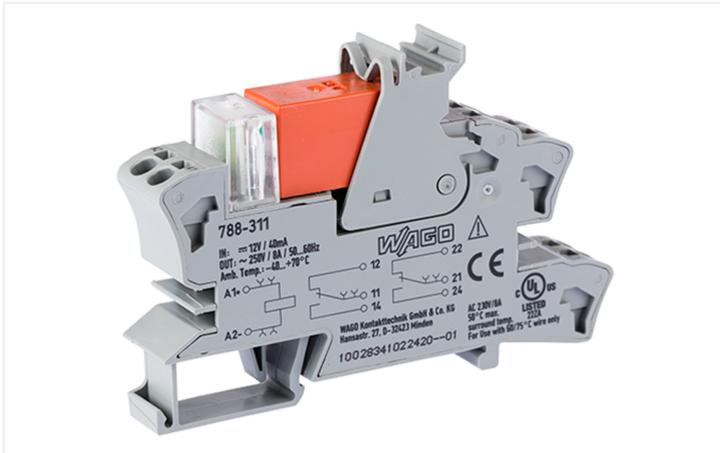


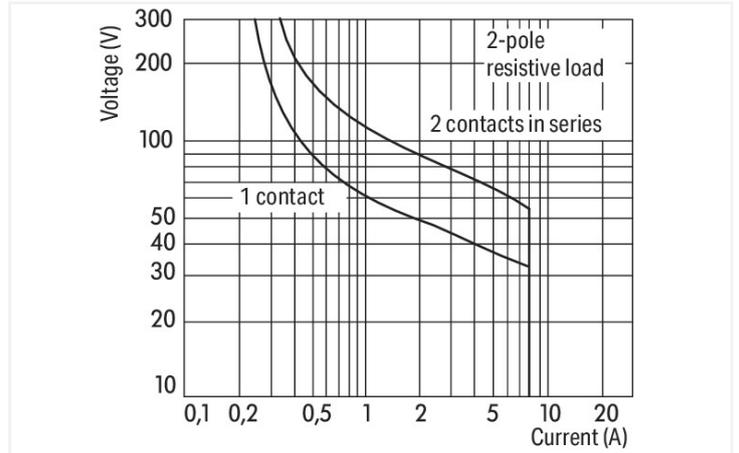
# Data Sheet | Item Number: 788-311

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

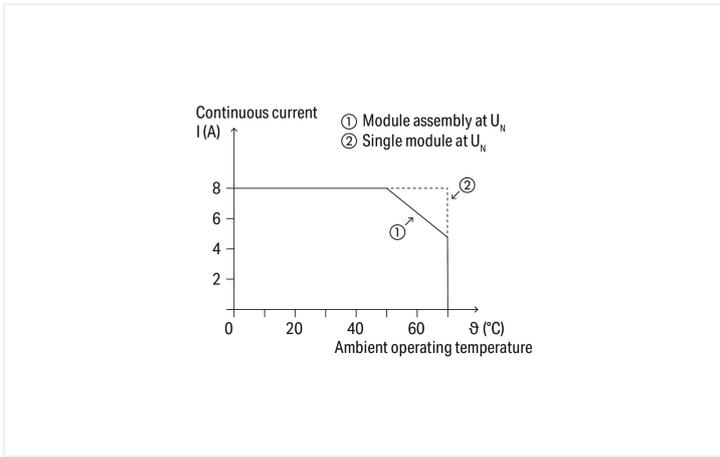
<https://www.wago.com/788-311>



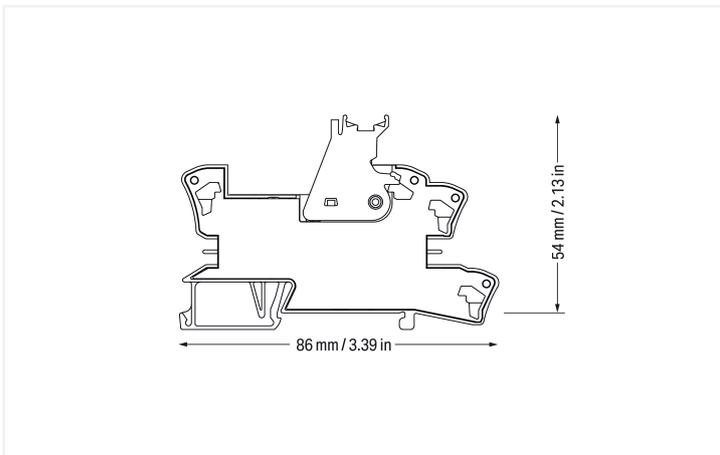
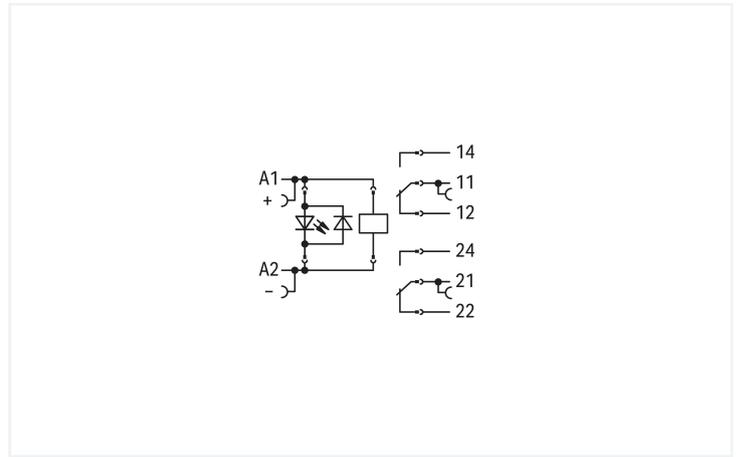
Color: ■ gray



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

Nominal input voltage $U_N$	12 VDC
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.	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)	$10 \times 10^3$ 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 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 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

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Fire load	0.67 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
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	788-152
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### Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
PU (SPU)	20 (1) pcs
Packaging type	Box
Country of origin	CN
GTIN	4055143184120
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 10.0	EC001437
ECCN	NO US CLASSIFICATION

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
SCIP notification number (Austria)	6cb17f3d-a438-4180-947f-430dbc9c5622
SCIP notification number (Belgium)	f5ee941f-e9d8-4cfc-ab36-c2dbe3aa2603
SCIP notification number (Bulgaria)	42048296-e89b-4a19-8cc8-c329f22cd90c
SCIP notification number (Czech Republic)	12684f0d-ed36-4226-bcc3-6f9f1e3c12e8
