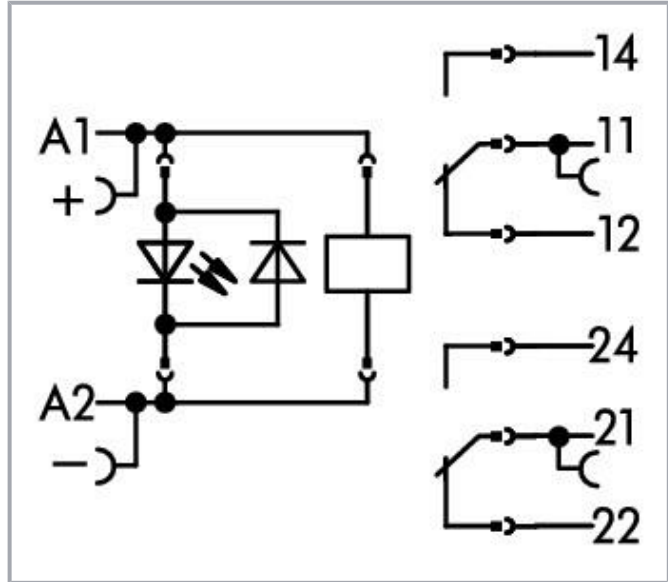
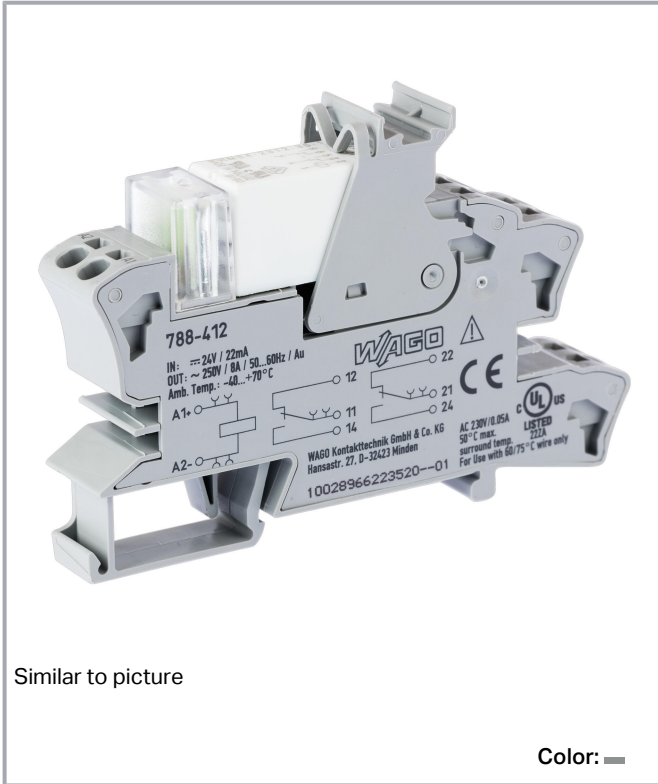


Data sheet | Item number: 788-412

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

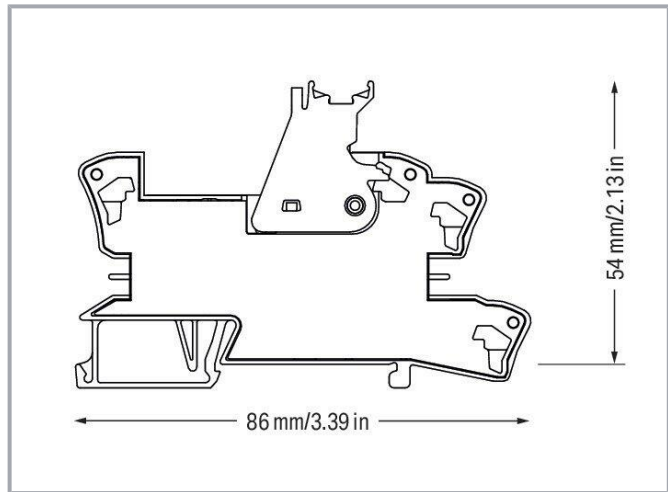
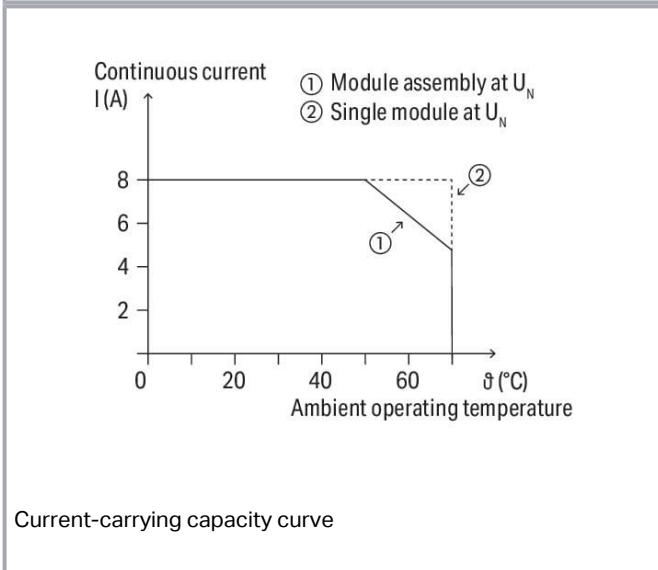


