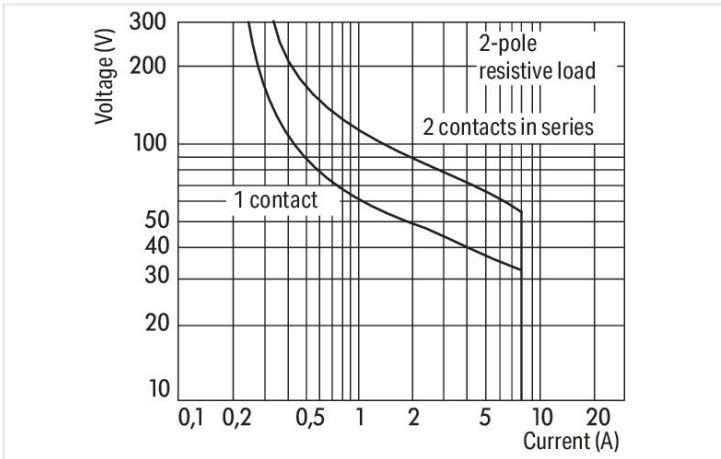
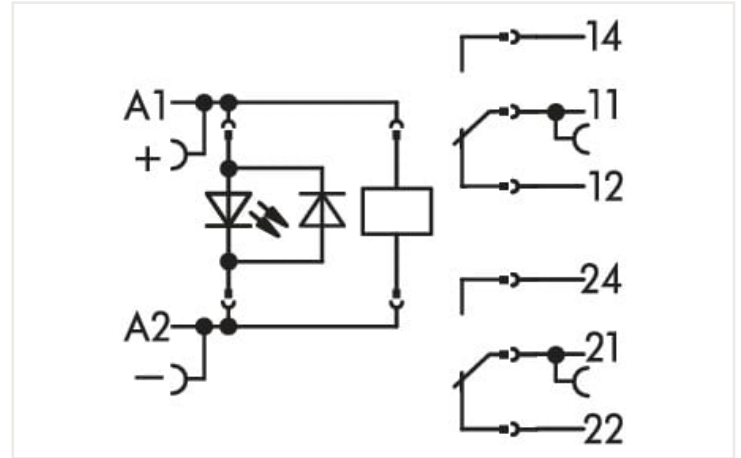
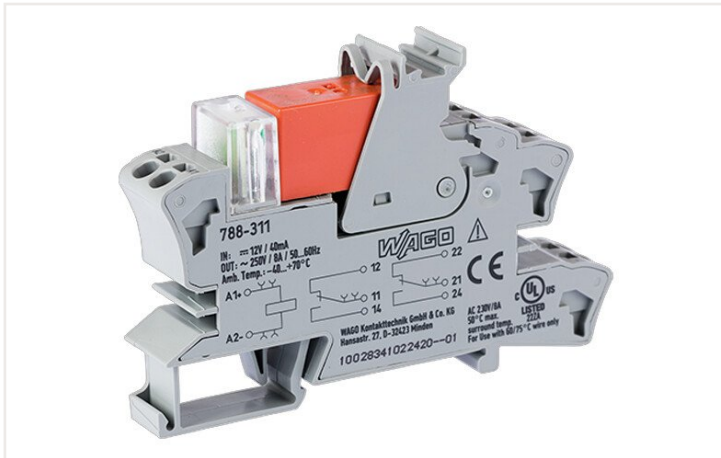


**Data sheet | Item number: 788-311**

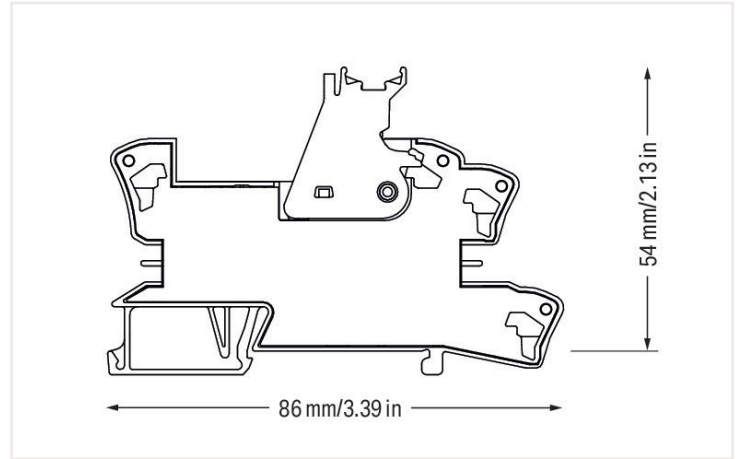
Relay module; Nominal input voltage: 12 VDC; 2 changeover contacts; Limiting continuous current: 8 A; Red status indicator; Module width: 15 mm; 2,50 mm<sup>2</sup>; gray



