

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

www.wago.com/788-313

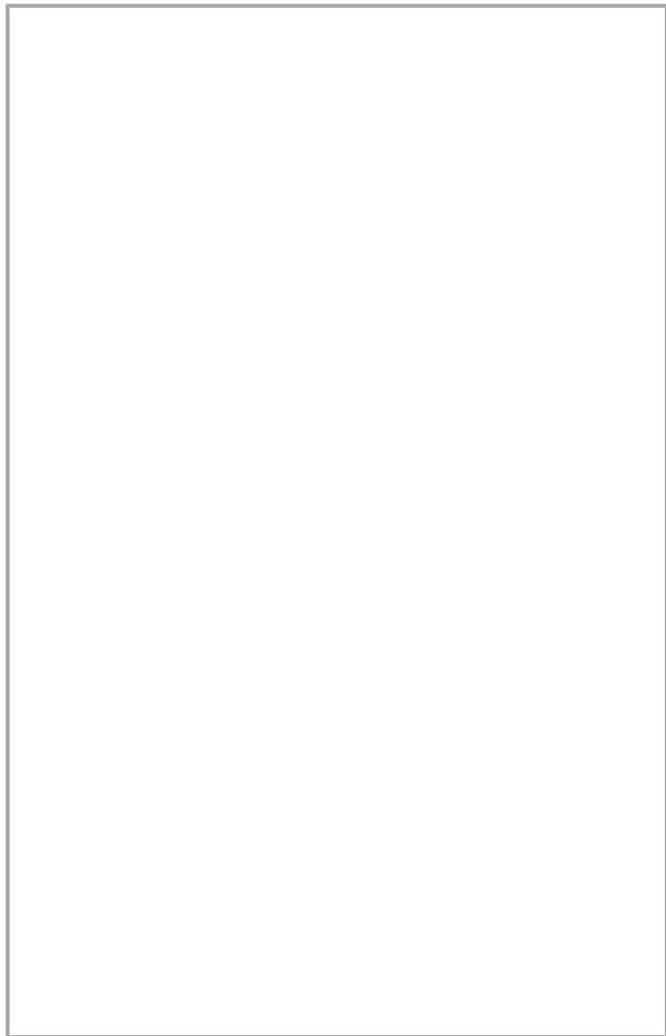
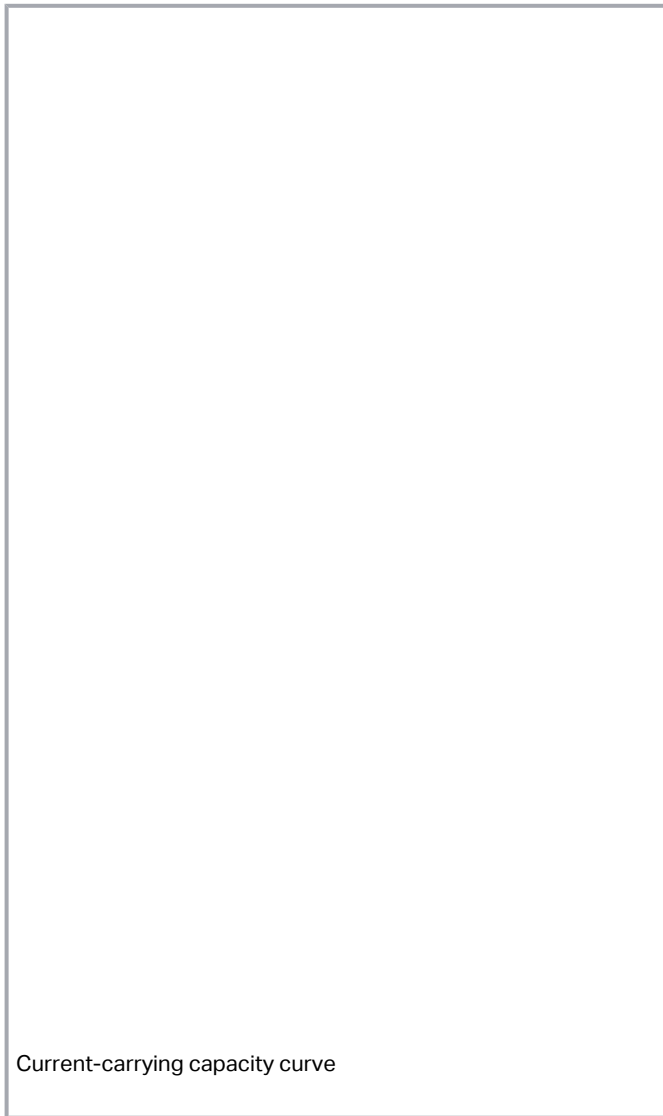


