Data Sheet | Item Number: 857-640
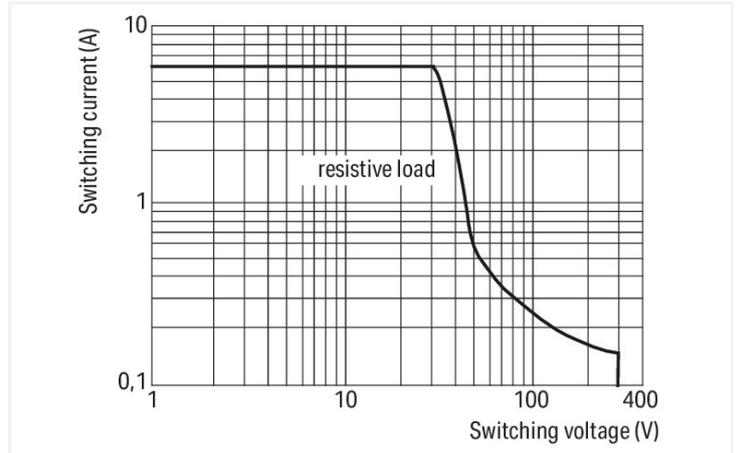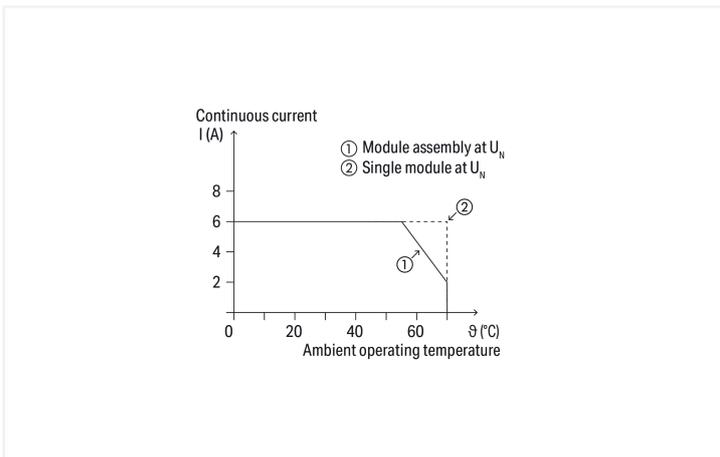
Timer relay module; Nominal input voltage: 24 VDC; Limiting continuous current: 6 A; Railway; Multifunction/Multitime; Yellow status indicator; Module width: 6 mm
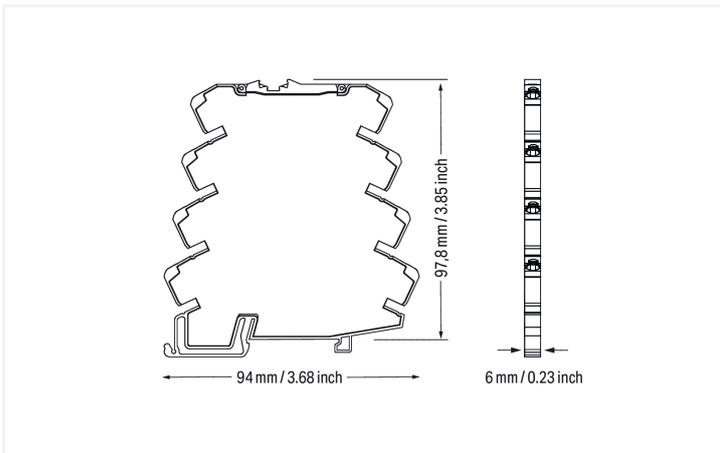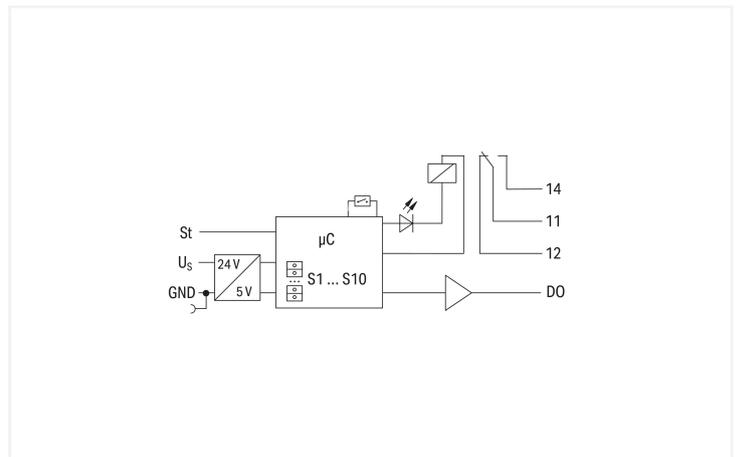
https://www.wago.com/857-640

DC load limit curve

Current-carrying capacity curve

Features:

- 14 functions
- Function and time range adjustable via DIP switch
- Push/slide switch for fine-tuning the times

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	Terminals 6 (GND) and 8 (GND) are internally bridged. The maximum current-carrying capacity is 4 A.

