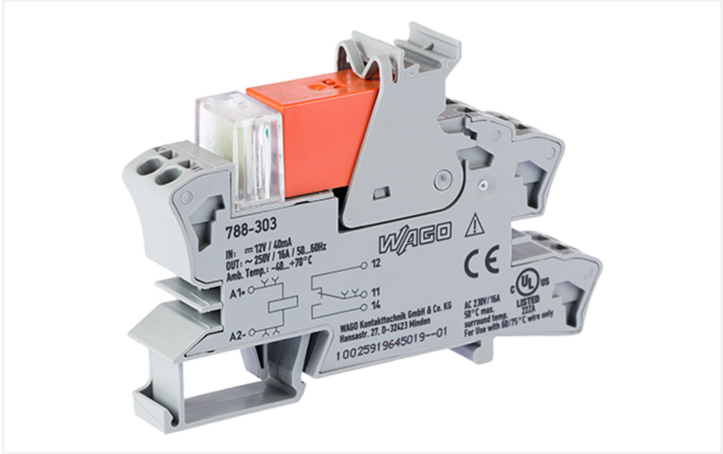


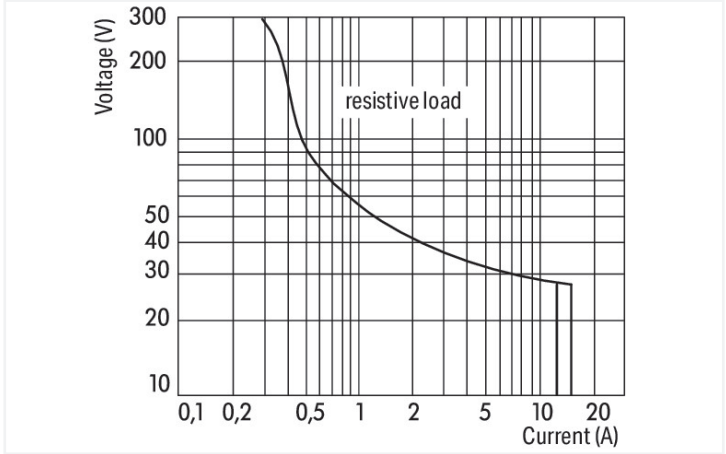
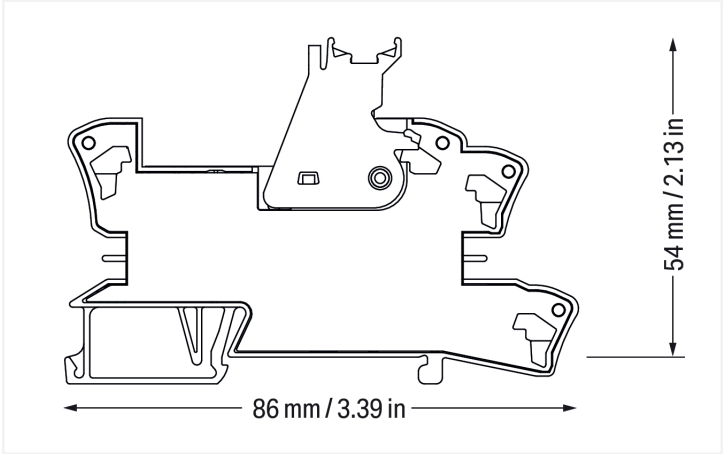
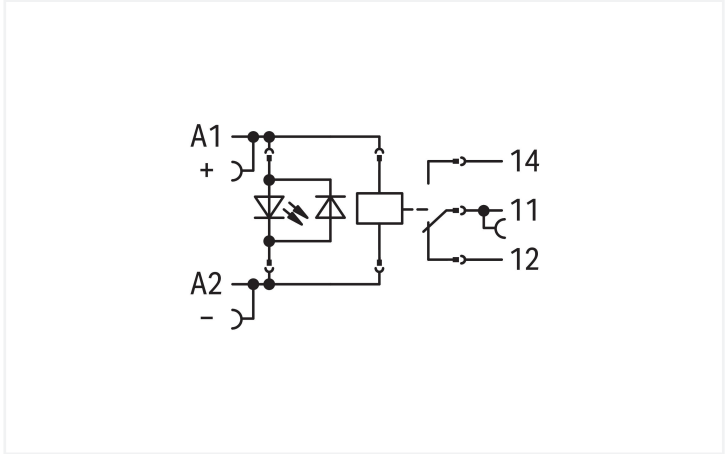
**Data Sheet | Item Number: 788-303**

Relay module; Nominal input voltage: 12 VDC; 1 changeover contact; Limiting continuous current: 16 A; Red status indicator; Module width: 15 mm; 2,50 mm²; gray