Color:

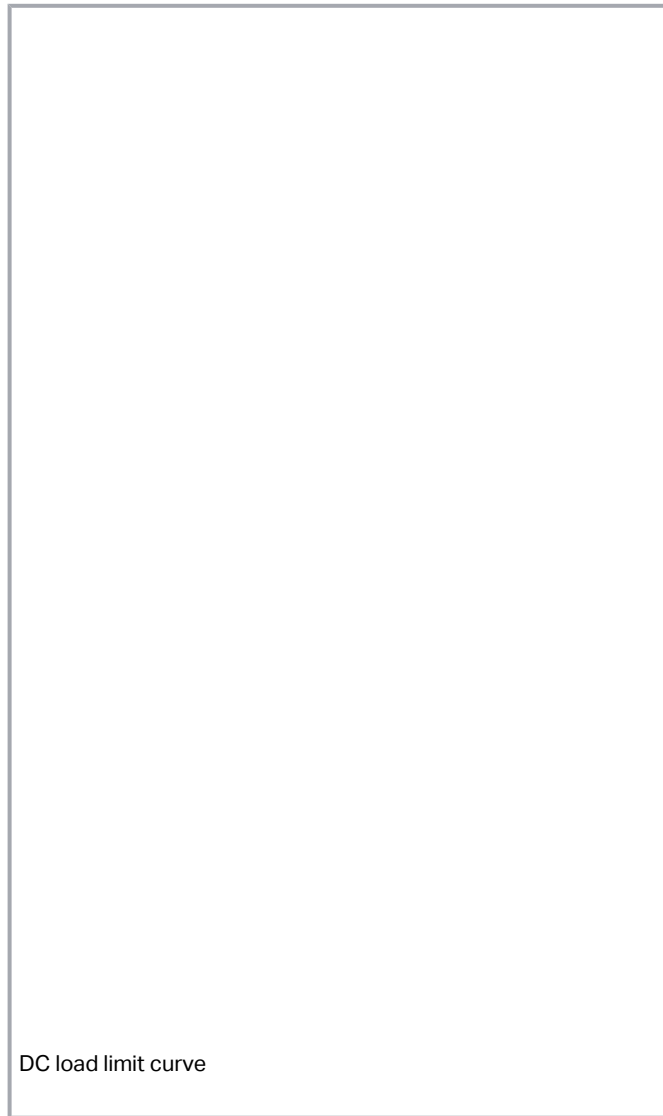
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Data

Notes

Safety information

A separator plate (e.g., 209-191) must be used for voltages greater than 250 V between adjacent relay modules and for compliance with the 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.

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Technical data

Control Circuit

Nominal input voltage U_N	DC 48 V
Input voltage range	$\pm 10\%$
Nominal input current at U_N	11 mA

Load circuit

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.)	AC 250 V
Switching power (resistive) max.	AC 2000 VA; DC (see load limit curve)
Switching capacity	AC-15: 3 A / AC 250 V; DC-13: 2 A / DC 24 V
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)	10×10^3 switching operations
Mechanical life	30×10^6 switching operations
Switching frequency with/without load (max.)	6 min^{-1} / 1200 min^{-1}

Signaling

Status indicator	Red LED
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Safety and protection

Rated voltage	250 V
Rated surge 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 greater than 250 V between adjacent relay modules and for compliance with

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the reinforced insulation requirements.

