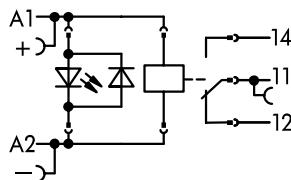
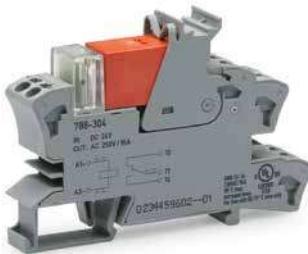
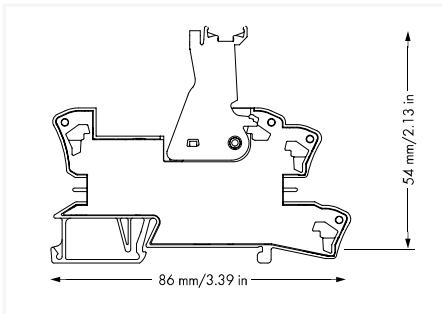


Relay module; 1 changeover contact; Limiting continuous current: 16 A; Red status indicator; Module width: 15 mm 788 Series

1



U_N	I_N	Item No.	PU
12 VDC	36 mA	788-303	20
24 VDC	19 mA	788-304	20
48 VDC	11 mA	788-305	20
60 VDC	115 mA	788-306	20
110 VDC	6 mA	788-307	20

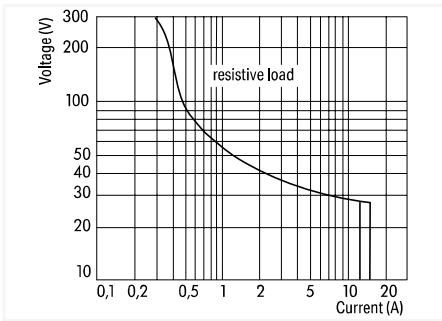


Safety information:

- 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.

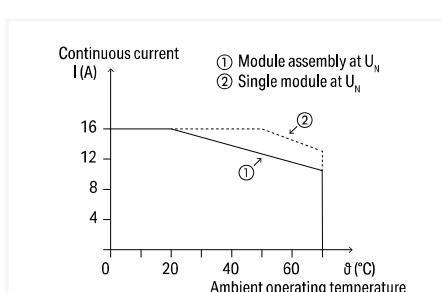
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



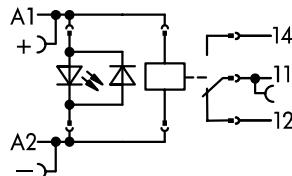
DC Load Limit Curve

Control circuit	
Input voltage range	±10 %
Load circuit	
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 ³ switching operations
Mechanical life	30 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 1200 min ⁻¹
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 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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 (max. 10 A)

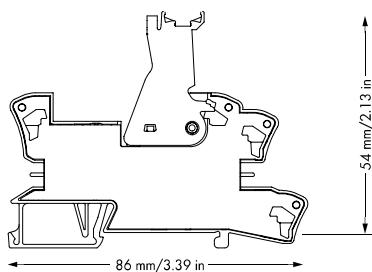


Current-Carrying Capacity Curve

Relay module; 1 changeover contact; Limiting continuous current: 16 A; with gold contacts; Red status indicator; Module width: 15 mm 788 Series



U_N	I_N	Item No.	PU
24 VDC	19 mA	788-404	20

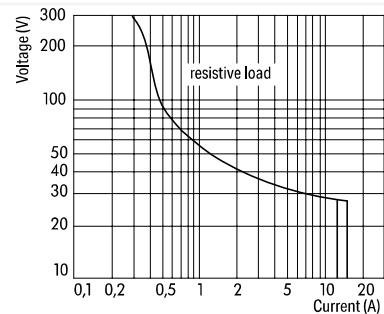


Safety information:

- 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.

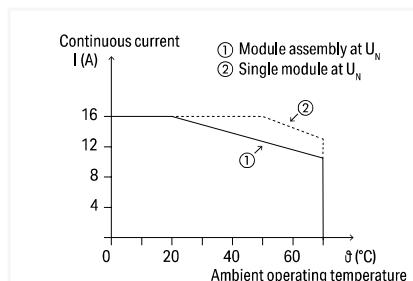
Note:

- 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 damped with an effective protection circuit.



