385c-1974-438c-91f9-8405e8d5826c
SCIP notification number (Italy)		c6bcbd8f-023b-413f-9544-fb93425ace59
SCIP notification number (Netherlands)		6ae04d85-77d0-4139-b2b0-eacb90ffb35c
SCIP notification number (Poland)		30e70e5d-41d9-45c4-8f1a-408e3932735f
SCIP notification number (Romania)		5a299f98-bb9a-48d6-8fd8-806c570ebb02

Environmental Product Compliance	
SCIP notification number (Sweden)	66d76b28-c884-43f5-8307-26eb6b61db74

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 hazardous areas



Approval	Standard	Certificate Name
ATEX DEKRA EXAM GmbH	EN 60079-0	BVS_14_ATEX_E_091_X (II 3G Ex ec nC IIC T4 Gc; II 3G Ex ec IIC T4 Gc)
CCC CNEX	CNCA-C23-01	2020312304000757 (Ex ec nC IIC T4 Gc)
IECEx DEKRA EXAM GmbH	IEC 60079-0	IECEX_BVS_14.0079X_Is-sue_3 (Ex ec nC IIC T4 Gc; Ex ec IIC T4 Gc)
UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA-GO22UKEX002X_ec nC
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 857-303	

Documentation					
Bid Text			Instruction Leaflet		
857-303	19.02.2019	xml 4.70 KB	CCC Ex (Additional information)	26.04.2023	pdf 129.88 KB
857-303	20.02.2019	docx 16.47 KB	Elektromechanical and Solid-State Relays/Optocouplers	V 2.0.0 15.02.2022	pdf 2352.42 KB

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 857-303	EPLAN Data Portal 857-303
	WSCAD Universe 857-303
	ZUKEN Portal 857-303

1 Compatible Products
1.1 Optional Accessories
1.1.1 Basic relay
1.1.1.1 Basic relay



Item No.: 857-150
Basic relay; Nominal input voltage: 12 VDC; 1 changeover contact; Limiting continuous current: 6 A; Module width: 5 mm; Module height: 15 mm

1.1.2 Ferrule				
1.1.2.1 Ferrule				
Item No.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	Item No.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	Item No.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	Item No.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	



1.1.3 Jumper

1.1.3.1 Jumper

 Item No.: 281-482 Jumper; 2-way; insulated; gray	 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 Double marker carrier



Item No.: 209-128
Adaptor; gray

1.1.4.2 Group marker carrier



Item No.: 249-105
Group marker carrier; gray

1.1.4.3 Marker



Item No.: 209-183
Marker; white



Item No.: 793-5501
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



Item No.: 793-502
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-566
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-503
WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-504
WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-505
WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-506
WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.4.4 Marking device



Item No.: 210-110
Fiber-tip pen

1.1.4.5 Marking strip



Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.1.4.6 Protective marker cover



Item No.: 209-184
Protection cover; transparent

1.1.5 Tool

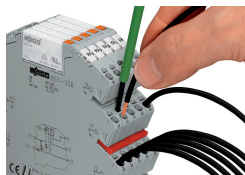
1.1.5.1 Operating tool

**Item No.: 210-720**

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

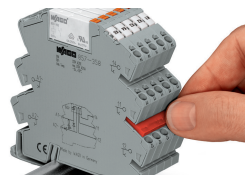
Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking



Marking via WMB Multi Marking System.

Installation



Removing a relay via ejector.