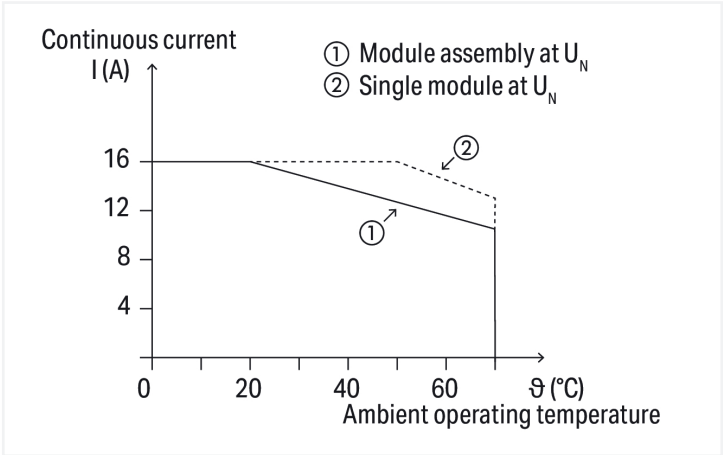
<https://www.wago.com/788-303>



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<br>To protect the relay coils and contacts, inductive loads must be dampened with an effective protection circuit. |

| Technical data                          |                                              |
|-----------------------------------------|----------------------------------------------|
| Control circuit                         | Load circuit                                 |
| Nominal input voltage U <sub>N</sub>    | 12 VDC                                       |
| Input voltage range                     | ±10 %                                        |
| Nominal input current at U <sub>N</sub> | 36 mA                                        |
|                                         | 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.                      |
|                                         | 250 VAC                                      |
|                                         | Switching power (resistive) max.             |
|                                         | AC 4000 VA; DC (see load limit curve)        |
|                                         | Switching capacity                           |
|                                         | AC-15: 6 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.)                         |
|                                         | 6 ms                                         |
|                                         | Bounce time (typ.)                           |
|                                         | 6 ms                                         |
|                                         | Electrical life (NO; resistive load; 23 °C)  |
|                                         | 30 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 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                                                                                                                                                           |
| 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 |

| Material data        |                                                                          |
|----------------------|--------------------------------------------------------------------------|
| Note (material data) | <a href="#">Information on material specifications can be found here</a> |
| Color                | gray                                                                     |
| Fire load            | 0.67 MJ                                                                  |
| Weight               | 45.9 g                                                                   |

| Environmental requirements                            |                                 |
|-------------------------------------------------------|---------------------------------|
| Ambient temperature (operation at U <sub>N</sub> )    | -40 ... +70 °C                  |
| Ambient temperature UL (operation at U <sub>N</sub> ) | -40 ... +50 °C                  |
| Ambient temperature (storage)                         | -40 ... +70 °C                  |
| Processing temperature                                | -25 ... +50 °C                  |
| Temperature range of connection cable                 | ≥ (T <sub>ambient</sub> + 20 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 | 788-150 |

| Commercial data       |                          |
|-----------------------|--------------------------|
| Product Group         | 6 (INTERFACE ELECTRONIC) |
| PU (SPU)              | 20 (1) pcs               |
| Packaging type        | Box                      |
| Country of origin     | CN                       |
| GTIN                  | 4055143184106            |
| 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 8.0               | EC001437             |
| ECCN                   | NO US CLASSIFICATION |



| Environmental Product Compliance          |                                      |
|-------------------------------------------|--------------------------------------|
| CAS-No.                                   | 7439-92-1                            |
| REACH Candidate List Substance            | Lead                                 |
| RoHS Compliance Status                    | Compliant,No Exemption               |
| SCIP notification number (Austria)        | 99c505cf-e077-4a9a-b16a-6140f44cd4eb |
| SCIP notification number (Belgium)        | 4266ea3e-dc9f-4b24-a0d8-2356e95cd7c4 |
| SCIP notification number (Bulgaria)       | 01656078-fa14-4c20-9a40-ee83bce8417f |
| SCIP notification number (Czech Republic) | 1974df66-5b4b-40ae-a482-4a13e32f1967 |
| SCIP notification number (Denmark)        | f73dee97-326f-4fe4-ac9f-8250a6ade0f5 |
| SCIP notification number (Finland)        | 3f4ffffd-3374-43d6-bf7c-d42fe41ae943 |
| SCIP notification number (France)         | b8eefc77-60a8-4d01-ac5c-6440b1ee322c |
| SCIP notification number (Germany)        | 60d161ed-2ec3-4f92-924f-a46821a54182 |
| SCIP notification number (Hungary)        | 54fc226a-363c-4637-ab6c-8f13a3415bfb |
| SCIP notification number (Italy)          | cec603a6-2176-4d70-82b9-d753bb4a120e |
| SCIP notification number (Netherlands)    | d3eeef65-85cf-4c0b-ae1-48d9b4ae5357  |
| SCIP notification number (Poland)         | b8916113-f6c2-42a7-98ca-9fafb0944c3f |
| SCIP notification number (Romania)        | 459ef119-0aa3-4da2-87fd-d618b48c7ad0 |
| SCIP notification number (Sweden)         | 7e16af04-4c25-4bdd-a443-ac12320213db |