DC Load Limit Curve

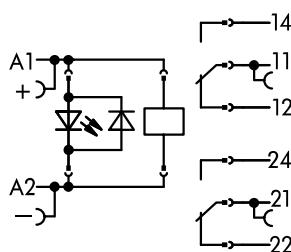
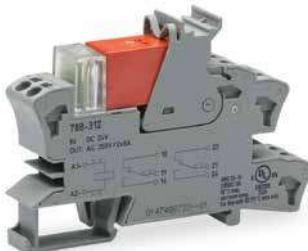
Control circuit	
Input voltage range	±10 %
Load circuit	
Number of changeover/switchover contacts	1
Contact material (relay)	AgNi + Au
Limiting continuous current	16 A
Switching voltage (max.)	250 VAC
Switching power (resistive) max.	AC 4000 VA; DC (see load limit curve)
Switching capacity	AC-15: 6 A / 250 VAC; DC-13: 2 A / 24 VDC
Recommended minimum load	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)	70 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
Safety and protection	
Rated voltage	250 V
Rated surge voltage	4 kV
Pollution degree	3
Dielectric strength (control/load circuit) (AC, 1 min)	5 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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



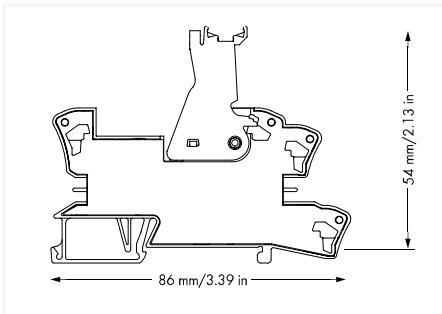
Current-Carrying Capacity Curve

Relay module; 2 changeover contacts; Limiting continuous current: 8 A; Red status indicator; Module width: 15 mm 788 Series

1



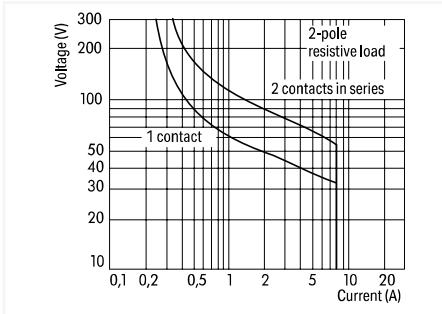
U_N	I_N	Item No.	PU
12 VDC	36 mA	788-311	20
24 VDC	19 mA	788-312	20
48 VDC	11 mA	788-313	20
60 VDC	8 mA	788-314	20
110 VDC	6 mA	788-315	20

**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.

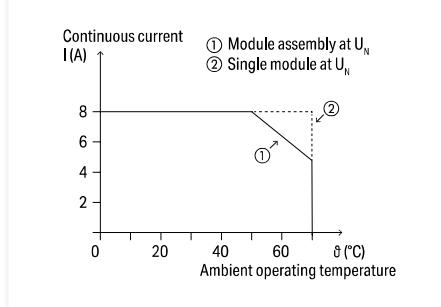
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



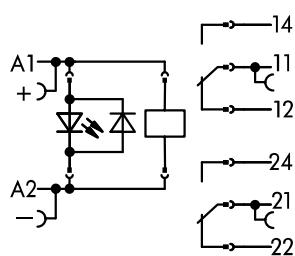
DC Load Limit Curve

Control circuit	
Input voltage range	±10 %
Load circuit	
Number of changeover/switchover contacts	2
Contact material (relay)	AgNi 90/10
Limiting continuous current	8 A
Inrush current (resistive) max.	(AC) 15 A / 4 s
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	12 V / 10 mA
Pull-in time (typ.)	8 ms
Drop-out time (typ.)	13 ms
Bounce time (typ.)	10 ms
Electrical life (NO; resistive load; 23 °C)	10 x 10 ³ switching operations
Mechanical life	30 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 1200 min ⁻¹
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 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
Dielectric strength (load/load circuit) (AC, 1 min)	2.5 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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

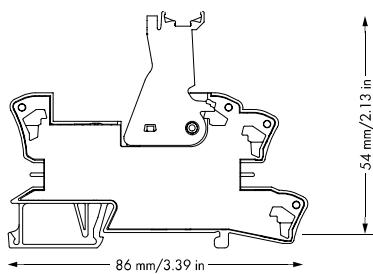


Current-Carrying Capacity Curve

Relay module; 2 changeover contacts; Limiting continuous current: 8 A; with gold contacts; Red status indicator; Module width: 15 mm 788 Series



U_N	I_N	Item No.	PU
24 VDC	17 mA	788-412	20

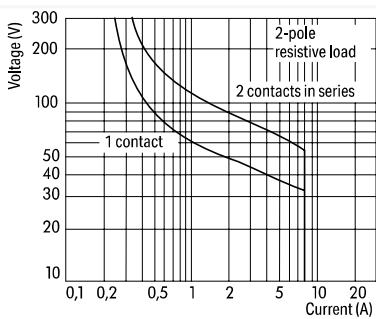


Safety information:

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.

