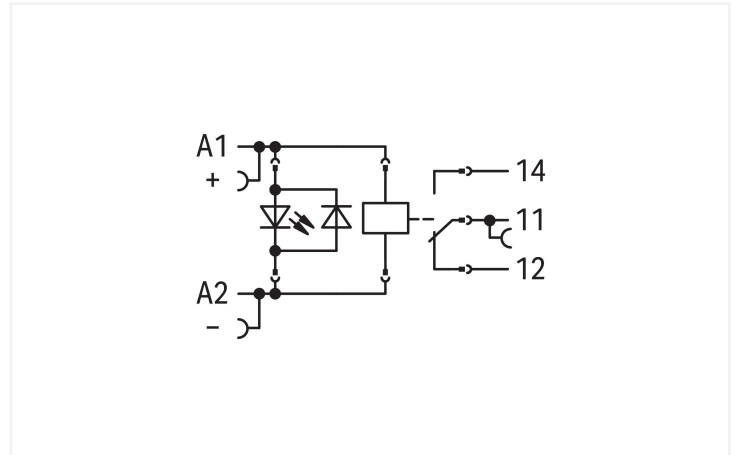
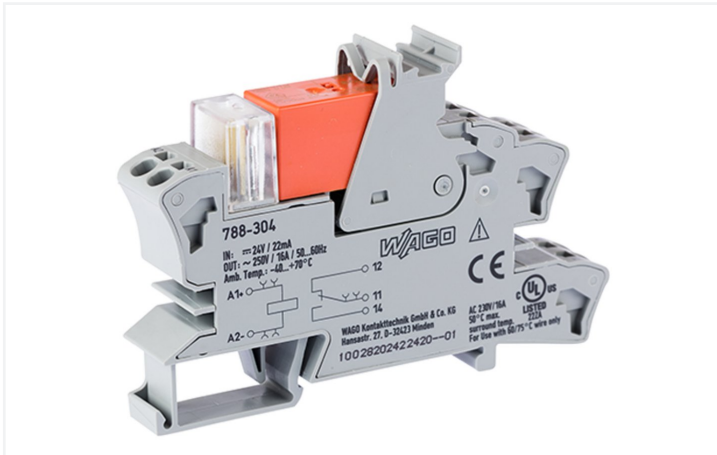


# Data Sheet | Item Number: 788-304

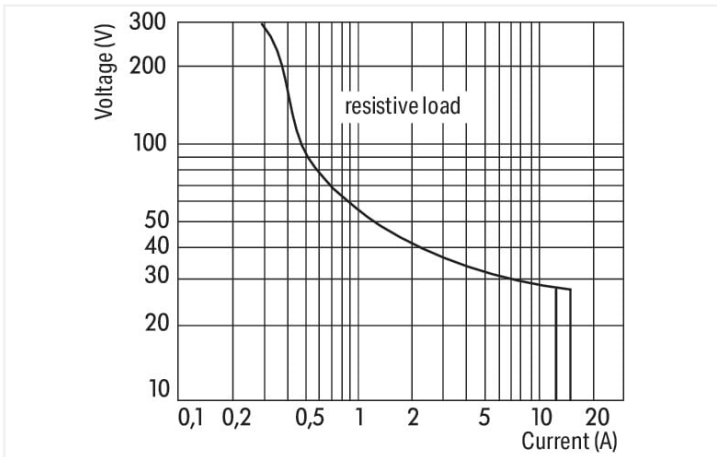
Relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 16 A; Red status indicator; Module width: 15 mm; 2,50 mm<sup>2</sup>; gray



