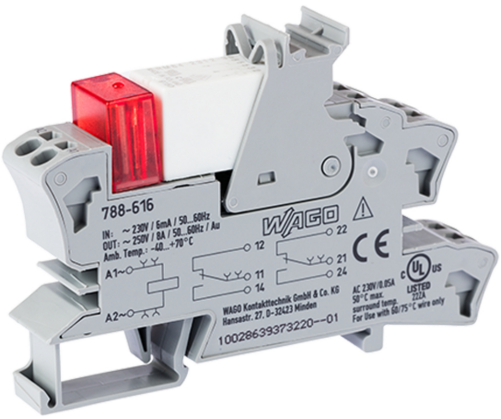
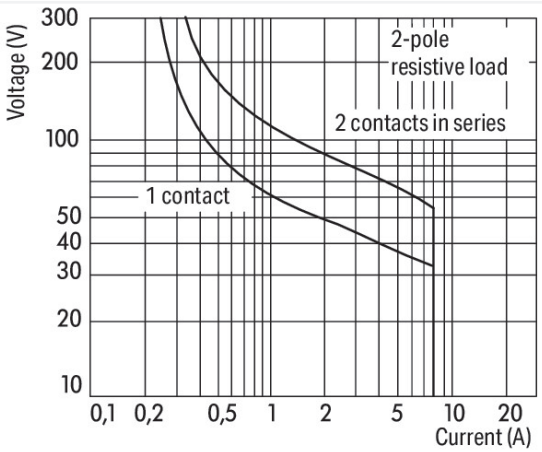
Data Sheet | Item Number: 788-616

Relay module; Nominal input voltage: 230 VAC; 2 changeover contacts; Limiting continuous current: 8 A; with gold contacts; Red status indicator; Module width: 15 mm; 2,50 mm²; gray

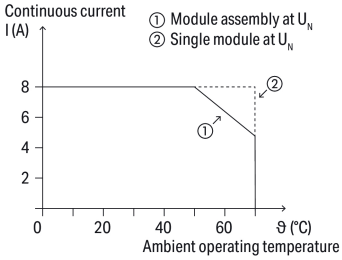
https://www.wago.com/788-616



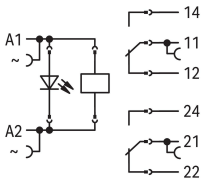
Color: gray

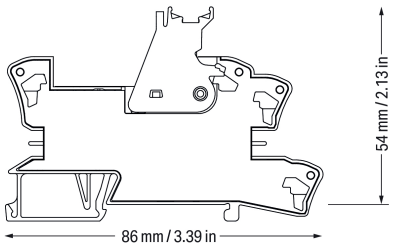


DC load limit curve



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 dampened with an effective protection circuit.

Technical data

Control circuit

Nominal input voltage U_N	230 VAC
Input voltage range	±10 %
Nominal input current at U_N	5 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)
Utilization category	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
Electrical life (NO; resistive load; 23 °C)	100 x 10^3 switching operations
Mechanical life	30 x 10^6 switching operations

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

Continued on next page

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)	Information on material specifications can be found here
Color	gray
Fire load	0.772 MJ
Weight	45.5 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	≥ ($T_{ambient}$ + 20 K)

Standards and Specifications

Standards/specifications	EN 61010-2-201 EN 61810-1 EN 61373 UL 508 DNV

Basic relay

WAGO Basic Relay	788-181

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
PU (SPU)	20 (1) pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454484804
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 10.0	EC001437
ECCN	NO US CLASSIFICATION

Continued on next page

Environmental Product Compliance

CAS-No.	7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Lead
RoHS Compliance Status	Compliant,No Exemption
SCIP notification number (Austria)	bfc78d36-341b-4994-8bed-6d06407fb230
SCIP notification number (Belgium)	88178c2e-c698-4af1-90fb-63cc9fe3f887
SCIP notification number (Bulgaria)	ad587133-d792-4fba-aaa0-bd131c5590c4
SCIP notification number (Czech Republic)	5a63a325-14b9-4a2b-838d-a21bde620399
SCIP notification number (Denmark)	1f2dfa1f-e9fd-4cab-a5bd-5e7a4e0c98f8
SCIP notification number (Finland)	98a7faef-09e0-4019-93fb-1be5cee850f7
SCIP notification number (France)	83fdbe64-8ff7-4c68-93ac-4c2e1506072d
SCIP notification number (Germany)	c0cdad25-4481-48fa-8907-42d8151e903d
SCIP notification number (Hungary)	d7fd6b1d-b3a1-4a00-9feb-3ffe54adb73c
SCIP notification number (Italy)	4c6bc921-2d10-4107-bdb5-b820ac523822
SCIP notification number (Netherlands)	3e5988b1-bc33-40f6-9832-2b78347052c7
SCIP notification number (Poland)	a7a12ae5-d9d0-495b-907b-e3ab130a3a5b
SCIP notification number (Romania)	45902eec-11c3-4ba9-bb29-bad7bcb8a8e8
SCIP notification number (Sweden)	d77c0d90-a2c6-4f7d-9afd-df5943db75be

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	-	-
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Approval	Standard	Certificate Name
DNV DNV Germany GmbH	DNV-CG-0339,Aug.2021	TAA00001D1

Continued on next page

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 788-616

Documentation

Bid Text

788-616	19.02.2019	xml 4.94 KB
788-616	25.01.2019	docx 16.64 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 788-616

CAE data

EPLAN Data Portal 788-616

WSCAD Universe 788-616

ZUKEN Portal 788-616

1 Compatible Products

1.1 Optional Accessories

1.1.1 Basic relay

1.1.1.1 Basic relay



Item No.: 788-181
Basic relay; Nominal input voltage: 230 VAC; 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

Continued on next page

1.1.3 Filter module

1.1.3.1 Suppressor module



Item No.: 788-148
Filter module; RC filter element; Nominal voltage: 230 VAC

1.1.4 Indicators

1.1.4.1 Status indication



Item No.: 788-125
Accessories for relay modules; Operation status indicator: red

1.1.5 Jumper

1.1.5.1 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

1.1.6 Marking

1.1.6.1 Double marker carrier



Item No.: 209-128
Adaptor; gray

1.1.6.2 Group marker carrier



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



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

 Continued on next page

1.1.6.3 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

1.1.6.4 Marking device



Item No.: 210-110
Fiber-tip pen

1.1.6.5 Marking strip



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

1.1.6.6 Protective marker cover

Item No.: 209-184
Protection cover; transparent

1.1.7 Tool

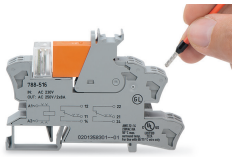
1.1.7.1 Operating tool



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

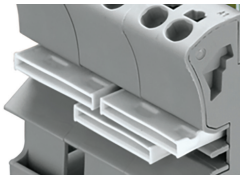
Installation Notes

Conductor termination



Conductor termination

Commoning



Easy commoning using adjacent jumpers

Marking



Marking using WMB Multi markers and group marker carriers.