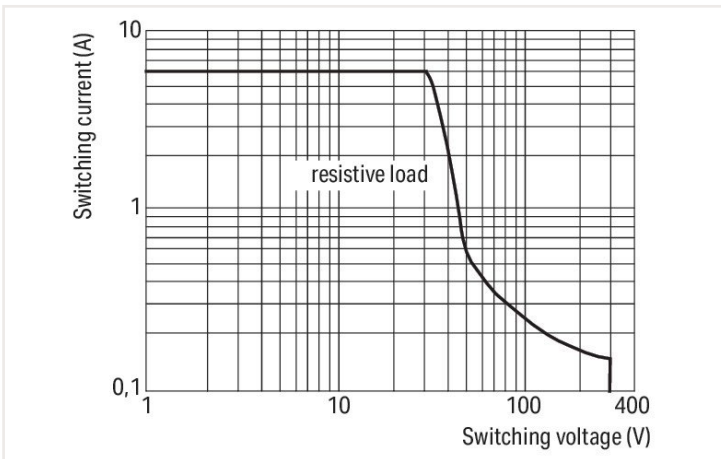
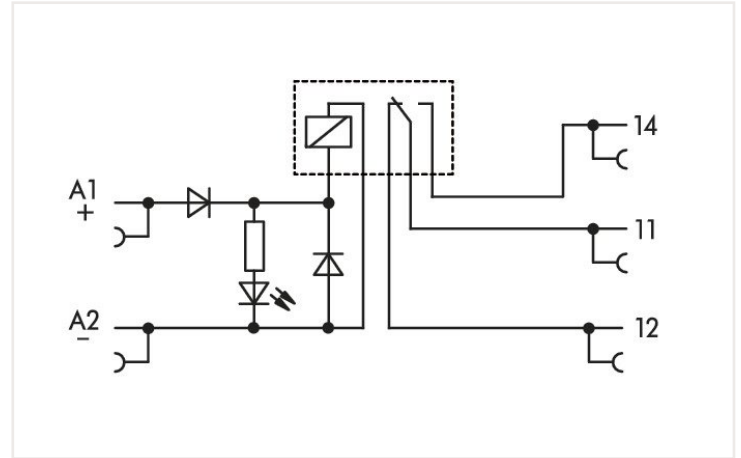
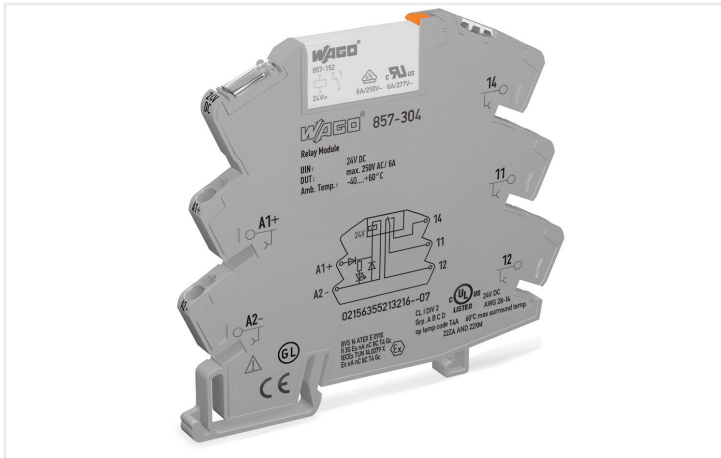


# Data sheet | Item number: 857-304

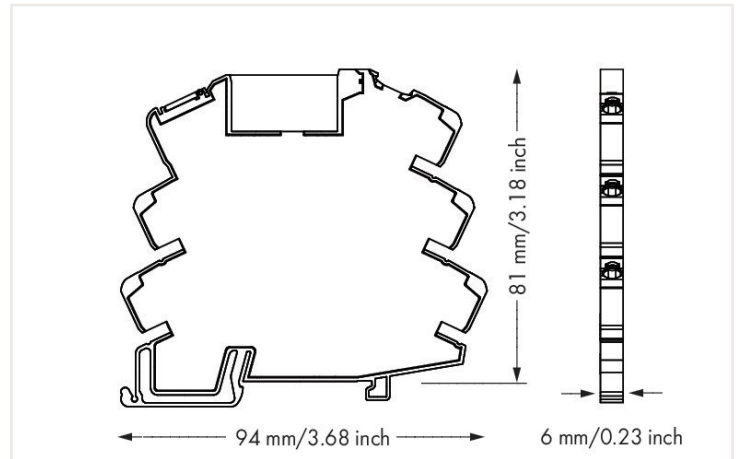
Relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 6 A; Yellow status indicator; Module width: 6 mm; 2,50 mm<sup>2</sup>; gray



<https://www.wago.com/857-304>



DC load limit curve



Dimensions in mm

## Notes

**Safety information 1** Adjacent devices are devices of the same design (series) that are arranged next to each other with the same orientation on the mounting rail. 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 $U_N$	DC 24 V
Input voltage range	-15 ... +20 %
Nominal input current at $U_N$	10 mA

Load circuit	
Number of changeover/switchover contacts	1
Contact material (relay)	AgSnO <sub>2</sub>
Limiting continuous current	6 A
Inrush current (resistive) max.	(AC) 20 A / 0.02 s
Switching voltage (max.)	AC 250 V
Switching power (resistive) max.	AC 1500 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.)	6 ms
Drop-out time (typ.)	6 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	Yellow LED
------------------	------------

### Safety and protection

Rated voltage	300 V
Rated surge 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 1	Adjacent devices are devices of the same design (series) that are arranged next to each other with the same orientation on the mounting rail. 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 <sup>2</sup> / 22 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.34 ... 1.5 mm <sup>2</sup> / 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

