

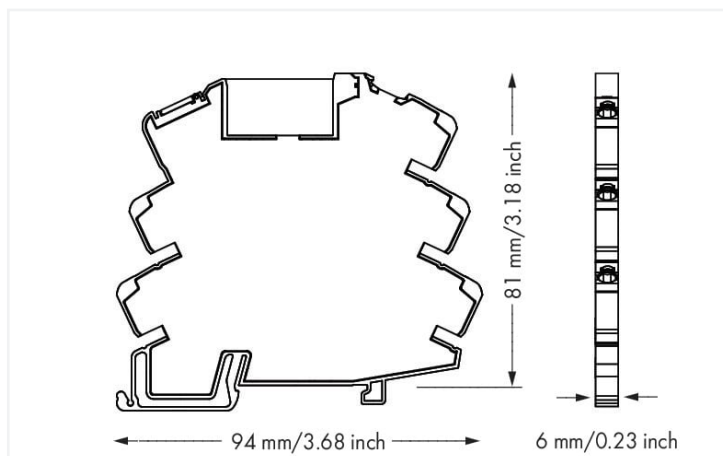
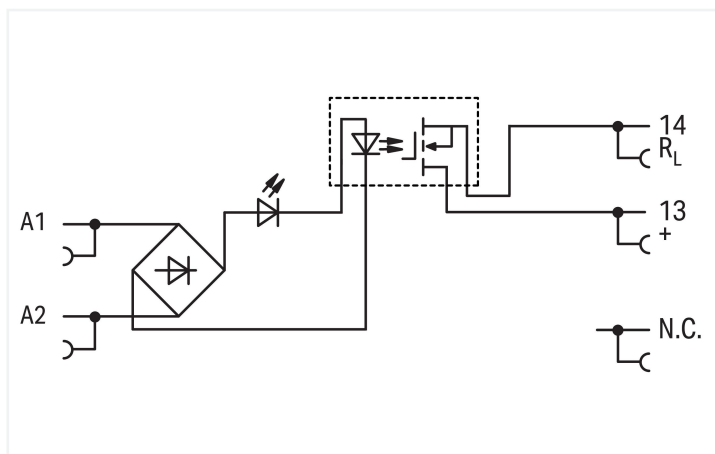
Data Sheet | Item Number: 857-728

Solid-state relay module; Nominal input voltage: 230 V AC/DC; Output voltage range: 0 ... 30 VDC; Limiting continuous current: 3 A; 2-wire connection; Yellow status indicator; Module width: 6 mm; gray

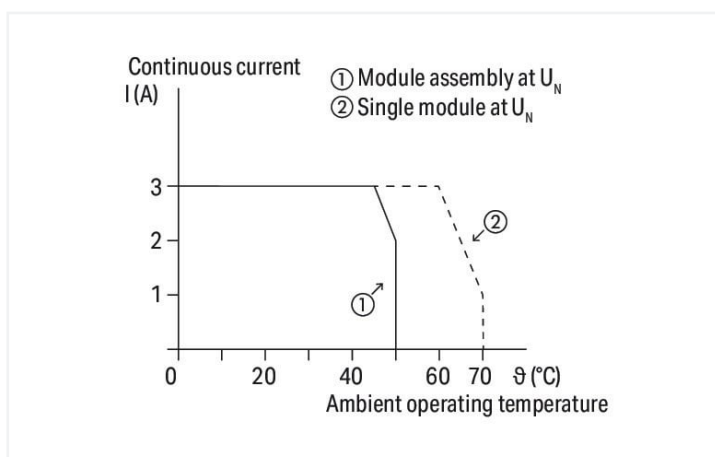
<https://www.wago.com/857-728>



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	AC/DC 230 V
Input voltage range (low level)	AC/DC 0 ... 60 V
Input voltage range (high level)	AC/DC 200 ... 253 V
Nominal input current at U_N	4 mA

Load circuit

Circuit type	2-wire connection
Limiting continuous current	3 A
Inrush current (resistive) max.	(AC) 15 A / 0.01 s
Nominal output voltage	DC 24 V
Output voltage range	DC 0 ... 30 V
Voltage drop	≤ 0.12 VDC
Leakage current at rated voltage	≤ 1 µA
Switching current (min.)	50 µA
Turn-on time	≤ 4.5 ms
Turn-off time	≤ 10 ms
Switching frequency	≤ 20 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)	Basic insulation
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	0.64 MJ
Weight	31 g

Environmental requirements	
Ambient temperature (operation at U _N)	-20 ... +70 °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	857-162	

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	DE	
GTIN	4045454835484	
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) 7(c)-I	
SCIP notification number (Bulgaria)	a11ddb13-73a2-402f-8c62-084e7ef393df	
SCIP notification number (Czech Republic)	f2e0ce4a-21ae-46f0-98e1-8a5e410776af	

Approvals / Certificates					
General approvals			Approvals for hazardous areas		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03078	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)
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4	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 857-728

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Documentation

Bid Text

857-728	19.02.2019	xml 4.13 KB	Download icon
857-728	20.02.2019	docx 16.36 KB	Download icon

Instruction Leaflet

CCC Ex (Additional information)	26.04.2023	pdf 129.88 KB	Download icon
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CAD/CAE-Data

CAD data

2D/3D Models 857-728

Download icon

CAE data

EPLAN Data Portal 857-728

Download icon

WSCAD Universe 857-728

Download icon

ZUKEN Portal 857-728

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1 Compatible Products

1.1 Optional Accessories

1.1.1 Basic relay

1.1.1.1 Basic solid-state relay



[Item No.: 857-162](#)
Basic solid-state relay; Nominal input voltage: 60 VDC; Output voltage range: 0 ... 24 VDC; Limiting continuous current: 3 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 Jumper

1.1.3.1 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			

1.1.4 Marking

1.1.4.1 Double marker carrier



[Item No.: 209-128](#)
Adaptor; gray

1.1.4.2 Group marker carrier



[Item No.: 249-105](#)
Group marker carrier; gray

1.1.4.3 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

1.1.4.4 Marking device



[Item No.: 210-110](#)
Fiber-tip pen

1.1.4.5 Marking strip



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

1.1.4.6 Protective marker cover



[Item No.: 209-184](#)
Protection cover; transparent

1.1.5 Tool

1.1.5.1 Operating tool

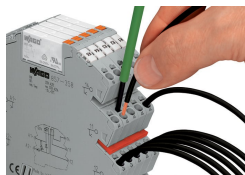


Item No.: 210-720

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

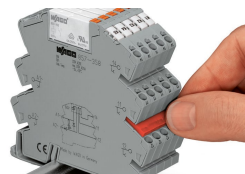
Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking



Marking via WMB Multi Marking System.

Installation



Removing a relay via ejector.