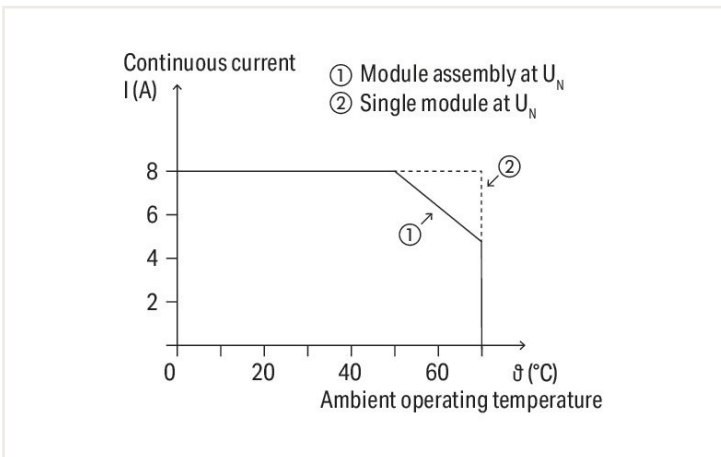
<https://www.wago.com/788-311>



DC load limit curve



Dimensions in mm



Current-carrying capacity curve

## Notes

### Safety information 1

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 12 V
Input voltage range	$\pm 10\%$
Nominal input current at $U_N$	36 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)	$10 \times 10^3$ switching operations
Mechanical life	$30 \times 10^6$ switching operations
Switching frequency with/without load (max.)	$6 \text{ min}^{-1}$ / $1200 \text{ min}^{-1}$

## 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 1	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
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	0.677 MJ
Weight	45.4 g

### Environmental requirements

Ambient temperature (operation at $U_N$ )	-40 ... 70 °C
Ambient temperature UL (operation at $U_N$ )	-40 ... 50 °C
Surrounding air temperature (storage)	-40 ... +70 °C
Processing temperature	-25 ... +50 °C

### 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	788-152
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### Commercial data

Product Group	6 (Interface Electronics)
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) Stück
Packaging type	Box
Country of origin	CN
GTIN	4055143184120
Customs tariff number	85364900990

Approvals and certificates

General approvals



Approval	Standard	Certificate name
EAC Brjansker Zertifizierungsstelle	TP TC 004/2011	EAC RU C-DE.AM02. B.00122/19
UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.6

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 788-311



Documentation

Bid Text

788-311	25.01.2019	docx 16.54 KB	
788-311	19.02.2019	xml 4.60 KB	

Instruction Leaflet

Sockets with Elementary Relay/ SSR	V 1.0.1 09.10.2020	pdf 2271.22 KB	
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CAD/CAE-Data

CAD data

2D/3D Models 788-311



CAE data

EPLAN Data Portal 788-311	
WSCAD Universe 788-311	
ZUKEN Portal 788-311	

## 1 Compatible products

### 1.1 Optional accessories

#### 1.1.1 Basic relay

##### 1.1.1.1 Basic relay



**Item no.: 788-152**

Basic relay; Nominal input voltage: 12 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 2 x 18; red, insulated; 12 mm long; red

#### 1.1.3 Indicators

##### 1.1.3.1 Status indication

**Item no.: 788-120**

Accessories for relay modules; Operation status indicator: red; Nominal operating voltage: 24 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 card; 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 devices



**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

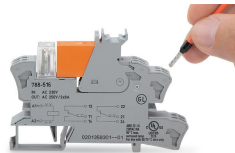


#### Item no.: 210-720

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

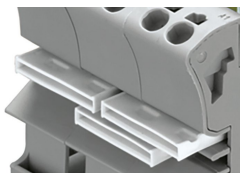
## Installation notes

### Conductor termination



Conductor termination

### Commoning



Easy commoning using adjacent jumpers

### Marking



Marking using WMB Multi markers and group marker carriers.