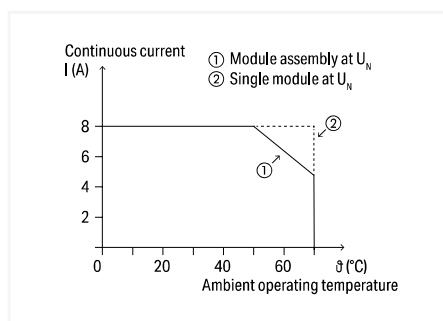
Note:

- 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 damped with an effective protection circuit.



DC Load Limit Curve

Control circuit	
Input voltage range	$\pm 10\%$
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 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
Safety and protection	
Rated voltage	250 V
Rated surge voltage	4 kV
Pollution degree	3
Dielectric strength (control/load circuit) (AC, 1 min)	5 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
Dielectric strength (load/load circuit) (AC, 1 min)	2.5 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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

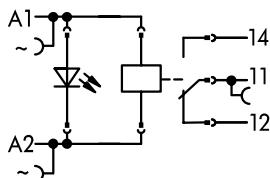
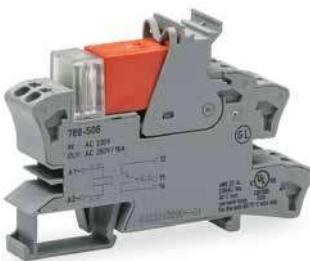


Current-Carrying Capacity Curve

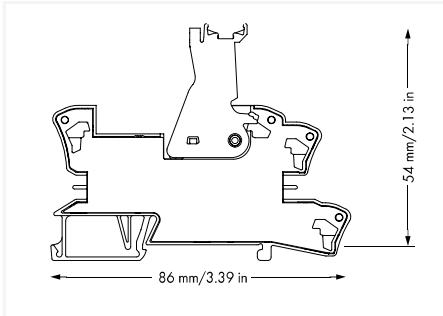
Relay module; 1 changeover contact; Limiting continuous current: 16 A; Red status indicator; Module width: 15 mm

788 Series

1



U_N	I_N	Item No.	PU
24 VAC	34 mA	788-506	20
115 VAC	8 mA	788-507	20
230 VAC	4 mA	788-508	20

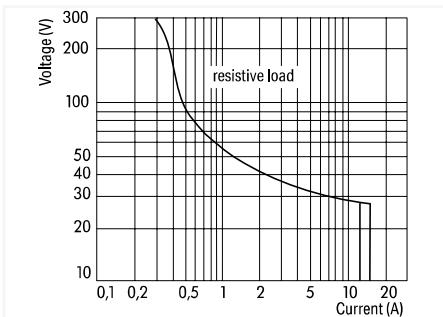


Safety information:

- 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.

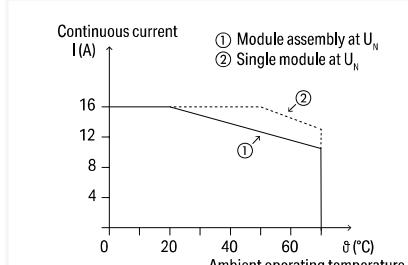
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



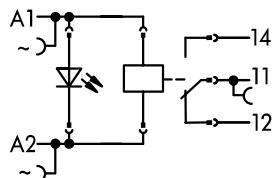
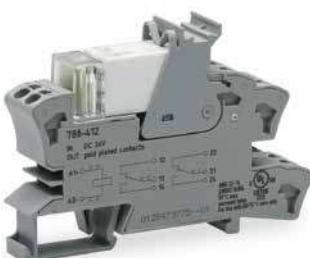
DC Load Limit Curve

Control circuit	
Input voltage range	±10 %
Load circuit	
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.)	10 ms
Drop-out time (typ.)	35 ms
Bounce time (typ.)	6 ms
Electrical life (NO; resistive load; 23 °C)	30 x 10 ³ switching operations
Mechanical life	5 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 600 min ⁻¹
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 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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

