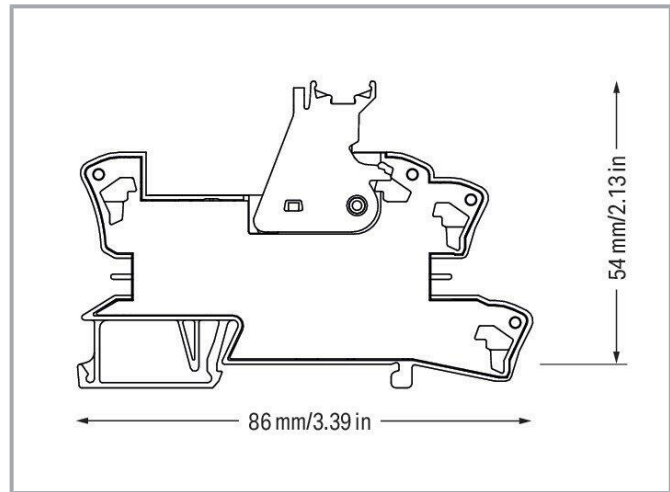
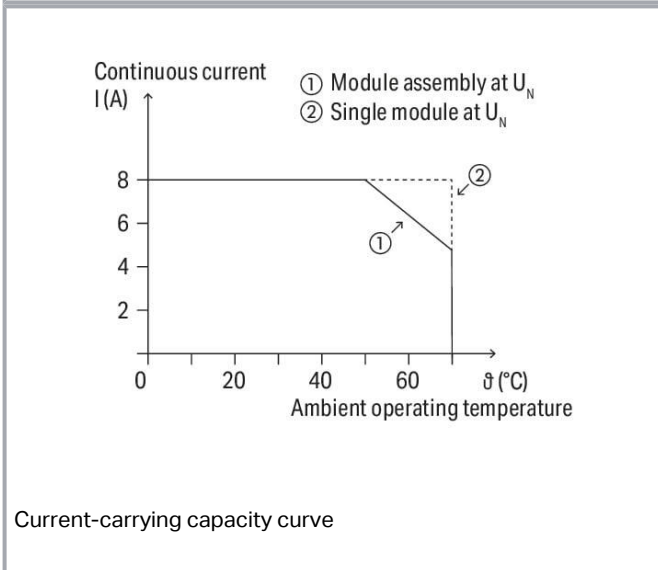
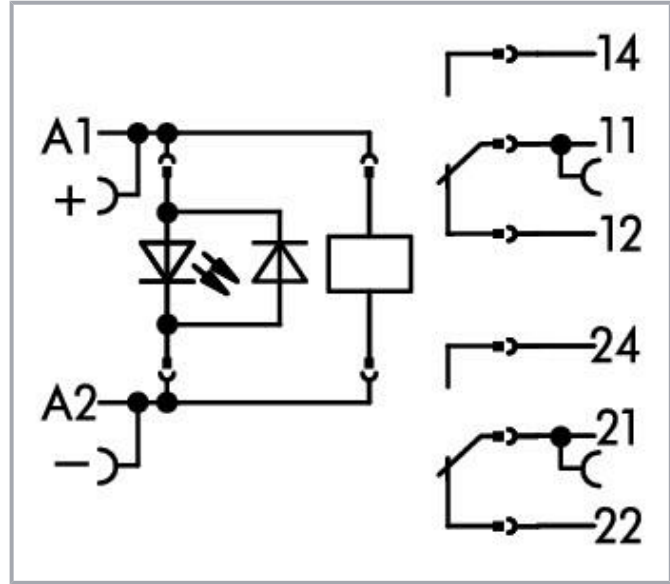
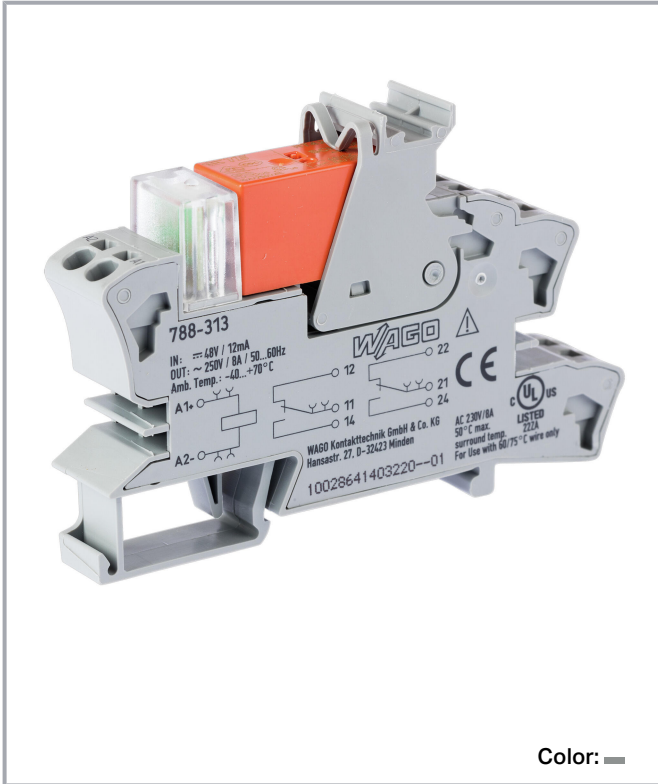