Technical data

Control circuit

Nominal input voltage U_N	24 VDC (SELV)
Input voltage range	±30 %
Nominal input current at U_N	0.5 mA
Time range	0.01 … 0.1 s 0.1 … 1 s 1 … 10 s 10 … 100 s 1 … 10 min 10 … 100 min 1 … 10 h 10 … 100 h
Reset time	50 ms
Minimum pulse length (control input)	10 ms
Functions	On-delay On-delay (with control input) Off-delay (with control input) On- and off-delay (with control input) Single-shot leading edge Single-shot leading edge (with control input) Single-shot trailing edge (with control input) Single-shot leading and trailing edge (with control input) On-delay and single-shot leading edge On-delay and single-shot leading edge (with control input) Step switching Flashing (pulse start) Flashing, interval start Relay switching

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)
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
Bounce time (typ.)	3.5 ms
Electrical life (NO; resistive load; 23 °C)	50×10^3 switching operations
Mechanical life	5×10^6 switching operations
Digital output (DO)	U_N - 1 V ; 100 mA
Short circuit protection (load circuit)	6.3 A; Slow (T); Test based on EN 61812-1 with short-circuit current 100 ADC

Power Supply

Nominal supply voltage U_S	24 VDC (SELV)
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 17.5 mA

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

Physical data

Width	6 mm / 0.236 inches
Height	94 mm / 3.701 inches
Depth from upper-edge of DIN-rail	97.8 mm / 3.85 inches

Mechanical data

Mounting type	DIN-35 rail

Material data

Note (material data)	Information on material specifications can be found here
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.013 MJ
Weight	33.2 g

Environmental requirements

Ambient temperature (operation at U_N)	-25 ... +70 ℃
Ambient temperature (storage)	-40 ... +70 ℃
Processing temperature	-25 ... +50 ℃
Temperature range of connection cable	$\geq (T_{ambient} + 30 \text{ K})$
Relative humidity	5 ... 85 % (no condensation permissible)
Operating altitude (max.)	2000 m

Standards and Specifications

Standards/specifications	EN 61373
	EN 50121-3-2
	UL 508
	EN 61010-2-201

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
PU (SPU)	1 pcs
Packaging type	Bag
Country of origin	DE
GTIN	4050821565703
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 1317-36-8 7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(a) 7(c)-I
SCIP notification number (Austria)	4029ba87-a0b8-4a9f-ae4d-b8026718a3cf
SCIP notification number (Belgium)	3234b8aa-bf2d-4b1a-ad01-c6dbcc7dd338
SCIP notification number (Bulgaria)	a186aba2-2280-41cf-959c-f810c03850b8
SCIP notification number (Czech Republic)	962d2948-4eb0-4407-ac8c-036eca4523ad
SCIP notification number (Denmark)	8ee5b9b3-b19a-4609-8dea-0faa7b4b70cf
SCIP notification number (Finland)	7d812479-4308-497a-8846-79ee4eb92ee6
SCIP notification number (France)	8819c87d-5f5b-4995-b8f9-490db3174e0d
SCIP notification number (Germany)	49e3f324-090c-4281-b21f-5363422841af
SCIP notification number (Hungary)	422efe8b-5699-4cf5-a536-bf57dac47f77
SCIP notification number (Italy)	29e8594d-faf2-4ae0-af87-801085326b58
SCIP notification number (Netherlands)	b3120f39-8f3a-4508-b3d4-a1dfede02aa2
SCIP notification number (Poland)	fba7fd85-bcd1-4681-80b9-463143cad6c6
SCIP notification number (Romania)	6bb4ed70-27bf-455d-a299-22cf02fdd4ed
SCIP notification number (Sweden)	28e1c026-9af6-463e-8275-36733122d23d

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03078
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081
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	-	-

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 857-640	↓

Documentation

Bid Text			
857-640	20.02.2019	docx 17.35 KB	↓
857-640	19.02.2019	xml 6.18 KB	↓

Instruction Leaflet			
Relaisbaustein mit gestecktem Kleinschaltrelais	V 2.0.0 10.03.2022	pdf 2474.07 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 857-640	↓

CAE data	
EPLAN Data Portal 857-640	↓
WSCAD Universe 857-640	↓
ZUKEN Portal 857-640	↓

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 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

1.1.2 Jumper

1.1.2.1 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

1.1.2.1 Jumper

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

1.1.3 Marking

1.1.3.1 Double marker carrier

Item No.: 209-128
Adaptor; gray

1.1.3.2 Group marker carrier

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

1.1.3.3 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

1.1.3.4 Marking device

Item No.: 210-110
Fiber-tip pen

1.1.3.5 Marking strip

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

1.1.3.6 Protective marker cover

Item No.: 209-184
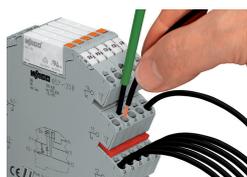Protection cover; transparent

1.1.4 Tool

1.1.4.1 Operating tool

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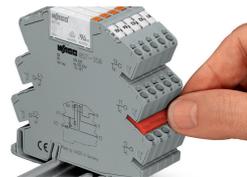
Installation Notes

Conductor termination

Conductor termination

Commoning

Easy commoning using adjacent jumpers

Marking

Marking via WMB Multi Marking System.

Installation

Removing a relay via ejector.

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at:: www.wago.com