www.wago.com/788-412



Similar to picture

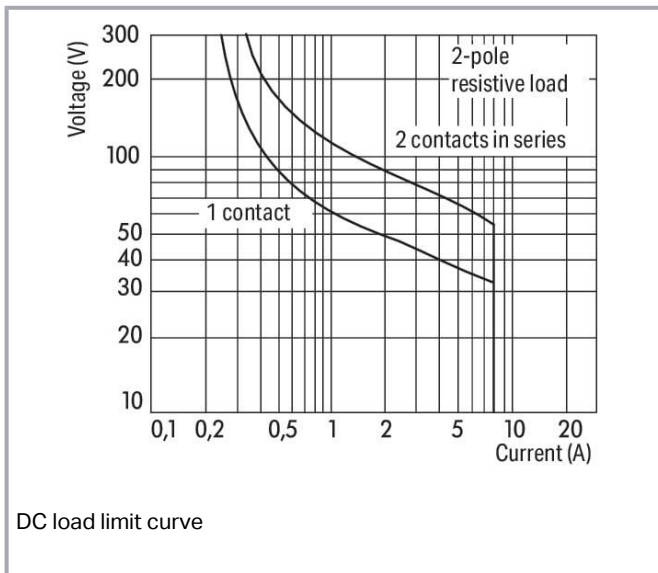
Color:



Subject to changes. Please also observe the further product documentation!

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Do you have any questions about our products?
 We are always happy to take your call at +49 (571) 887-44222.



Data

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	DC 24 V
Input voltage range	$\pm 10\%$
Nominal input current at U_N	17 mA

Subject to changes. Please also observe the further product documentation!



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
Bounce time (typ.)	6 ms
Electrical life (NO; resistive load; 23 °C)	100 x 10 ³ switching operations
Mechanical life	30 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	10 min ⁻¹ / 1200 min ⁻¹

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 ² / 22 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches

Subject to changes. Please also observe the further product documentation!



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	0.677 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)
eCl@ss 10.0	27-37-16-01
eCl@ss 9.0	27-37-16-01
ETIM 8.0	EC001437
ETIM 7.0	EC001437

Subject to changes. Please also observe the further product documentation!



PU (SPU)	20 (1) pcs
Packaging type	box
Country of origin	DE
GTIN	4045454352165
Customs tariff number	85364900990

Environmental Product Compliance


RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals


Logo	Approval	Additional Approval Text	Certificate name
	EAC Brjansker Zertifizierungsstelle	TP TC 004/2011	EAC RU C-DE.AM02.B.00122/19
	UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Vol.1 Sec. 6

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Optional accessories

Indicators

Status indication	
	<p>Item no.: 788-120</p> <p>Accessories for relay modules; Operation status indicator: red; Nominal operating voltage: 24 VDC</p> <p>www.wago.com/788-120</p>

Marking accessories

Marking strip	
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Subject to changes. Please also observe the further product documentation!



Item no.: 209-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

www.wago.com/209-110

Double marker carrier



Item no.: 209-128
Adaptor; gray

www.wago.com/209-128

Marking devices



Item no.: 210-110
Fiber-tip pen

www.wago.com/210-110

Protective marker cover



Item no.: 209-184
Protection cover; transparent

www.wago.com/209-184

Marker



Item no.: 209-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/209-115



Item no.: 209-183
Marker; white

www.wago.com/209-183



Item no.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white

www.wago.com/793-501



Item no.: 793-502
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-502



Item no.: 793-503
WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-503



Item no.: 793-504
WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-504



Item no.: 793-505
WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-505

Group marker carrier



Item no.: 209-145
Group marker carrier; white

www.wago.com/209-145








Item no.: 249-105
Group marker carrier; gray

www.wago.com/249-105

Subject to changes. Please also observe the further product documentation!