**Data sheet | Item number: 788-313**

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



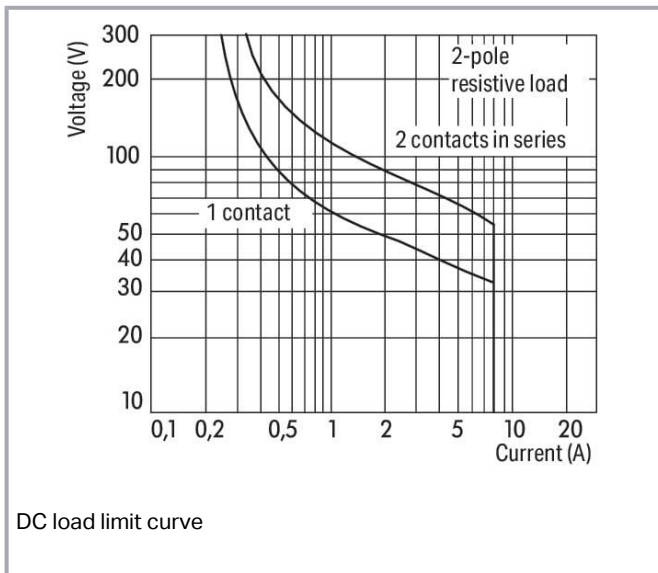
[www.wago.com/788-313](http://www.wago.com/788-313)



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

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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.

## 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

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



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 x 10 <sup>3</sup> switching operations
Mechanical life	30 x 10 <sup>6</sup> switching operations
Switching frequency with/without load (max.)	6 min <sup>-1</sup> / 1200 min <sup>-1</sup>

## Signaling

Status indicator	Red LED
------------------	---------

## 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 the reinforced insulation requirements.
Protection type	IP20

## Connection data

Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.34 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm <sup>2</sup> / 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

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



Depth from upper-edge of DIN-rail	54 mm / 2.126 inches
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### 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
PU (SPU)	20 (1) pcs
Packaging type	box
Country of origin	DE

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



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	6(c) 7(a) 7(c)-I 7(c)-II
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

#### Declarations of conformity and manufacturer's declarations

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

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

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## Optional accessories

### 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](http://www.wago.com/210-720)

### Basic Relay

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

[www.wago.com/788-160](http://www.wago.com/788-160)

### Indicators

Status indication



**Item no.: 788-121**

Accessories for relay modules; Operation status indicator: red; Nominal operating voltage range: 48 ... 60 VDC

[www.wago.com/788-121](http://www.wago.com/788-121)

### Ferrule

Ferrule



**Item no.: 216-241**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white

[www.wago.com/216-241](http://www.wago.com/216-241)



**Item no.: 216-242**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray

[www.wago.com/216-242](http://www.wago.com/216-242)



**Item no.: 216-243**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

[www.wago.com/216-243](http://www.wago.com/216-243)



**Item no.: 216-244**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

[www.wago.com/216-244](http://www.wago.com/216-244)



Image coming soon

**Item no.: 216-542**

Twin ferrule; Sleeve for 2 x 1 mm<sup>2</sup> / AWG 2 x 18; red, insulated; 12 mm long; red

[www.wago.com/216-542](http://www.wago.com/216-542)

### 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](http://www.wago.com/2009-110)

Double marker carrier

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

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**Item no.: 209-128**  
Adaptor; gray

[www.wago.com/209-128](http://www.wago.com/209-128)

Marking devices



**Item no.: 210-110**  
Fiber-tip pen

[www.wago.com/210-110](http://www.wago.com/210-110)