SCIP notification number (Denmark)	8d6dd953-b583-4558-95b2-154cd93ef817
SCIP notification number (Finland)	411ef4a0-8b14-4733-bfee-0a07c8ab569d
SCIP notification number (France)	576c1a8d-b2f1-45cc-bc30-a1ec7a13f9d3
SCIP notification number (Germany)	3aed2e25-4110-44b8-b215-d3bfc882a24
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SCIP notification number (Netherlands)	0b7ded81-a4f9-4300-86c0-d4c7ceb401c2
SCIP notification number (Poland)	ec289dc0-b26a-4fdd-bf55-f03332566cc
SCIP notification number (Romania)	8c5dd94a-0b6d-4d59-8d75-24f638fe372f
SCIP notification number (Sweden)	51d232f7-c7af-4143-872d-16428ba97485

**Approvals / Certificates**

General approvals			Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03084	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UL Underwriters Laboratories Inc. (ORDINARY LOCATI- ONS)	UL 508	E175199 Vol.1 Sec.6			

**Downloads**

**Environmental Product Compliance**

Compliance Search	
Environmental Product Compliance 788-311	<a href="#">↓</a>

**Documentation**

Bid Text			
788-311	25.01.2019	docx 16.54 KB	<a href="#">↓</a>
788-311	19.02.2019	xml 4.60 KB	<a href="#">↓</a>

Instruction Leaflet			
Sockets with Elementa- ry Relay/ SSR	V 1.0.1 09.10.2020	pdf 2271.22 KB	<a href="#">↓</a>

**CAD/CAE-Data**

CAD data	CAE data
2D/3D Models 788-311 	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; 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

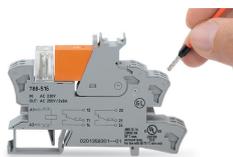


**Item No.: 210-720**

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.