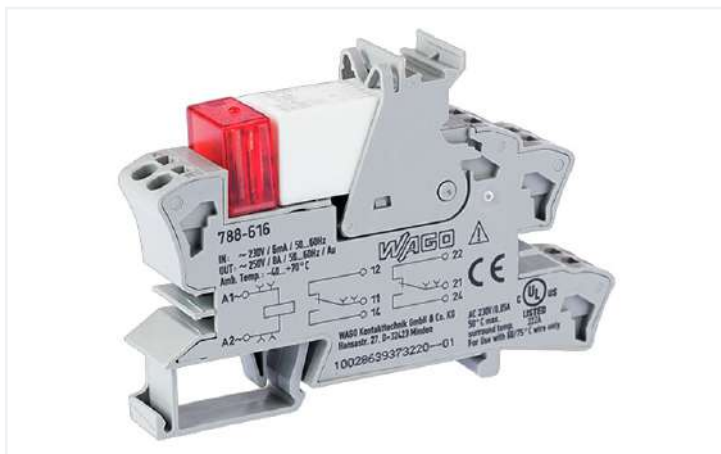


# Data Sheet | Item Number: 788-616

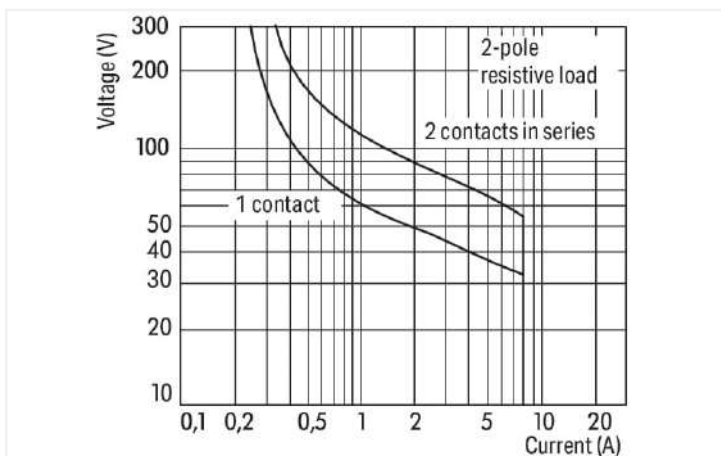
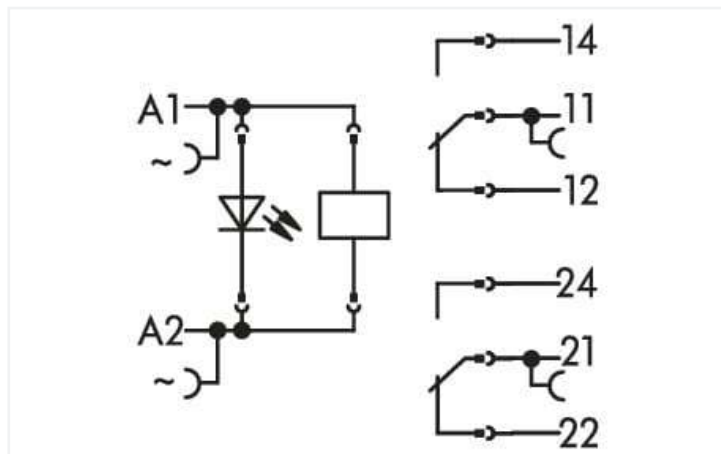
Relay module; Nominal input voltage: 230 VAC; 2 changeover contacts; Limiting continuous current: 8 A; with gold contacts; Red status indicator; Module width: 15 mm; 2,50 mm<sup>2</sup>; gray



