

Data Sheet | Item Number: 857-714

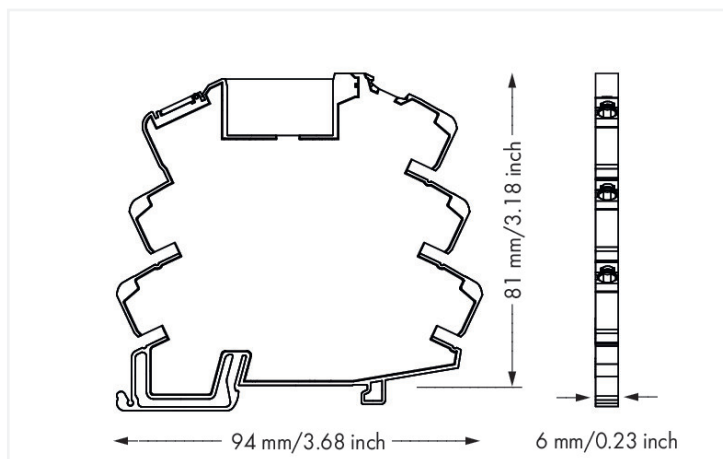
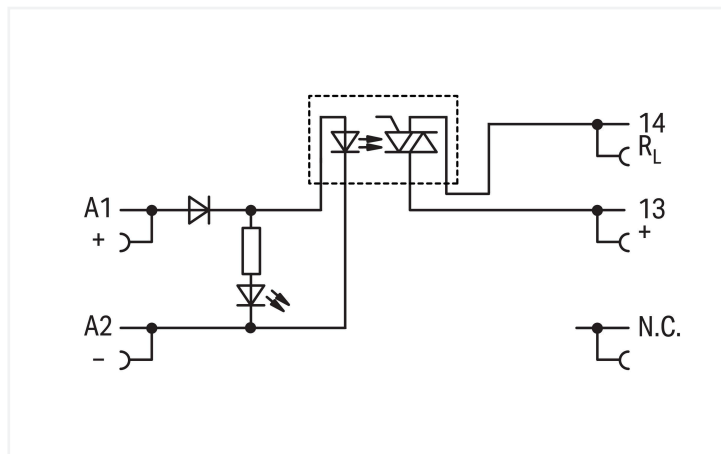
Solid-state relay module; Nominal input voltage: 24 VDC; Output voltage range: 24 ... 240 VAC; Limiting continuous current: 2 A; 2-wire connection; zero-cross switching; Yellow status indicator; Module width: 6 mm; gray



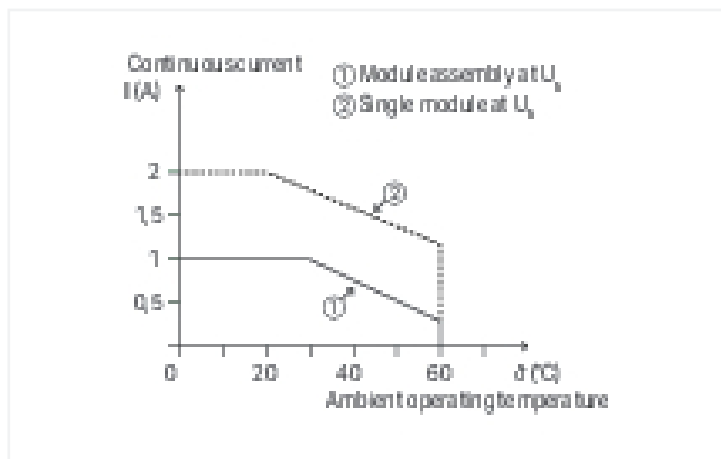
<https://www.wago.com/857-714>



Color: ■ gray



Dimensions in mm



Current-carrying capacity curve

Notes

Note

Optocouplers and solid state relays are designed for use in signal processing networks that are not supplied directly by the low-voltage power supply network.

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 20 ... 28.8 V
Nominal input current at U_N	10 mA

Load circuit

Circuit type	2-wire connection Zero-voltage switching
Limiting continuous current	2 A
Nominal output voltage	AC 230 V
Output voltage range	AC 24 ... 240 V
Voltage drop	≤ 1.6 VAC
Leakage current at rated voltage	≤ 1.5 mA
Switching current (min.)	22 mA
Turn-on time	≤ 10 ms
Turn-off time	≤ 10 ms
Switching frequency	50 Hz / 60 Hz

Signaling

Status indicator	Yellow LED
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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 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	Polyamide (PA66)
Material group	I
Flammability class per UL94	V0
Fire load	0.552 MJ
Weight	29.2 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

Standards and specifications

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

WAGO Basic Relay	857-167
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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	4045454835545
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)	e1be6fb9-4706-430c-873e-29c6c4fffbcd
SCIP notification number (Belgium)	35ac389a-dd2b-40ba-93f8-561e53d69fb3
SCIP notification number (Bulgaria)	1f4a17cb-fde4-4d5e-a76d-d1c7e74ed1d3
SCIP notification number (Czech Republic)	c219fe0f-72d5-48fa-9e67-3b0db3f092fd
SCIP notification number (Denmark)	24f6c854-8bba-4fb7-a33d-6b4327984608
SCIP notification number (Finland)	f396a1b7-6c72-4160-af53-1e98f21bcce1
SCIP notification number (France)	81c10d44-5142-449a-adb7-d009ad4a6a01
SCIP notification number (Germany)	ab41c137-1d14-4f02-be24-87de5fc8eb2c
SCIP notification number (Hungary)	a5ed00dc-7b85-4783-94f8-1a2321300a5c
SCIP notification number (Italy)	5a65ea83-3a05-4bcd-9d10-3ccec1f1e375
SCIP notification number (Netherlands)	f96a146d-a122-4b34-afab-8ce4f26cbb3a
SCIP notification number (Poland)	82725d69-22d1-4f83-a4bc-773cd85a6129
SCIP notification number (Romania)	6b965222-8af7-470f-9cf1-8ab072602be2
SCIP notification number (Sweden)	9c3c9749-a281-423c-bdae-23fffb4579bf

Approvals / Certificates

General approvals



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

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 857-714 ↓

Documentation

Bid Text			
857-714	19.02.2019	xml 4.22 KB	↓
857-714	20.02.2019	docx 16.31 KB	↓

Instruction Leaflet			
CCC Ex (Additional information)	26.04.2023	pdf 129.88 KB	↓

CAD/CAE-Data

CAD data
2D/3D Models 857-714 ↓

CAE data
EPLAN Data Portal 857-714 ↓
WSCAD Universe 857-714 ↓
ZUKEN Portal 857-714 ↓

1 Compatible Products

1.1 Optional Accessories

1.1.1 Basic relay

1.1.1.1 Basic solid-state relay



Item No.: 857-167
 Basic solid-state relay; Nominal input voltage: 24 VDC; Output voltage range: 24 ... 240 VAC; Limiting continuous current: 2 A

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

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



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

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

1.1.5.3 Marker



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

1.1.6 Tool

1.1.6.1 Operating tool

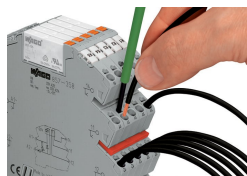


Item No.: 210-720

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

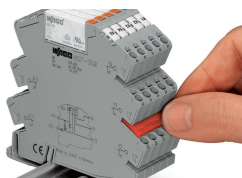
Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking



Marking via WMB Multi Marking System.

Installation



Removing a relay via ejector.