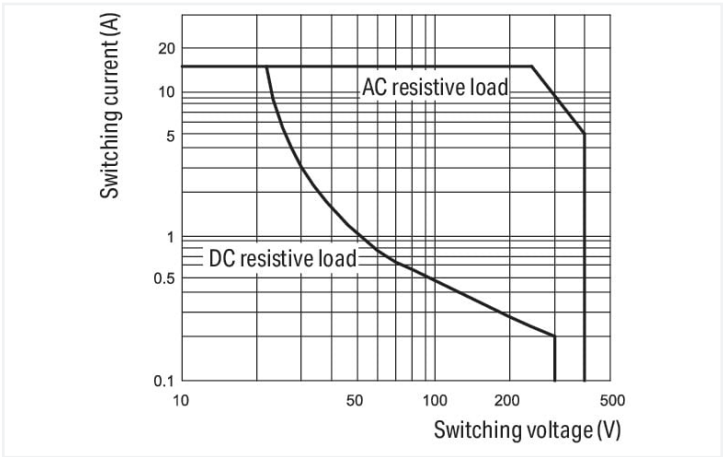
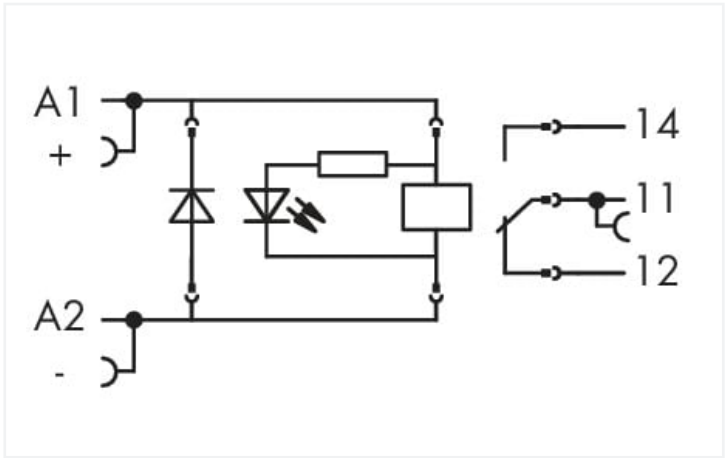
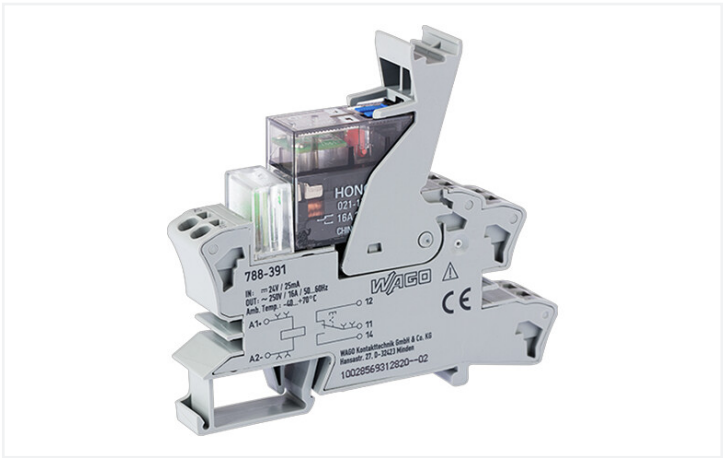


**Data Sheet | Item Number: 788-391**

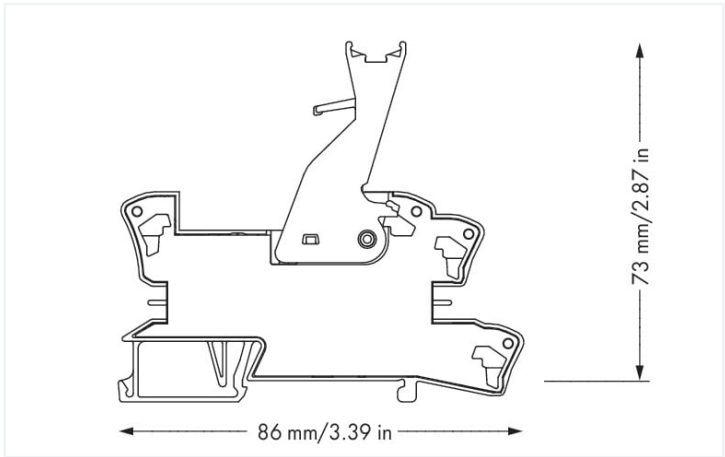
Relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 16 A; with manual operation; Railway; Red status indicator; Module width: 15 mm