Protective marker cover



**Item no.: 209-184**  
Protection cover; transparent

[www.wago.com/209-184](http://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](http://www.wago.com/2009-115)



**Item no.: 209-183**  
Marker; white

[www.wago.com/209-183](http://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](http://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](http://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](http://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](http://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](http://www.wago.com/793-505)

Group marker carrier



**Item no.: 209-145**  
Group marker carrier; white

[www.wago.com/209-145](http://www.wago.com/209-145)



**Item no.: 249-105**  
Group marker carrier; gray

[www.wago.com/249-105](http://www.wago.com/249-105)

Jumpers




Jumper



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

[www.wago.com/788-116](http://www.wago.com/788-116)

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

	<b>Item no.: 788-117</b> Jumper; for jumper slot; 8-way; insulated; light gray	<a href="http://www.wago.com/788-117">www.wago.com/788-117</a>
	<b>Item no.: 788-114</b> Jumper; for jumper slot; 3-way; insulated; light gray	<a href="http://www.wago.com/788-114">www.wago.com/788-114</a>
	<b>Item no.: 788-113</b> Jumper; for jumper slot; 2-way; insulated; light gray	<a href="http://www.wago.com/788-113">www.wago.com/788-113</a>
	<b>Item no.: 788-115</b> Jumper; for jumper slot; 4-way; insulated; light gray	<a href="http://www.wago.com/788-115">www.wago.com/788-115</a>
	<b>Item no.: 859-402</b> Jumper; for jumper slot; 2-way; insulated; light gray	<a href="http://www.wago.com/859-402">www.wago.com/859-402</a>
	<b>Item no.: 788-118</b> Jumper; for jumper slot; 2-way; from 1 to 3; insulated; light gray	<a href="http://www.wago.com/788-118">www.wago.com/788-118</a>

## Downloads

### Documentation

#### Bid Text

788-313 X81 - Datei	2019 Feb 19	xml 4.7 kB	Download
788-313 docx - Datei	2019 Jan 25	docx 17.0 kB	Download

#### Instruction Leaflet

Sockets with Elementary Relay/ SSR	V 1.0.1 2020 Oct 9	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 Aug 18	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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Subject to changes. Please also observe the further product documentation!



## CAE data

ZUKEN Portal 788-313	<a href="#">URL</a>	<a href="#">Download</a>
WSCAD Universe 788-313	<a href="#">URL</a>	<a href="#">Download</a>
EPLAN Data Portal 788-313	<a href="#">URL</a>	<a href="#">Download</a>

## Environmental Product Compliance

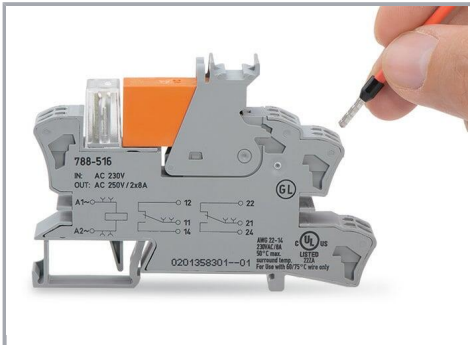
### Compliance Search

Environmental Product Compliance 788-313	<a href="#">URL</a>	<a href="#">Download</a>
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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 mm<sup>2</sup>; gray

## Installation Notes

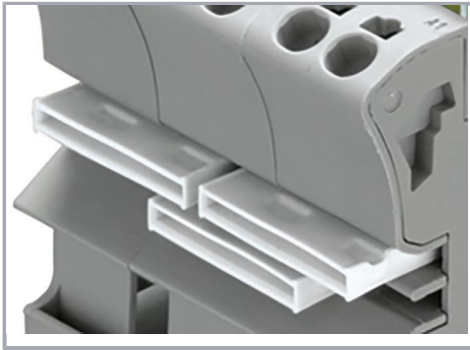
### Conductor termination



### Conductor termination

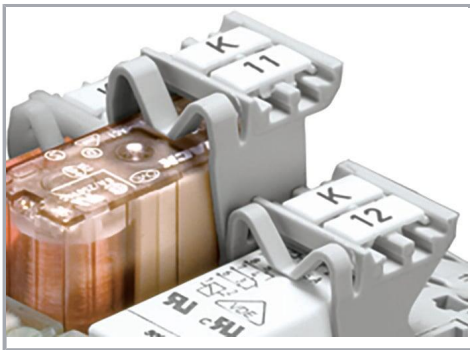
### Commoning

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



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!