Color	gray
Fire load	0.63 MJ
Weight	31.6 g

### Environmental requirements

Ambient temperature (operation at $U_N$ )	-40 ... 60 °C
Surrounding air temperature (storage)	-40 ... +70 °C
Processing temperature	-25 ... +50 °C
Temperature range of connection cable	$\geq (T_{\text{ambient}} + 30 \text{ K})$
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 IEC Ex DNV
--------------------------	---

### Basic relay

WAGO Basic Relay	857-152
------------------	---------

### Commercial data

Product Group	6 (Interface Electronics)
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)	25 (1) Stück
Packaging type	Box
Country of origin	CN
GTIN	4050821797807
Customs tariff number	85364900990

### Approvals and 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
BV Bureau Veritas S.A.	Rules for class. of Steel Ships	40179_B0
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA00001D1
PRS Polski Rejestr Statków	-	TE/2186/880590/18

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_14.0079_X (Ex ec nC IIC T4 Gc; Ex ec IIC T4 Gc)
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 857-304 <a href="#">↓</a>

Documentation

Bid Text			
857-304	19.02.2019	xml 4.70 KB	<a href="#">↓</a>
857-304	20.02.2019	docx 16.43 KB	<a href="#">↓</a>
ausschreiben.de 857-304			<a href="#">↓</a>

CAD/CAE-Data

CAD data
2D/3D Models 857-304 <a href="#">↓</a>

CAE data
EPLAN Data Portal 857-304 <a href="#">↓</a>
WSCAD Universe 857-304 <a href="#">↓</a>
ZUKEN Portal 857-304 <a href="#">↓</a>

## 1 Compatible products

### 1.1 Optional accessories

#### 1.1.1 Basic relay

##### 1.1.1.1 Basic relay

**Item no.: 857-152**

Basic relay; Nominal input voltage: 24 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<sup>2</sup> / 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<sup>2</sup> / 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<sup>2</sup> / 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<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

#### 1.1.3 Interface module

##### 1.1.3.1 Interface adapters



**Item no.: 857-981**

Interface adapter; 14-pole; High-side switching input



**Item no.: 857-982**

Interface adapter; 14-pole; High-side switching output



**Item no.: 857-986**

Interface adapter; 15-pole; High-side switching input

#### 1.1.4 Jumper

##### 1.1.4.1 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

1.1.4.1 Jumper

 <b>Item no.: 859-404/000-029</b> Jumper; for jumper slot; 4-way; insulated; yellow	 <b>Item no.: 859-405/000-006</b> Jumper; for jumper slot; 5-way; insulated; blue	 <b>Item no.: 859-405</b> Jumper; for jumper slot; 5-way; insulated; light gray	 <b>Item no.: 859-405/000-005</b> Jumper; for jumper slot; 5-way; insulated; red
 <b>Item no.: 859-405/000-029</b> Jumper; for jumper slot; 5-way; insulated; yellow	 <b>Item no.: 859-406/000-006</b> Jumper; for jumper slot; 6-way; insulated; blue	 <b>Item no.: 859-406</b> Jumper; for jumper slot; 6-way; insulated; light gray	 <b>Item no.: 859-406/000-005</b> Jumper; for jumper slot; 6-way; insulated; red
 <b>Item no.: 859-406/000-029</b> Jumper; for jumper slot; 6-way; insulated; signal yellow	 <b>Item no.: 859-407/000-006</b> Jumper; for jumper slot; 7-way; insulated; blue	 <b>Item no.: 859-407</b> Jumper; for jumper slot; 7-way; insulated; light gray	 <b>Item no.: 859-407/000-005</b> Jumper; for jumper slot; 7-way; insulated; red
 <b>Item no.: 859-407/000-029</b> Jumper; for jumper slot; 7-way; insulated; yellow	 <b>Item no.: 859-408/000-006</b> Jumper; for jumper slot; 8-way; insulated; blue	 <b>Item no.: 859-408</b> Jumper; for jumper slot; 8-way; insulated; light gray	 <b>Item no.: 859-408/000-005</b> Jumper; for jumper slot; 8-way; insulated; red
 <b>Item no.: 859-408/000-029</b> Jumper; for jumper slot; 8-way; insulated; yellow	 <b>Item no.: 859-409/000-006</b> Jumper; for jumper slot; 9-way; insulated; blue	 <b>Item no.: 859-409</b> Jumper; for jumper slot; 9-way; insulated; light gray	 <b>Item no.: 859-409/000-005</b> Jumper; for jumper slot; 9-way; insulated; red


1.1.5 Marking

1.1.5.1 Double marker carrier













**Item no.: 209-128**  
Adaptor; gray

1.1.5.2 Group marker carrier



**Item no.: 249-105**  
Group marker carrier; gray

1.1.5.3 Marker

 <b>Item no.: 209-183</b> Marker card; white	 <b>Item no.: 793-5501</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white	 <b>Item no.: 793-502</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white	 <b>Item no.: 793-566</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type; white
 <b>Item no.: 793-503</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white	 <b>Item no.: 793-504</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white	 <b>Item no.: 793-505</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; white	 <b>Item no.: 793-506</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white
 <b>Item no.: 793-501</b> WMB marking card; as card; not stretchable; plain; snap-on type; white	 <b>Item no.: 2009-115</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white		

### 1.1.5.4 Marking devices



**Item no.: 210-110**

Fiber-tip pen

### 1.1.5.5 Marking strip



**Item no.: 2009-110**

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

### 1.1.5.6 Protective marker cover



**Item no.: 209-184**

Protection cover; transparent

### 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 WMB Multi Marking System.

## Installation

Removing a relay via ejector.