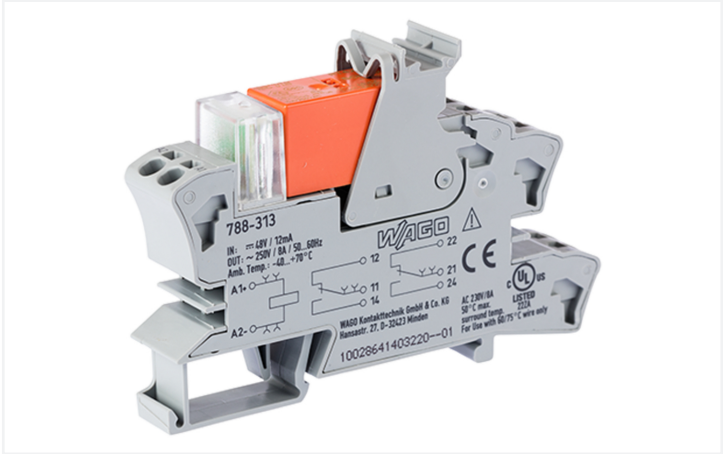


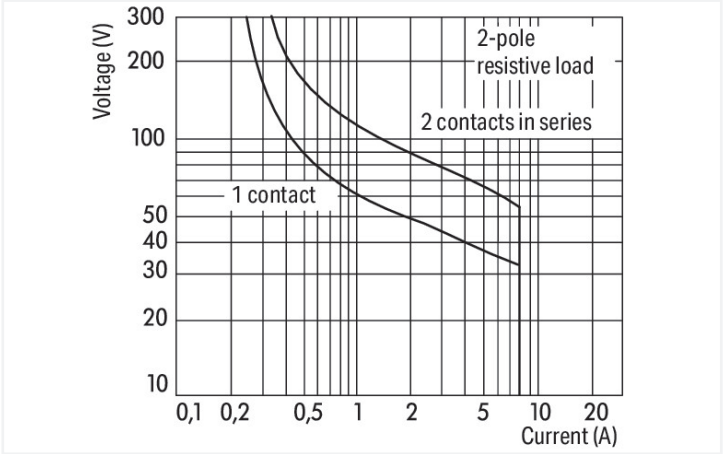
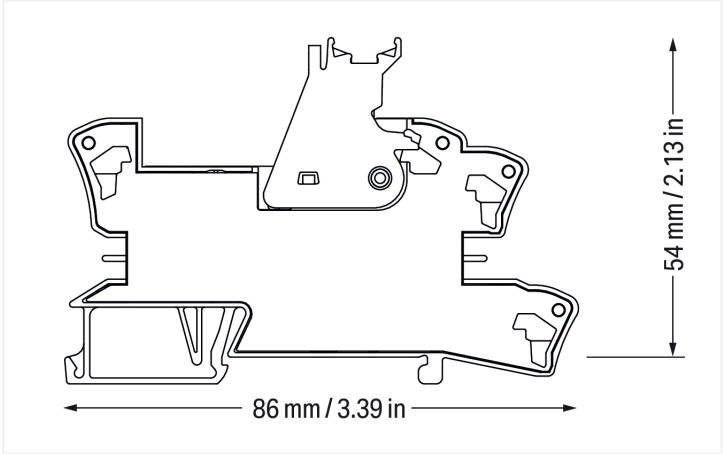
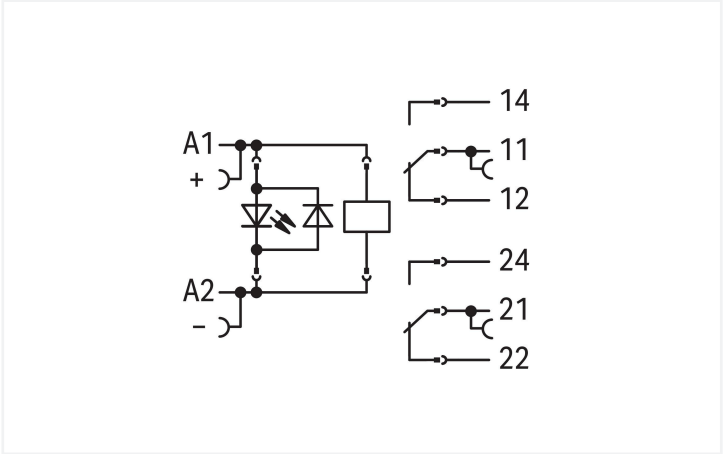
Data Sheet | Item Number: 788-313

