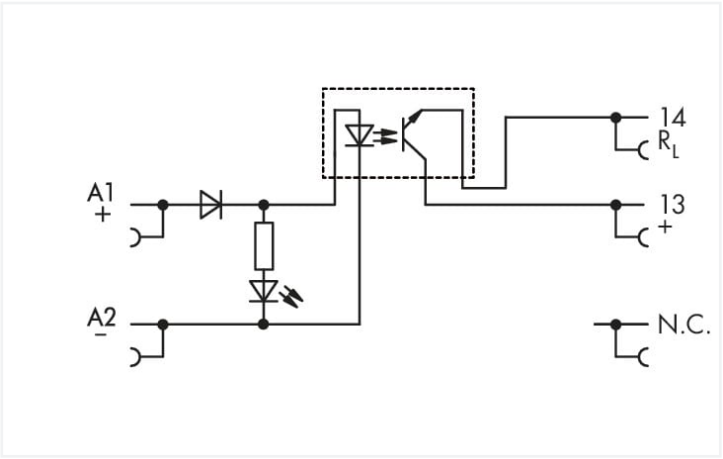
Data Sheet | Item Number: 857-704

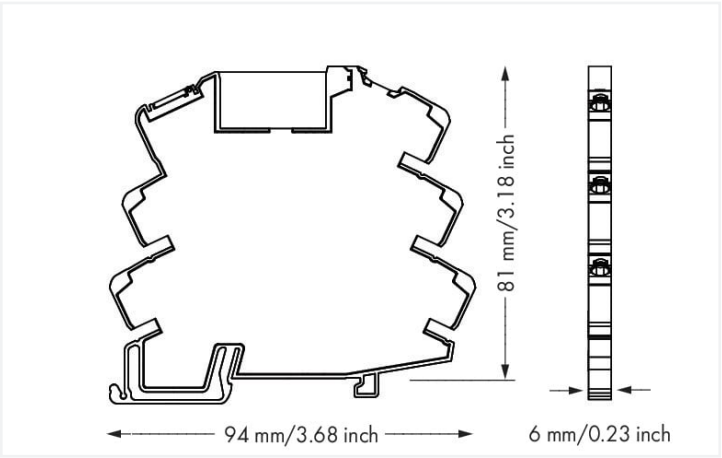
Solid-state relay module; Nominal input voltage: 24 VDC; Output voltage range: 0 … 48 VDC; Limiting continuous current: 0.1 A; Yellow status indicator; Module width: 6 mm; gray

https://www.wago.com/857-704





Color: gray



Dimensions in mm

Notes

Note	Optocouplers and solid state relays are designed for use in signal processing networks, which are not supplied by the low-voltage power supply networks.

Technical data

Control circuit

Nominal input voltage U_N	DC 24 V
Input voltage range (low level)	DC 0 … 10 V
Input voltage range (high level)	DC 16.8 … 30 V
Nominal input current at U_N	9 mA

Load circuit

Circuit type	2-wire connection
Limiting continuous current	0.1 A
Nominal output voltage	DC 24 V
Output voltage range	DC 0 … 48 V
Voltage drop	≤ 1 VDC
Leakage current at rated voltage	≤ 1 µA
Switching current (min.)	50 µA
Turn-on time	≤ 100 µs
Turn-off time	≤ 600 µs
Switching frequency	≤ 1 kHz

Signaling

Status indicator	Yellow LED

Safety and protection

Rated voltage	300 V
Overvoltage category	III
Pollution degree	2
Dielectric strength (control/load circuit) (AC, 1 min)	3.51 kVrms
Insulation type (control/load circuit)	Reinforced insulation (safe isolation)
Insulation type (between adjacent devices of the same type)	Reinforced insulation (safe isolation)
Insulation type (to adjacent devices of different types)	Basic insulation
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
Fine-stranded conductor; with insulated ferrule	0.34 … 1.5 mm² / 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	0.69 MJ
Weight	30.7 g

