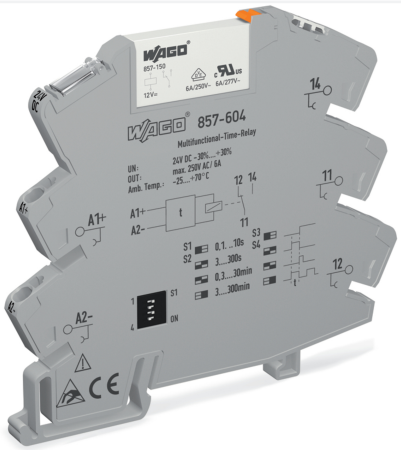
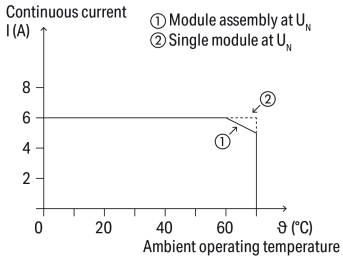
# Data Sheet | Item Number: 857-604

Timer relay module; Nominal input voltage: 24 VDC; Limiting continuous current: 6 A; Railway; Multifunction; Yellow status indicator; Module width: 6 mm; gray

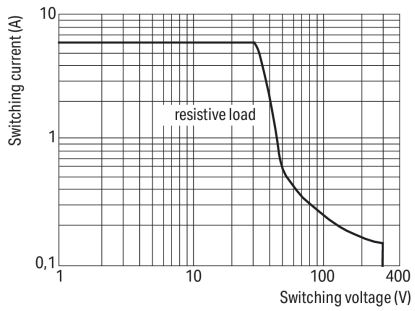
https://www.wago.com/857-604



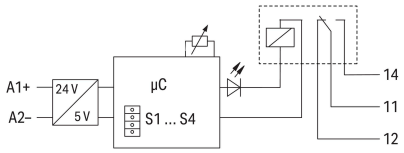

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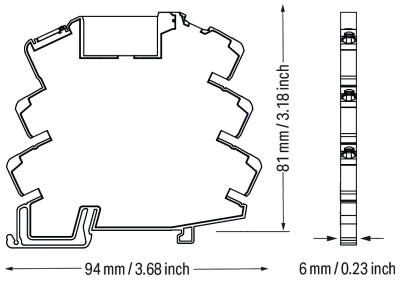



Current-carrying capacity curve




DC load limit curve




**Features:**

- 4 functions
- Function and time range adjustable via DIP switch
- Potentiometer for fine adjustment of the time intervals

## 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. |

## Technical data

### Control circuit

| | |
|---|---|
| Nominal input voltage $U_N$ | 24 VDC (SELV) |
| Input voltage range | ±30 % |
| Nominal input current at $U_N$ | 18 mA |
| Time range | 0.1 … 10 s<br>3 … 300 s<br>0.3 … 30 min<br>3 … 300 min |
| Reset time | 50 ms |
| Repeat accuracy | 1 % |
| Minimum pulse length (control input) | 10 ms |
| Functions | On-delay<br>Single-shot leading edge<br>On-delay and single-shot leading edge (1 s fixed)<br>Flashing |

### 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<br>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 |
| 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 |
| Short circuit protection (load circuit) | 6.3 A; Slow (T); Test based on EN 61812-1 with short-circuit current 100 ADC |

### Signaling

| | |
|---|---|
| Status indicator | Yellow LED |

## Safety and protection

| | |
|---|---|
| Rated Voltage | 300 V |
| Rated impulse withstand voltage | 6.4 kV |
| Overvoltage category | II |
| 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 mm² / 22 … 14 AWG |
| Fine-stranded conductor | 0.34 … 2.5 mm² / 22 … 14 AWG |
| Strip length | 9 … 10 mm / 0.35 … 0.39 inches |


Continued on next page

## 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 |

## 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 | 0.449 MJ |
| Weight | 24.9 g |

## Environmental requirements

| | |
|---|---|
| Ambient temperature (operation at $U_N$) | -25 … +70 °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<br>EN 61373<br>EN 50121-3-2<br>UL 508 |

## Basic relay

| | |
|---|---|
| WAGO Basic Relay | 857-150 |

## Commercial data

| | |
|---|---|
| Product Group | 6 (INTERFACE ELECTRONIC) |
| PU (SPU) | 1 pcs |
| Packaging type | Bag |
| Country of origin | DE |
| GTIN | 4050821565673 |
| Customs tariff number | 85364900990 |