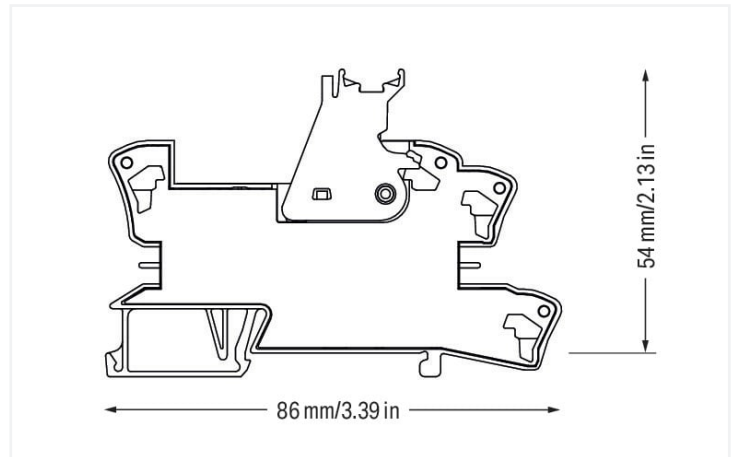
<https://www.wago.com/788-304>



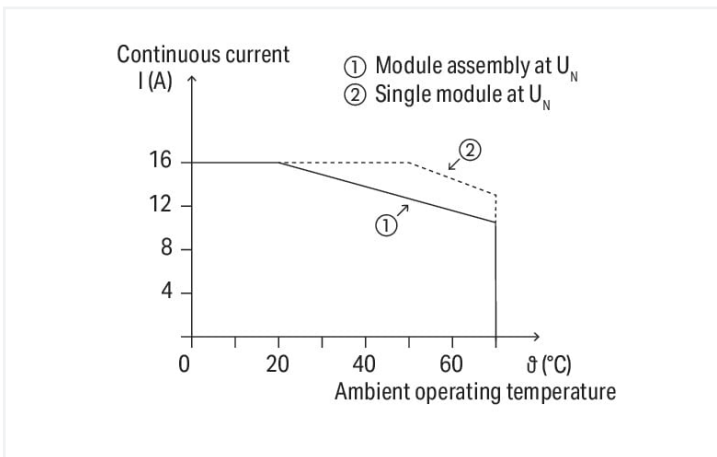
Color: ■ gray



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<br>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 24 V    |
| Input voltage range            | $\pm 10\%$ |
| Nominal input current at $U_N$ | 19 mA      |

### Load circuit

|  |  |
|--|--|
| Number of changeover/switchover contacts     | 1  |
| Contact material (relay)                     | AgNi 90/10                                     |
| Limiting continuous current                  | 16 A   |
| Inrush current (resistive) max.              | (AC) 30 A / 4 s                                |
| Switching Voltage, Max.                      | AC 250 V                                       |
| Switching power (resistive) max.             | AC 4000 VA; DC (see load limit curve)          |
| Switching capacity                           | AC-15: 6 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.)                         | 6 ms   |
| Bounce time (typ.)                           | 6 ms   |
| Electrical life (NO; resistive load; 23 °C)  | $30 \times 10^3$ 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 |
|------------------|---------|

## 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   |
| 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 |
|---------------|-------------|

### Material data

|                      |  |
|----------------------|--|
| Note (material data) | <a href="#">Information on material specifications can be found here</a> |
|----------------------|--|

|           |          |
|-----------|----------|
| Color     | gray     |
| Fire load | 0.927 MJ |
| Weight    | 45.9 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<br>EN 61810-1<br>EN 61373<br>UL 508 (max. 10 A) |
|--------------------------|--|

### Basic relay

|                  |         |
|------------------|---------|
| WAGO Basic Relay | 788-154 |
|------------------|---------|


### Commercial data

|                       |                          |
|-----------------------|--------------------------|
| Product Group         | 6 (INTERFACE ELECTRONIC) |
| eCl@ss 10.0           | 27-37-16-01              |
| eCl@ss 9.0            | 27-37-16-01              |
| ETIM 9.0              | EC001437                 |
| ETIM 8.0              | EC001437                 |
| PU (SPU)              | 20 (1) pcs               |
| Packaging type        | Box                      |
| Country of origin     | CN                       |
| GTIN                  | 4055143184113            |
| Customs tariff number | 85364900990              |