Relay module; Nominal input voltage: 48 VDC; 2 changeover contacts; Limiting continuous current: 8 A; Red status indicator; Module width: 15 mm; 2,50 mm²; gray

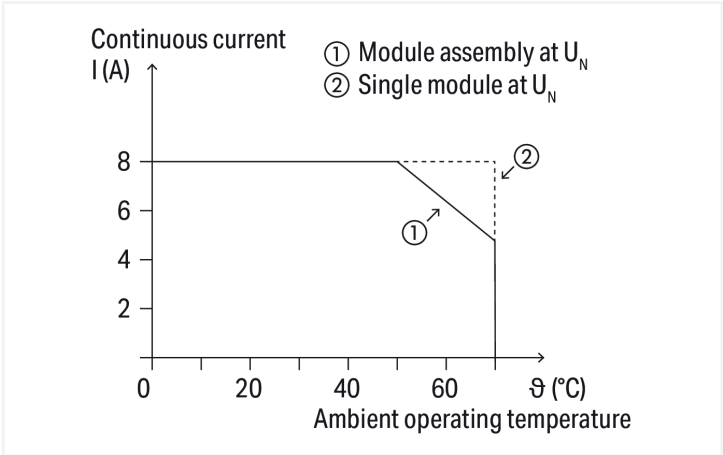
<https://www.wago.com/788-313>



Color: ■ gray



DC load limit curve



Current-carrying capacity curve



Notes	
Safety Information	A separator plate (e.g., 209-191) must be used for voltages exceeding 250 V between adjacent relay modules and to comply with reinforced insulation requirements.
Note	Reinforced insulation between coil and contacts To protect the relay coils and contacts, inductive loads must be dampened with an effective protection circuit.

Technical data	
Control circuit	Load circuit
Nominal input voltage U _N	48 VDC
Input voltage range	±10 %
Nominal input current at U _N	11 mA
	Number of changeover/switchover contacts
	2
	Contact material (relay)
	AgNi 90/10
	Limiting continuous current
	8 A
	Inrush current (resistive) max.
	(AC) 15 A / 4 s
	Switching Voltage, Max.
	250 VAC
	Switching power (resistive) max.
	AC 2000 VA; DC (see load limit curve)
	Switching capacity
	AC-15: 3 A / 250 VAC; DC-13: 2 A / 24 VDC
	Recommended minimum load
	12 V / 10 mA
	Pull-in time (typ.)
	8 ms
	Drop-out time (typ.)
	13 ms
	Bounce time (typ.)
	10 ms
	Electrical life (NO; resistive load; 23 °C)
	10 x 10 ³ switching operations
	Mechanical life
	30 x 10 ⁶ switching operations
	Switching frequency with/without load (max.)
	6 min ⁻¹ / 1200 min ⁻¹

Signaling	
Status indicator	Red LED

Safety and protection	
Rated Voltage	250 V
Rated impulse withstand voltage	4 kV
Pollution degree	3
Dielectric strength (control/load circuit) (AC, 1 min)	5 kVrms
Dielectric strength (open contact) (AC, 1 min)	1 kVrms
Dielectric strength (load/load circuit) (AC, 1 min)	2.5 kVrms
Safety Information	A separator plate (e.g., 209-191) must be used for voltages exceeding 250 V between adjacent relay modules and to comply with reinforced insulation requirements.
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
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches



Physical data		
Width		15 mm / 0.591 inches
Height		86 mm / 3.386 inches
Depth from upper-edge of DIN-rail		54 mm / 2.126 inches

Mechanical data		
Mounting type		DIN-35 rail

Material data		
Note (material data)		Information on material specifications can be found here
Color		gray
Fire load		0.66 MJ
Weight		45.6 g