## Product Classification

| | |
|---|---|
| UNSPSC | 39122329 |
| eCl@ss 10.0 | 27-37-16-05 |
| eCl@ss 9.0 | 27-37-16-05 |
| ETIM 9.0 | EC001439 |
| ETIM 10.0 | EC001439 |
| ECCN | NO US CLASSIFICATION |

## Environmental Product Compliance

| | |
|---|---|
| CAS-No. | 1303-86-2<br>1317-36-8<br>7439-92-1<br>79-94-7 |
| REACH Candidate List Substance | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol<br>Diboron trioxide<br>Lead<br>Lead monoxide |
| RoHS Compliance Status | Compliant,With Exemption |
| RoHS Exemption | 6(c)<br>7(a)<br>7(c)-I<br>7(c)-II |
| SCIP notification number (Austria) | b89d2de2-ccd0-42b0-b35c-4b96ab7aad92 |
| SCIP notification number (Belgium) | 147da2d8-6973-4cd5-98b4-0919d418e6bb |
| SCIP notification number (Bulgaria) | f0557247-ded0-43f1-8dfc-52b6fb04b895 |
| SCIP notification number (Czech Republic) | f03e7d66-0086-4a55-aa3c-079dc9009419 |
| SCIP notification number (Denmark) | d0287920-775f-46e8-a54e-649519e2944e |
| SCIP notification number (Finland) | e9c4fe20-7ab1-4d2d-984e-a87d9da40b48 |
| SCIP notification number (France) | eeee99bd-d400-48e5-a852-f9505e8f3063 |
| SCIP notification number (Germany) | 1588f722-404a-42ea-83f9-5e8c18d96bbd |
| SCIP notification number (Hungary) | 41f66463-47dd-47ca-b11d-726c111e1ec9 |
| SCIP notification number (Italy) | b75d085e-cc14-4164-9e7d-8b6408f61f94 |
| SCIP notification number (Netherlands) | c0934558-ace5-467e-847e-530badbc9afd |
| SCIP notification number (Poland) | 0b77ff1e-b0e7-4adf-9090-a657721b7e5a |
| SCIP notification number (Romania) | 6f234623-3bca-41bc-839c-8ac7c1eefb24 |
| SCIP notification number (Sweden) | 04efb0b3-a642-4d0d-a88b-bdc6e3bbc9a8 |

## Approvals / Certificates

### General approvals

| Approval | Standard | Certificate Name |
|---|---|---|
| EAC<br>GZO Almaty Standart | TP TC 004/2011 | EAC CoC 03078 |
| EAC<br>GZO Almaty Standart | TP TC 020/2011 | EAC CoC 03081 |
| UL<br>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<br>WAGO GmbH & Co. KG | - | - |
| MFD for Railway<br>WAGO GmbH & Co. KG | - | - |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |


Continued on next page

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 857-604

### Documentation

**Bid Text**

| | | |
|---|---|---|
| 857-604 | 20.02.2019 | docx 16.97 KB |
| 857-604 | 19.02.2019 | xml 5.49 KB |

**Instruction Leaflet**

| | | |
|---|---|---|
| Zeitrelaismodul; Eingangsnennspannung DC 24 V | V 2.0.0 10.03.2022 | pdf 2021.26 KB |

### CAD/CAE-Data

**CAD data**

2D/3D Models 857-604

**CAE data**

EPLAN Data Portal 857-604

WSCAD Universe 857-604

ZUKEN Portal 857-604

## 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 mm² / 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 mm² / 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 mm² / 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 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black


Continued on next page

## 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


Continued on next page

## 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


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### 1.1.5 Tool

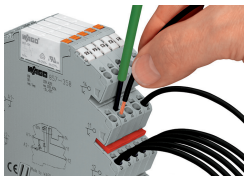
#### 1.1.5.1 Operating tool



Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

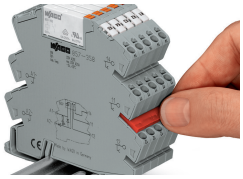
## Installation Notes

### Conductor termination



Conductor termination

### Commoning



Easy commoning using adjacent jumpers

### Marking



Marking via WMB Multi Marking System.

### Installation



Removing a relay via ejector.