Ferrule

Ferrule		
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	www.wago.com/216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-242
	Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-243
	Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-244
	Item no.: 216-542 Twin ferrule; Sleeve for 2 x 1 mm ² / AWG 2 x 18; red, insulated; 12 mm long; red	www.wago.com/216-542


Basic Relay

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	www.wago.com/788-157

Tool

Operating tool		
	Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured	www.wago.com/210-720

Jumpers

Jumper		
	Item no.: 788-116 Jumper; for jumper slot; 6-way; insulated; light gray	www.wago.com/788-116
	Item no.: 788-117 Jumper; for jumper slot; 8-way; insulated; light gray	www.wago.com/788-117
	Item no.: 788-114 Jumper; for jumper slot; 3-way; insulated; light gray	www.wago.com/788-114
	Item no.: 788-113 Jumper; for jumper slot; 2-way; insulated; light gray	www.wago.com/788-113

Subject to changes. Please also observe the further product documentation!



Item no.: 788-115
 Jumper; for jumper slot; 4-way; insulated; light gray

www.wago.com/788-115



Item no.: 859-402
 Jumper; for jumper slot; 2-way; insulated; light gray

www.wago.com/859-402



Item no.: 788-118
 Jumper; for jumper slot; 2-way; from 1 to 3; insulated; light gray

www.wago.com/788-118

Downloads Documentation

Bid Text

788-412 X81 - Datei	2019 Feb 19	xml 5.1 kB	Download
788-412 docx - Datei	2019 Jan 25	docx 17.2 kB	Download

Instruction Leaflet

Sockets with Elementary Relay/ SSR	V 1.0.1 2020 Oct 9	pdf 2.3 MB	Download
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Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 Aug 18	pdf 2.2 MB	Download
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CAD/CAE-Data

CAE data

EPLAN Data Portal 788-412	URL	Download
ZUKEN Portal 788-412	URL	Download
WSCAD Universe 788-412	URL	Download

CAD data

2D/3D Models 788-412	URL	Download
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Subject to changes. Please also observe the further product documentation!

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 788-412

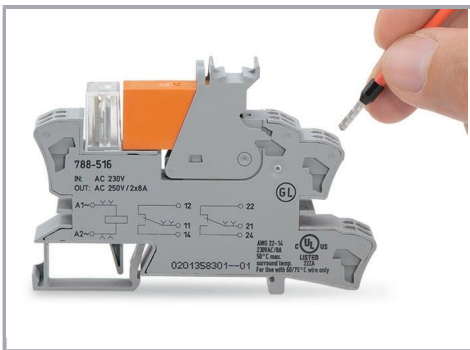
[URL](#)

[Download](#)

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

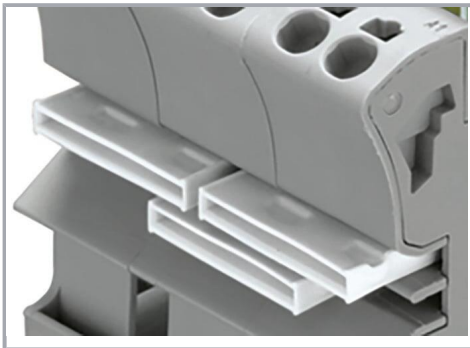
Installation Notes

Conductor termination



Conductor termination

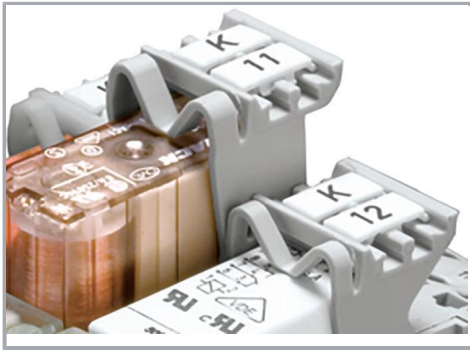
Commoning



Easy commoning using adjacent jumpers

Marking

Subject to changes. Please also observe the further product documentation!



Marking using WMB Multi markers and group marker carriers.

Subject to changes. Please also observe the further product documentation!