Protection type	IP20
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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
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
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Material Data

Color	gray
Fire load	0.667 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	$\geq (T_{\text{ambient}} + 20 \text{ K})$

Standards and specifications

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

WAGO Basic Relay	788-160
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Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-37-16-01
eCl@ss 9.0	27-37-16-01
ETIM 8.0	EC001437
ETIM 7.0	EC001437
Recupel Type	
PU (SPU)	20 (1) pcs
Packaging type	box
Country of origin	DE
GTIN	4045454550370
Customs tariff number	85364900990

Environmental Product Compliance

CAS-No.	7439-92-1 79-94-7 80-05-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol 4,4'-isopropylidenediphenol 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

Logo	Approval	Additional Approval Text	Certificate name
	EAC Brjansker Zertifizierungsstelle	TP TC 004/2011	EAC RU C-DE.AM02.B.00122/19
	UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Vol.1 Sec. 6

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Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Optional accessories

Marking accessories

Marking strip			
	Item no.: 2009-110 Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white		www.wago.com/2009-110
Marking device			
	Item no.: 210-110 Fiber-tip pen		www.wago.com/210-110
Double marker carrier			
	Item no.: 209-128 Adaptor; gray		www.wago.com/209-128
Protective marker cover			
	Item no.: 209-184 Protection cover; transparent		www.wago.com/209-184
Marker			
	Item no.: 2009-115 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white		www.wago.com/2009-115
	Item no.: 209-183 Marker; white		www.wago.com/209-183
	Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white		www.wago.com/793-501
	Item no.: 793-502 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white		www.wago.com/793-502
	Item no.: 793-503 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white		www.wago.com/793-503
	Item no.: 793-504 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white		www.wago.com/793-504
	Item no.: 793-505 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; white		www.wago.com/793-505

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Group marker carrier

Item no.: 209-145

Group marker carrier; white

www.wago.com/209-145**Item no.: 249-105**

Group marker carrier; gray

www.wago.com/249-105**Indicators**

Status indication

Item no.: 788-121Accessories for relay modules; Operation status indicator: red; Nominal operating voltage range: 48 ... 60 VDC www.wago.com/788-121**Ferrule**

Ferrule

Item no.: 216-241Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; whitewww.wago.com/216-241**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; graywww.wago.com/216-242**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 www.wago.com/216-243**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; blackwww.wago.com/216-244**Item no.: 216-542**Twin ferrule; Sleeve for 2 x 1 mm² / AWG 2 x 18; red, insulated; 12 mm long; redwww.wago.com/216-542**Basic Relay**

Basic relay

Item no.: 788-160Basic relay; Nominal input voltage: 48 VDC; 2 changeover contacts; Limiting continuous current: 8 A; Module width: 13 mm; Module height: 15 mm www.wago.com/788-160**Tool**

Operating tool

Item no.: 210-720

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

www.wago.com/210-720**Jumpers**

Jumper

Item no.: 788-116

Jumper; for jumper slot; 6-way; insulated; light gray

www.wago.com/788-116**Item no.: 788-117**

Jumper; for jumper slot; 8-way; insulated; light gray

www.wago.com/788-117**Item no.: 788-114**www.wago.com/788-114

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Jumper; for jumper slot; 3-way; insulated; light gray

Item no.: 788-113

Jumper; for jumper slot; 2-way; insulated; light gray

www.wago.com/788-113

Item no.: 788-115

Jumper; for jumper slot; 4-way; insulated; light gray

www.wago.com/788-115

Item no.: 859-402

Jumper; for jumper slot; 2-way; insulated; light gray

www.wago.com/859-402

Item no.: 788-118

Jumper; for jumper slot; 2-way; from 1 to 3; insulated; light gray

www.wago.com/788-118

Downloads

Documentation

Bid Text

788-313 X81 - Datei	2019 年2月19 日	xml 4.7 kB	Download
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788-313 docx - Datei	2019 年1月25 日	docx 17.0 kB	Download
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Instruction Leaflet

Sockets with Elementary Relay/ SSR	V 1.0.1 2020 年10月9 日	pdf 2.3 MB	Download
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Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 年8月18 日	pdf 2.2 MB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 788-313	URL	Download
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CAE data

ZUKEN Portal 788-313	URL	Download
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WSCAD Universe 788-313	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 788-313

[URL](#)

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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

Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking

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



Marking using WMB Multi markers and group marker carriers.

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