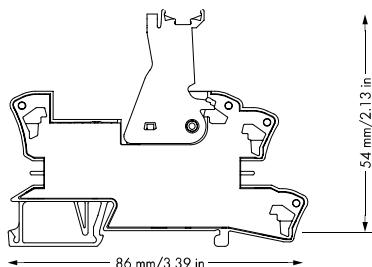


Current-Carrying Capacity Curve

Relay module; 1 changeover contact; Limiting continuous current: 16 A; with gold contacts; Red status indicator; Module width: 15 mm 788 Series



U_N	I_N	Item No.	PU
115 VAC	9 mA	788-607	20
230 VAC	5 mA	788-608	20

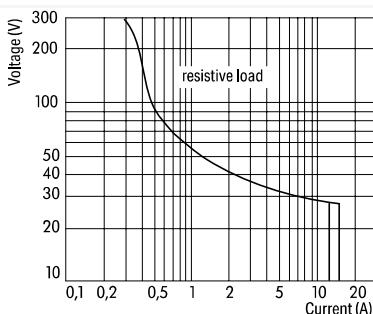


Safety information:

- 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.

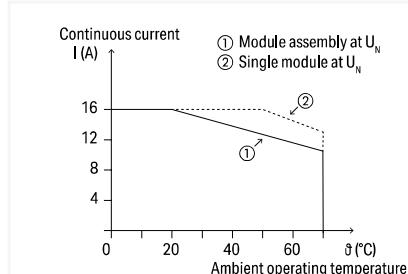
Note:

- 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 damped with an effective protection circuit.



DC Load Limit Curve

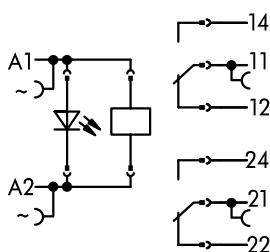
Control circuit	
Input voltage range	±10 %
Load circuit	
Number of changeover/switchover contacts	1
Contact material (relay)	AgNi + Au
Limiting continuous current	16 A
Switching voltage (max.)	250 VAC
Switching power (resistive) max.	AC 4000 VA; DC (see load limit curve)
Switching capacity	AC-15: 6 A / 250 VAC; DC-13: 2 A / 24 VDC
Recommended minimum load	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)	70 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
Safety and protection	
Rated voltage	250 V
Rated surge voltage	4 kV
Pollution degree	3
Dielectric strength (control/load circuit) (AC, 1 min)	5 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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



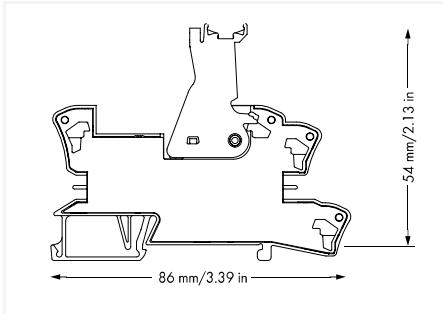
Current-Carrying Capacity Curve

Relay module; 2 changeover contacts; Limiting continuous current: 8 A; Red status indicator; Module width: 15 mm 788 Series

1



U_N	I_N	Item No.	PU
24 VAC	34 mA	788-512	20
115 VAC	8 mA	788-515	20
230 VAC	4 mA	788-516	20

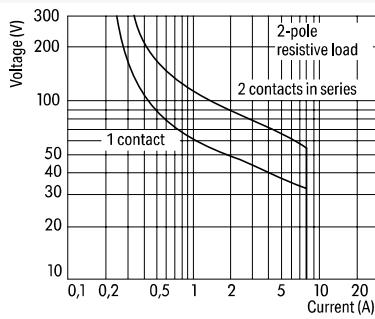


Safety information.

- 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.

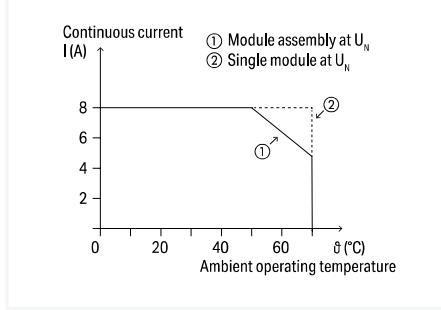
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