Environmental requirements		
Ambient temperature (operation at U _N)		-40 ... +70 °C
Ambient temperature UL (operation at U _N)		-40 ... +50 °C
Ambient temperature (storage)		-40 ... +70 °C
Processing temperature		-25 ... +50 °C
Temperature range of connection cable		≥ (T _{ambient} + 20 K)

Standards and specifications		
Standards/specifications		EN 61010-2-201 EN 61810-1 EN 61373 UL 508

Basic relay		
WAGO Basic Relay		788-160

Commercial data		
Product Group		6 (INTERFACE ELECTRONIC)
PU (SPU)		20 (1) pcs
Packaging type		Box
Country of origin		DE
GTIN		4045454550370
Customs tariff number		85364900990

Product Classification		
UNSPSC		39122334
eCl@ss 10.0		27-37-16-01
eCl@ss 9.0		27-37-16-01
ETIM 9.0		EC001437
ETIM 8.0		EC001437
ECCN		NO US CLASSIFICATION



Environmental Product Compliance	
CAS-No.	7439-92-1 7440-43-9 79-94-7 80-05-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol 4,4'-isopropylidenediphenol Cadmium Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	7(a)
SCIP notification number (Bulgaria)	73d5cb2e-d36a-4445-9941-623ea07679bc
SCIP notification number (Czech Republic)	4f74200c-b4fd-4a10-be4f-76bc8b610bf8

Approvals / Certificates											
General approvals		Declarations of conformity and manufacturer's declarations									
Approval	Standard	Certificate Name									
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03084									
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Vol.1 Sec.6									
		<table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>EU-Declaration of Conformity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr><tr><td>UK-Declaration of Conformity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr></table>	Approval	Standard	Certificate Name	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Approval	Standard	Certificate Name									
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-									
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-									

Downloads	
Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 788-313	

Documentation					
Bid Text			Instruction Leaflet		
788-313	19.02.2019	xml 4.60 KB	Sockets with Elementa- ry Relay/ SSR	V 1.0.1 09.10.2020	pdf 2271.22 KB
788-313	25.01.2019	docx 16.58 KB			



CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 788-313	EPLAN Data Portal 788-313
	WSCAD Universe 788-313
	ZUKEN Portal 788-313

1 Compatible Products

1.1 Optional Accessories

1.1.1 Basic relay

1.1.1.1 Basic relay



Item No.: 788-160
Basic relay; Nominal input voltage: 48 VDC; 2 changeover contacts; Limiting continuous current: 8 A; Module width: 13 mm; Module height: 15 mm

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



Item No.: 216-542
Twin ferrule; Sleeve for 2 x 1 mm² / AWG 2 x 18; red, insulated; 12 mm long; red

1.1.3 Indicators

1.1.3.1 Status indication



Item No.: 788-121
Accessories for relay modules; Operation status indicator: red; Nominal operating voltage range: 48 ... 60 VDC



1.1.4 Jumper

1.1.4.1 Jumper



Item No.: 788-118
Jumper; for jumper slot; 2-way; from 1 to 3; insulated; light gray



Item No.: 788-113
Jumper; for jumper slot; 2-way; insulated; light gray



Item No.: 859-402
Jumper; for jumper slot; 2-way; insulated; light gray



Item No.: 788-114
Jumper; for jumper slot; 3-way; insulated; light gray



Item No.: 788-115
Jumper; for jumper slot; 4-way; insulated; light gray



Item No.: 788-116
Jumper; for jumper slot; 6-way; insulated; light gray



Item No.: 788-117
Jumper; for jumper slot; 8-way; insulated; light gray

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



Item No.: 209-145
Group marker carrier; white

1.1.5.3 Marker



Item No.: 209-183
Marker; white



Item No.: 793-502
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-503
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.: 793-501
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

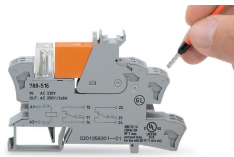
1.1.6.1 Operating tool



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

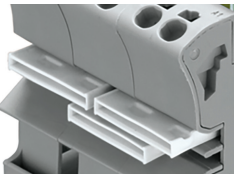
Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking



Marking using WMB Multi markers and
group marker carriers.

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at: www.wago.com