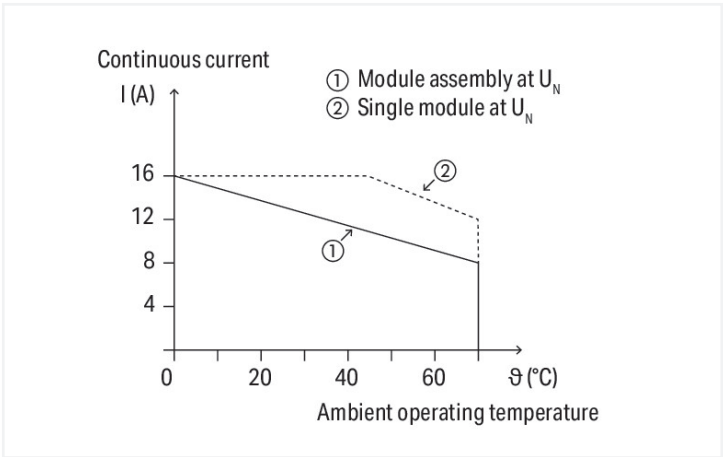
<https://www.wago.com/788-391>



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                         | Load circuit                                 |
| Nominal input voltage U <sub>N</sub>    | DC 24 V                                      |
| Input voltage range                     | -30 ... +25 %                                |
| Nominal input current at U <sub>N</sub> | 20 mA                                        |
|                                         | Number of changeover/switchover contacts     |
|                                         | 1                                            |
|                                         | Contact material (relay)                     |
|                                         | AgNi                                         |
|                                         | Limiting continuous current                  |
|                                         | 16 A                                         |
|                                         | Inrush current (resistive) max.              |
|                                         | (AC) 32 A / 0.02 s; (AC) 24 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: 3 A / AC 240 V; DC-13: 2 A / DC 24 V  |
|                                         | Recommended minimum load                     |
|                                         | 12 V / 10 mA                                 |
|                                         | Pull-in time (typ.)                          |
|                                         | 15 ms                                        |
|                                         | Drop-out time (typ.)                         |
|                                         | 8 ms                                         |
|                                         | Bounce time (typ.)                           |
|                                         | 6 ms                                         |
|                                         | Electrical life (NO; resistive load; 23 °C)  |
|                                         | 10 x 10 <sup>3</sup> switching operations    |
|                                         | Mechanical life                              |
|                                         | 5 x 10 <sup>6</sup> switching operations     |
|                                         | Switching frequency with/without load (max.) |
|                                         | 6 min <sup>-1</sup> / 300 min <sup>-1</sup>  |

| 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 | 73 mm / 2.874 inches |

| Mechanical data |             |
|-----------------|-------------|
| Mounting type   | DIN-35 rail |

| Material data |          |
|---------------|----------|
| Fire load     | 0.696 MJ |
| Weight        | 45 g     |

| Environmental requirements                            |                                 |
|-------------------------------------------------------|---------------------------------|
| Ambient temperature (operation at U <sub>N</sub> )    | -40 ... +70 °C                  |
| Ambient temperature UL (operation at U <sub>N</sub> ) | -40 ... +70 °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 |

| 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)              | 15 (1) pcs               |
| Packaging type        | Box                      |
| Country of origin     | DE                       |
| GTIN                  | 4050821128731            |
| Customs tariff number | 85364900990              |

| Environmental Product Compliance |                         |
|----------------------------------|-------------------------|
| RoHS Compliance Status           | Compliant, No Exemption |

Approvals / Certificates

| General approvals                           |                |                                 | Declarations of conformity and manufacturer's declarations |          |                  |
|---------------------------------------------|----------------|---------------------------------|------------------------------------------------------------|----------|------------------|
| Approval                                    | Standard       | Certificate Name                | Approval                                                   | Standard | Certificate Name |
| EAC<br>Brjansker Zertifizierungs-<br>stelle | TP TC 004/2011 | EAC RU C-DE.AM02.<br>B.00122/19 | EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 788-391

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Documentation

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 788-391

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EPLAN Data Portal 788-391

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WSCAD Universe 788-391

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ZUKEN Portal 788-391

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1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 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



1.1.2 Indicators

1.1.2.1 Status indication



**Item No.: 788-120**  
Accessories for relay modules; Operation status indicator: red; Nominal operating voltage: 24 VDC

1.1.3 Jumper

1.1.3.1 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

1.1.4 Marking

1.1.4.1 Double marker carrier



**Item No.: 209-128**  
Adaptor; gray

1.1.4.2 Group marker carrier



**Item No.: 249-105**  
Group marker carrier; gray



**Item No.: 209-145**  
Group marker carrier; white

1.1.4.3 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



1.1.4.4 Marking device



Item No.: 210-110  
Fiber-tip pen

1.1.4.5 Marking strip



Item No.: 2009-110  
Marking strips; for Smart Printer; on reel;  
not stretchable; plain; snap-on type; white

1.1.4.6 Protective marker cover



Item No.: 209-184  
Protection cover; transparent

1.1.5 Tool

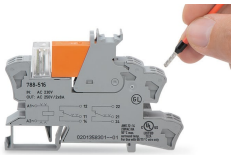
1.1.5.1 Operating tool



Item No.: 210-720  
Operating tool; Blade: 3.5 x 0.5 mm; with a  
partially insulated shaft; multicoloured

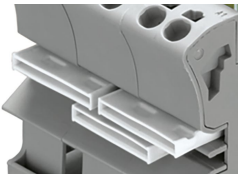
Installation Notes

Conductor termination



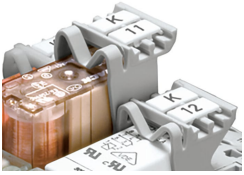
Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking



Marking using WMB Multi markers and group marker carriers.