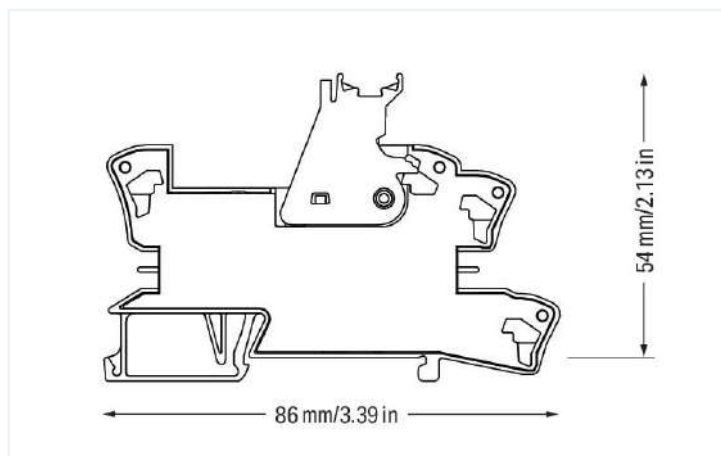
<https://www.wago.com/788-616>



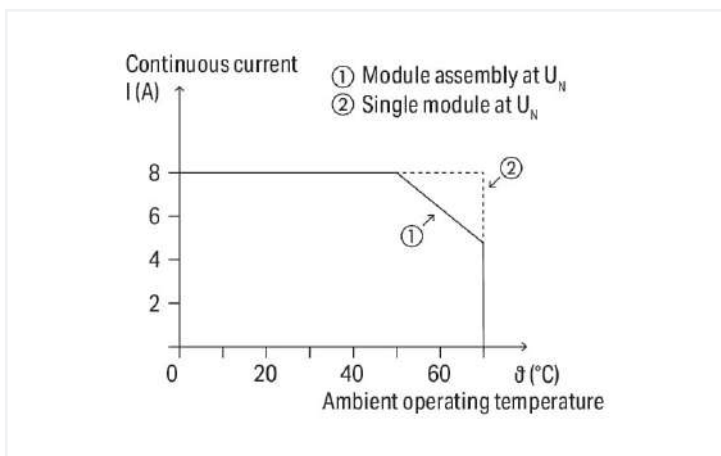
Color: ■ gray



DC load limit curve



Dimensions in mm



Current-carrying capacity curve

## 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 prevent damaging the gold layer, 30 VDC switching voltages and 50 mA currents must not be exceeded. Higher switching power eventually evaporates the gold layer. The resulting deposits in the housing may reduce service life.
- To protect the relay coils and contacts, inductive loads must be dampened with an effective protection circuit.

## Technical data

### Control circuit

Nominal input voltage $U_N$	AC 230 V
Input voltage range	$\pm 10\%$
Nominal input current at $U_N$	5 mA

### Load circuit

Number of changeover/switchover contacts	2
Contact material (relay)	AgNi + Au
Limiting continuous current	8 A
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	5 V / 2 mA / 50 mW
Pull-in time (typ.)	7 ms
Drop-out time (typ.)	3 ms
Electrical life (NO; resistive load; 23 °C)	100 x 10 <sup>3</sup> switching operations
Mechanical life	30 x 10 <sup>6</sup> switching operations

## 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 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	0.843 MJ
Weight	45.5 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 DNV
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### Basic relay

WAGO Basic Relay	788-181
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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
GTIN	4045454484804
Customs tariff number	85364900990

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
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**Approvals / Certificates**



**General approvals**      **Declarations of conformity and manufacturer's declarations**



Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungsstelle	TP TC 004/2011	EAC RU C-DE.AM02. B.00122/19

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

**Approvals for marine applications**

Approval	Standard	Certificate Name
DNV DNV Germany GmbH	DNV-CG-0339, Aug. 2021	TAA00001D1
PRS Polski Rejestr Statków	-	TE/2186/880590/18

**Downloads**

**Environmental Product Compliance**

**Compliance Search**

Environmental Product Compliance 788-616	<a href="#">↓</a>
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**Documentation**

**Bid Text**

Item	Date	Format	Size	Action
788-616	19.02.2019	xml	4.94 KB	<a href="#">↓</a>
788-616	25.01.2019	docx	16.64 KB	<a href="#">↓</a>

**Instruction Leaflet**

Document	Version	Date	Format	Size	Action
Sockets with Elementary Relay/ SSR	V 1.0.1	09.10.2020	pdf	2271.22 KB	<a href="#">↓</a>

**CAD/CAE-Data**

CAD data	
2D/3D Models 788-616	<a href="#">↓</a>

CAE data	
EPLAN Data Portal 788-616	<a href="#">↓</a>
WSCAD Universe 788-616	<a href="#">↓</a>
ZUKEN Portal 788-616	<a href="#">↓</a>

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Basic relay

##### 1.1.1.1 Basic relay



**Item No.: 788-181**  
 Basic relay; Nominal input voltage: 230 VAC; 2 changeover contacts; Limiting continuous current: 8 A; with gold contacts; 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 Filter module

##### 1.1.3.1 Suppressor module



**Item No.: 788-148**  
 Filter module; RC filter element; Nominal voltage: 230 VAC

#### 1.1.4 Indicators

1.1.4.1 Status indication



**Item No.: 788-125**

Accessories for relay modules; Operation status indicator: red

1.1.5 Jumper

1.1.5.1 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

1.1.6 Marking

1.1.6.1 Double marker carrier



**Item No.: 209-128**

Adaptor; gray

1.1.6.2 Group marker carrier



**Item No.: 249-105**

Group marker carrier; gray



**Item No.: 209-145**

Group marker carrier; white

1.1.6.3 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

### 1.1.6.4 Marking devices



**Item No.: 210-110**

Fiber-tip pen

### 1.1.6.5 Marking strip



**Item No.: 2009-110**

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

### 1.1.6.6 Protective marker cover



**Item No.: 209-184**

Protection cover; transparent

## 1.1.7 Tool

### 1.1.7.1 Operating tool

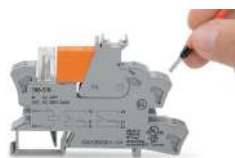


**Item No.: 210-720**

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.