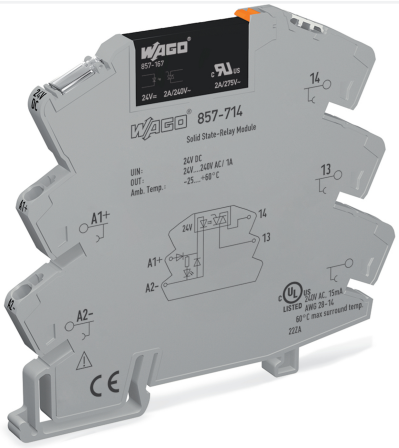
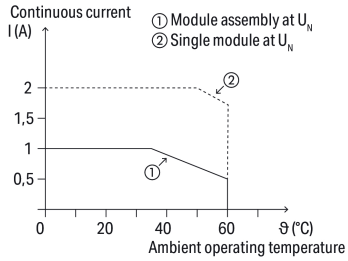
Data Sheet | Item Number: 857-714

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

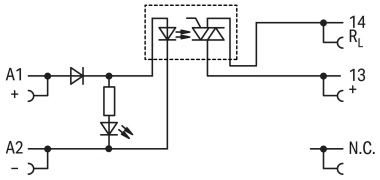
https://www.wago.com/857-714

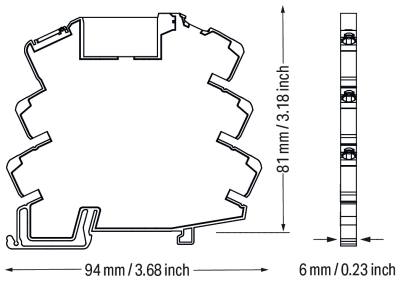


Color: gray



Current-carrying capacity curve





Technical data

Control circuit

Nominal input voltage U_N	24 VDC
Input voltage range (low level)	0 … 10 VDC
Input voltage range (high level)	20 … 28.8 VDC
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	230 VAC
Output voltage range	24 … 240 VAC
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	0.437 MJ
Weight	29.5 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)
PU (SPU)	25 (1) pcs
Packaging type	Box
Country of origin	CN
GTIN	4045454835545
Customs tariff number	85365005000

Product Classification

UNSPSC	39122334
eCl@ss 10.0	27-26-15-03
eCl@ss 9.0	27-26-15-03
ETIM 9.0	EC001504
ETIM 10.0	EC001504
ECCN	NO US CLASSIFICATION

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,No Exemption
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

Continued on next page

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_Issue_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	
Elektromechanical and Solid-State Relays/Optocouplers	V 2.0.0 15.02.2022	pdf 2352.42 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

Continued on next page

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; 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

Continued on next page

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

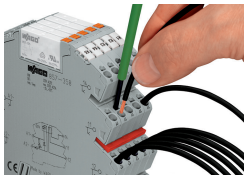
1.1.6.1 Operating tool



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

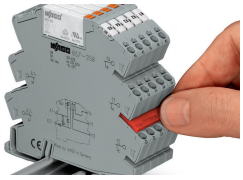
Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking



Marking via WMB Multi Marking System.

Installation



Removing a relay via ejector.