**Environmental Product Compliance**

|   |                                      |
|---|--------------------------------------|
| CAS-No.                                   | 7439-92-1                            |
| REACH Candidate List Substance            | Lead                                 |
| RoHS Compliance Status                    | Compliant, No Exemption              |
| SCIP notification number (Austria)        | 84ae7b9f-3fe5-4da9-9731-c89b39422f3e |
| SCIP notification number (Belgium)        | 162bfd49-de13-43b9-abc4-68173c689386 |
| SCIP notification number (Bulgaria)       | 2a4fbf75-e73d-443c-b5b9-dffc28501cd  |
| SCIP notification number (Czech Republic) | cd025afe-2a02-4a21-bc80-bcaeb91ff082 |
| SCIP notification number (Denmark)        | ac5d1b6f-9680-4651-98af-86c04d78ab67 |
| SCIP notification number (Finland)        | 85fa947a-6a38-4d85-90dc-4c12aecd5137 |
| SCIP notification number (France)         | 5cf9e1db-eef0-4269-b4a6-7376973f581e |
| SCIP notification number (Germany)        | cedcf22f-3718-4ebf-a376-4488406c01d6 |
| SCIP notification number (Hungary)        | f211f016-224b-4f18-9217-e87c0676401a |
| SCIP notification number (Italy)          | 203e48c6-de1b-4349-b952-1c69055eee16 |
| SCIP notification number (Netherlands)    | 382a1d8e-79e5-4426-9fcd-4c35748754e4 |
| SCIP notification number (Poland)         | 9a8d598b-7e0b-43ea-b5a3-09a5a851620a |
| SCIP notification number (Romania)        | 985e8d7f-acb8-4cf2-afc8-6b464f4db8e7 |
| SCIP notification number (Sweden)         | ca754066-af24-4b2e-9d81-e882de52b25c |

**Approvals / Certificates**

| General approvals   |  |  | Declarations of conformity and manufacturer's declarations |                 |                         |
|---|--|--|--|-----------------|-------------------------|
|  |  |  | <b>Approval</b>  | <b>Standard</b> | <b>Certificate Name</b> |
|   |  |  | UL   | UL 508          | E175199 Vol.1 Sec.6     |
| Underwriters Laboratories Inc. (ORDINARY LOCATIONS)                               |  |  | EU-Declaration of Conformity<br>WAGO GmbH & Co. KG         | -               | -                       |
|   |  |  | UK-Declaration of Conformity<br>WAGO GmbH & Co. KG         | -               | -                       |

**Downloads**

**Environmental Product Compliance**

|  |
|--|
| <b>Compliance Search</b>                                   |
| Environmental Product Compliance 788-304 <a href="#">↓</a> |

**Documentation**

| Bid Text                   |            |                  |                   | Instruction Leaflet                |                       |                   |                   |
|----------------------------|------------|------------------|-------------------|------------------------------------|-----------------------|-------------------|-------------------|
| 788-304                    | 25.01.2019 | docx<br>16.30 KB | <a href="#">↓</a> | Sockets with Elementary Relay/ SSR | V 1.0.1<br>09.10.2020 | pdf<br>2271.22 KB | <a href="#">↓</a> |
| 788-304                    | 19.02.2019 | xml<br>4.60 KB   | <a href="#">↓</a> |                                    |                       |                   |                   |
| ausschreiben.de<br>788-304 |            |                  | <a href="#">↓</a> |                                    |                       |                   |                   |

## CAD/CAE-Data

| CAD data             | CAE data                  |
|----------------------|---------------------------|
| 2D/3D Models 788-304 | EPLAN Data Portal 788-304 |
|                      | WSCAD Universe 788-304    |
|                      | ZUKEN Portal 788-304      |

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Basic relay

##### 1.1.1.1 Basic relay



**Item No.: 788-154**

Basic relay; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 16 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

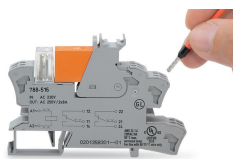


**Item No.: 210-720**

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

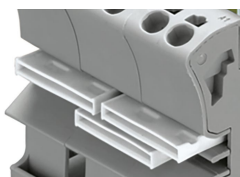
## Installation Notes

### Conductor termination



Conductor termination

### Commoning



Easy commoning using adjacent jumpers

## Marking



Marking using WMB Multi markers and group marker carriers.