

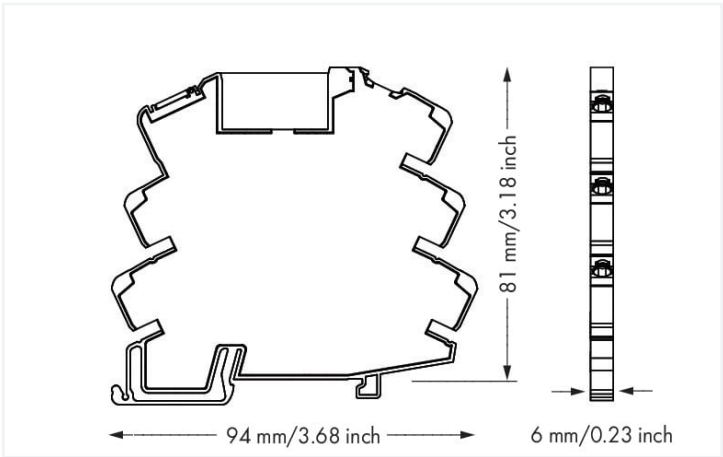
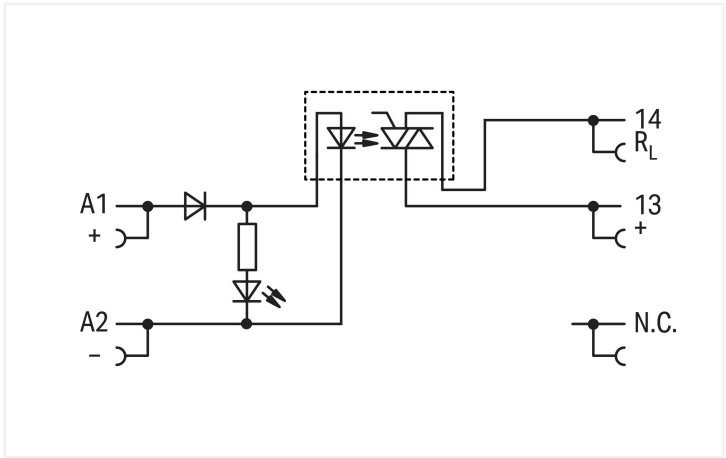
Data Sheet | Item Number: 857-714

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

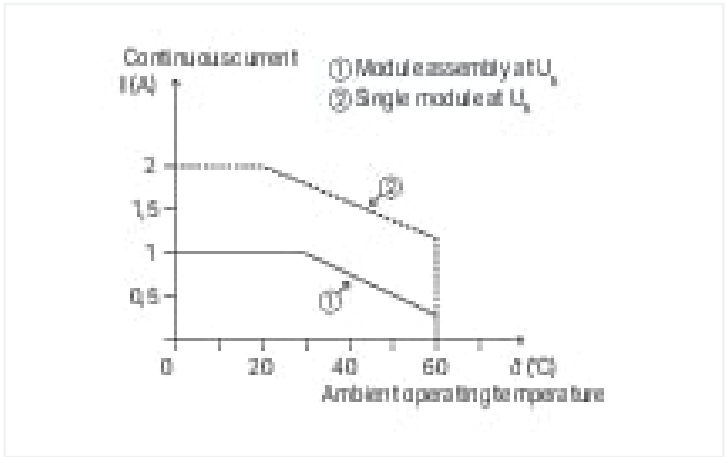
<https://www.wago.com/857-714>



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		Load circuit	
Nominal input voltage U _N	DC 24 V	Circuit type	2-wire connection Zero-voltage switching
Input voltage range (low level)	DC 0 ... 10 V	Limiting continuous current	2 A
Input voltage range (high level)	DC 20 ... 28.8 V	Nominal output voltage	AC 230 V
Nominal input current at U _N	10 mA	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

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	
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	0.544 MJ
Weight	28.9 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

Basic relay	
WAGO Basic Relay	857-167

Commercial data	
Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-26-15-03
eCl@ss 9.0	27-26-15-03
ETIM 9.0	EC001504
ETIM 8.0	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

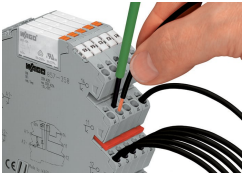
1.1.6.1 Operating tool



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

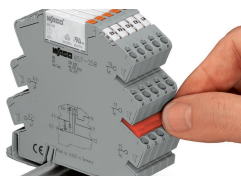
Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking



Marking via WMB Multi Marking System.

Installation



Removing a relay via ejector.