| Approvals / Certificates                                                          |                |                                                                                                                                                                                                                                                                                                                                                                                  |          |          |                  |                                                      |   |   |                                                      |   |   |                                                      |   |   |
|-----------------------------------------------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|------------------|------------------------------------------------------|---|---|------------------------------------------------------|---|---|------------------------------------------------------|---|---|
| General approvals                                                                 |                | Declarations of conformity and manufacturer's declarations                                                                                                                                                                                                                                                                                                                       |          |          |                  |                                                      |   |   |                                                      |   |   |                                                      |   |   |
|  |                |                                                                                                                                                                                                                                                                                                                                                                                  |          |          |                  |                                                      |   |   |                                                      |   |   |                                                      |   |   |
| Approval                                                                          | Standard       | Certificate Name                                                                                                                                                                                                                                                                                                                                                                 |          |          |                  |                                                      |   |   |                                                      |   |   |                                                      |   |   |
| EAC<br>GZO Almaty Standart                                                        | TP TC 004/2011 | EAC CoC 03084                                                                                                                                                                                                                                                                                                                                                                    |          |          |                  |                                                      |   |   |                                                      |   |   |                                                      |   |   |
| UL<br>Underwriters Laboratories Inc. (ORDINARY LOCATIONS)                         | UL 508         | E175199 Vol.1 Sec.6                                                                                                                                                                                                                                                                                                                                                              |          |          |                  |                                                      |   |   |                                                      |   |   |                                                      |   |   |
|                                                                                   |                | <table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>EU-Declaration of Confor- mity<br/>WAGO GmbH &amp; Co. KG</td><td>-</td><td>-</td></tr><tr><td>UK-Declaration of Confor- mity<br/>WAGO GmbH &amp; Co. KG</td><td>-</td><td>-</td></tr><tr><td>UK-Declaration of Confor- mity<br/>WAGO GmbH &amp; Co. KG</td><td>-</td><td>-</td></tr></table> | Approval | Standard | Certificate Name | EU-Declaration of Confor- mity<br>WAGO GmbH & Co. KG | - | - | UK-Declaration of Confor- mity<br>WAGO GmbH & Co. KG | - | - | UK-Declaration of Confor- mity<br>WAGO GmbH & Co. KG | - | - |
| Approval                                                                          | Standard       | Certificate Name                                                                                                                                                                                                                                                                                                                                                                 |          |          |                  |                                                      |   |   |                                                      |   |   |                                                      |   |   |
| EU-Declaration of Confor- mity<br>WAGO GmbH & Co. KG                              | -              | -                                                                                                                                                                                                                                                                                                                                                                                |          |          |                  |                                                      |   |   |                                                      |   |   |                                                      |   |   |
| UK-Declaration of Confor- mity<br>WAGO GmbH & Co. KG                              | -              | -                                                                                                                                                                                                                                                                                                                                                                                |          |          |                  |                                                      |   |   |                                                      |   |   |                                                      |   |   |
| UK-Declaration of Confor- mity<br>WAGO GmbH & Co. KG                              | -              | -                                                                                                                                                                                                                                                                                                                                                                                |          |          |                  |                                                      |   |   |                                                      |   |   |                                                      |   |   |

| Downloads                                |                                                                                     |
|------------------------------------------|-------------------------------------------------------------------------------------|
| Environmental Product Compliance         |                                                                                     |
| Compliance Search                        |                                                                                     |
| Environmental Product Compliance 788-303 |  |

| Documentation |            |                  |                                                                                     |                                     |                                                                                       |
|---------------|------------|------------------|-------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------|
| Bid Text      |            |                  |                                                                                     | Instruction Leaflet                 |                                                                                       |
| 788-303       | 19.02.2019 | xml<br>4.60 KB   |  | Sockets with Elementa-ry Relay/ SSR | V 1.0.1<br>09.10.2020                                                                 |
| 788-303       | 25.01.2019 | docx<br>16.30 KB |  |                                     | pdf<br>2271.22 KB                                                                     |
|               |            |                  |                                                                                     |                                     |  |



| CAD/CAE-Data         |                           |
|----------------------|---------------------------|
| CAD data             | CAE data                  |
| 2D/3D Models 788-303 | EPLAN Data Portal 788-303 |
|                      | WSCAD Universe 788-303    |
|                      | ZUKEN Portal 788-303      |

| 1 Compatible Products    |
|--------------------------|
| 1.1 Optional Accessories |
| 1.1.1 Basic relay        |
| 1.1.1.1 Basic relay      |



[Item No.: 788-150](#)  
Basic relay; Nominal input voltage: 12 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 mm² / 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 mm² / 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 mm² / 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 mm² / 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 mm² / 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

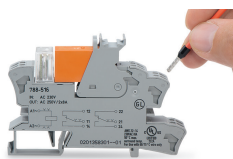


**Item No.: 210-720**

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

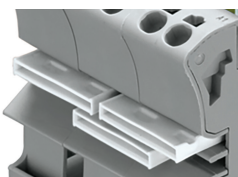
## Installation Notes

### Conductor termination



Conductor termination

## Commoning



Easy commoning using adjacent jumpers

## Marking



Marking using WMB Multi markers and  
group marker carriers.