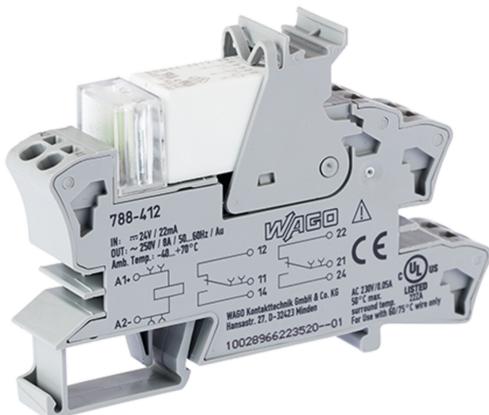
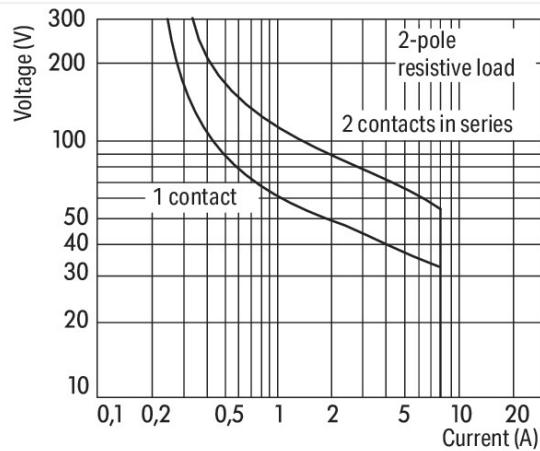
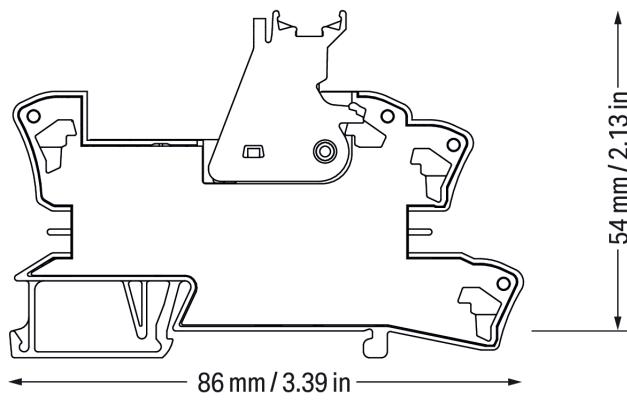
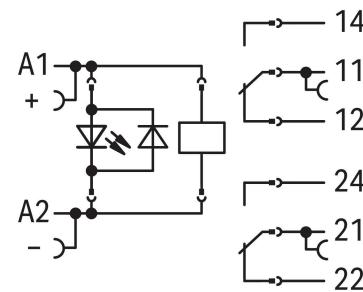


Relay module; Nominal input voltage: 24 VDC; 2 changeover contacts; Limiting continuous current: 8 A; with gold contacts; Red status indicator; Module width: 15 mm; 2,50 mm²; gray

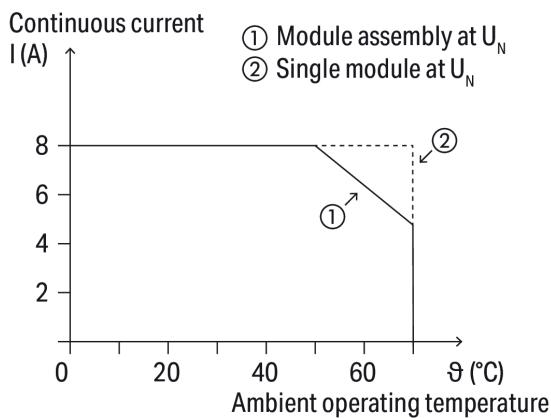
<https://www.wago.com/788-412>



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 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 damped with an effective protection circuit.

Technical data

Control circuit

Nominal input voltage U_N 24 VDC

Input voltage range $\pm 10\%$

Nominal input current at U_N 17 mA

Load circuit

Number of changeover/switchover contacts 2

Contact material (relay) AgNi + Au

Limiting continuous current 8 A

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 5 V / 2 mA / 50 mW

Pull-in time (typ.) 7 ms

Drop-out time (typ.) 3 ms

Bounce time (typ.) 6 ms

Electrical life (NO; resistive load; 23 °C) 100×10^3 switching operations

Mechanical life 30×10^6 switching operations

Switching frequency with/without load (max.) $10 \text{ min}^{-1} / 1200 \text{ min}^{-1}$

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

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 mm² / 22 ... 14 AWG

Fine-stranded conductor

0.34 ... 2.5 mm² / 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)	Information on material specifications can be found here
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Color	gray
Fire load	0.67 MJ
Weight	47.6 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	788-157
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Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
PU (SPU)	20 (1) pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454352165
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

RoHS Compliance Status

Compliant, No Exemption

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03084
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Vol.1 Sec.6

Declarations of conformity and manufacturer's declarations

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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 788-412



Documentation

Bid Text

788-412

19.02.2019

xml

4.94 KB



788-412

25.01.2019

docx

16.82 KB



Instruction Leaflet

Sockets with Elementary Relay/SSR

V 1.0.1

09.10.2020

pdf

2271.22 KB



CAD/CAE-Data

CAD data

2D/3D Models 788-412



CAE data

EPLAN Data Portal
788-412WSCAD Universe
788-412

ZUKEN Portal 788-412



1 Compatible Products

1.1 Optional Accessories

1.1.1 Basic relay

1.1.1.1 Basic relay



[Item No.: 788-157](#)

Basic relay; Nominal input voltage: 24 VDC; 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 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

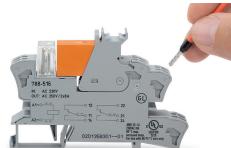


[Item No.: 210-720](#)

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.