Environmental requirements

Ambient temperature (operation at U_N)	-20 … +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

Continued on next page

Standards and specifications

Standards/specifications	EN 61000-6-2 EN 61000-6-3 EN 61373 EN 61010-2-201 UL 508

Basic relay

WAGO Basic Relay	858-164

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-26-15-03
eCl@ss 9.0	27-26-15-03
ETIM 8.0	EC001504
ETIM 7.0	EC001504
PU (SPU)	25 (1) pcs
Packaging type	Box
Country of origin	CN
GTIN	4045454835491
Customs tariff number	85365005000

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,With Exemption
RoHS Exemption	7(a)
SCIP notification number (Austria)	fcff34c4-3ec8-4337-87b7-07cd356739fb
SCIP notification number (Belgium)	96d388b2-8744-4f02-b0b6-13ee246fb126
SCIP notification number (Bulgaria)	508fb6c7-e6ba-4584-9d2b-13ab2998ce45
SCIP notification number (Czech Republic)	350da321-5683-4002-a35c-1a8ab5a235b8
SCIP notification number (Denmark)	31a374ab-4018-445e-aea4-28a63bf01f7e
SCIP notification number (Finland)	fde443c7-0494-42a3-b5b5-e257364dc328
SCIP notification number (France)	ff1ee0f4-8cd3-43cd-938f-b9888f89ea13
SCIP notification number (Germany)	58969c06-56af-4579-aee7-46b35d6ccbc1
SCIP notification number (Hungary)	0a1827be-d99f-4bda-a0f3-83d9a6c47afd
SCIP notification number (Italy)	431bf98b-6227-41d8-9cf7-4d6503c8be2a
SCIP notification number (Netherlands)	66f365d2-c07e-4131-a0aa-591915887aa7
SCIP notification number (Poland)	b54d9860-a02e-40c2-a390-30605741cb3e
SCIP notification number (Romania)	ef639f7d-83bd-4665-ab42-c300c6bd5f31
SCIP notification number (Sweden)	938a65c9-eaca-4aee-8585-8d43a41bc4c8

Continued on next page

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs-stelle	TP TC 020/2011	EAC_Certificate_RU_C-DE.AM02.B.00115_19
EAC Brjansker Zertifizierungs-stelle	TP TC 012/2011	EAC Ex 857 RU_C_DE.AZ_58_B_02148_21 nA (2Ex nA IIC T4 Gc X)
UL Underwriters Laboratories Inc. (ORDINARY LOCATI-ONS)	UL 508	E175199 Sec.4

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor-mity 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 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	WAGO22UKEX002X_ec

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 857-704

Documentation

Bid Text

857-704	19.02.2019	xml 4.13 KB	
857-704	20.02.2019	docx 16.14 KB	

Instruction Leaflet

CCC Ex (Additional in-formation)	26.04.2023	pdf 129.88 KB	

Continued on next page

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 857-704	EPLAN Data Portal 857-704
	WSCAD Universe 857-704
	ZUKEN Portal 857-704

1 Compatible Products

1.1 Optional Accessories

1.1.1 Basic relay

1.1.1.1 Basic solid-state relay



Item No.: 857-164
Basic solid-state relay; Nominal input voltage: 24 VDC; Output voltage range: 0 … 48 VDC

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

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

Continued on next page

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



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; signal 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

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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

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

1.1.5.4 Marking device



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

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1.1.6 Tool

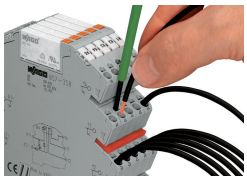
1.1.6.1 Operating tool



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

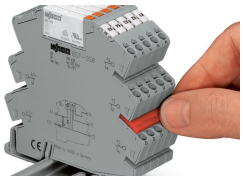
Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking



Marking via WMB Multi Marking System.

Installation



Removing a relay via ejector.