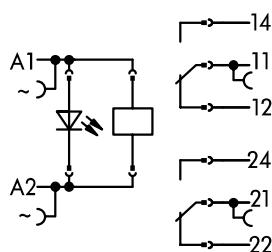
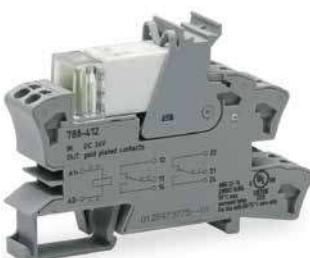
DC Load Limit Curve

Control circuit	
Input voltage range	±10 %
Load circuit	
Number of changeover/switchover contacts	2
Contact material (relay)	AgNi 90/10
Limiting continuous current	8 A
Inrush current (resistive) max.	(AC) 15 A / 4 s
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	12 V / 10 mA
Pull-in time (typ.)	10 ms
Drop-out time (typ.)	35 ms
Bounce time (typ.)	10 ms
Electrical life (NO; resistive load; 23 °C)	10 x 10 ³ switching operations
Mechanical life	30 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 1200 min ⁻¹
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 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
Dielectric strength (load/load circuit) (AC, 1 min)	2.5 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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

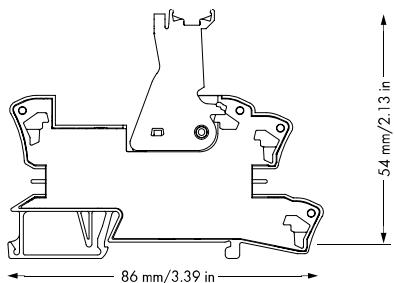


Current-Carrying Capacity Curve

Relay module; 2 changeover contacts; Limiting continuous current: 8 A; with gold contacts; Red status indicator; Module width: 15 mm 788 Series



U_N	I_N	Item No.	PU
115 VAC	9 mA	788-615	20
230 VAC	5 mA	788-616	20

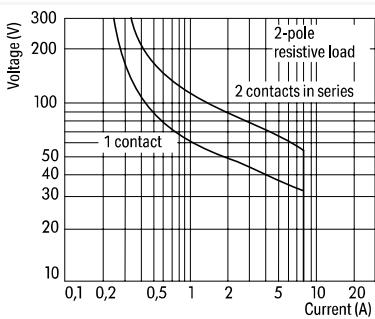


Safety information:

- 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 damped with an effective protection circuit.



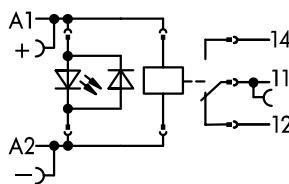
DC Load Limit Curve

Control circuit	
Input voltage range	$\pm 10\%$
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 min ⁻¹ / 1200 min ⁻¹
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 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
Dielectric strength (load/load circuit) (AC, 1 min)	2.5 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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; DNV

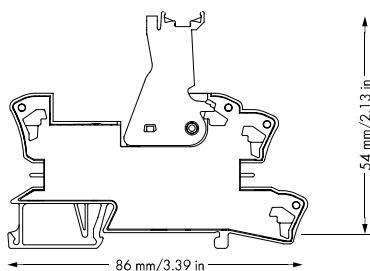
Current-Carrying Capacity Curve

Relay module; 1 changeover contact; Limiting continuous current: 16 A; for lamp loads; Red status indicator; Module width: 15 mm 788 Series

1



U_N	I_N	Item No.	PU
12 VDC	35 mA	788-353	20
24 VDC	19 mA	788-354	20

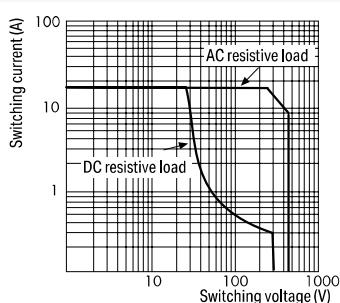


Safety information:

- 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.

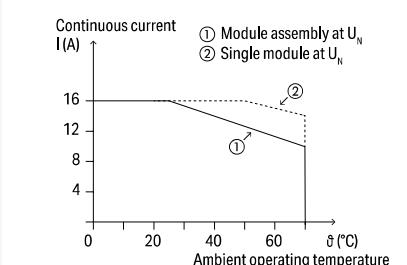
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



Lastgrenzkurve

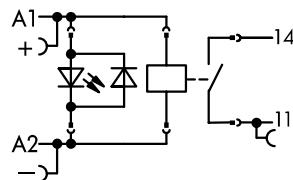
Control circuit	
Input voltage range	-15 ... +20 %
Load circuit	
Number of changeover/switchover contacts	1
Contact material (relay)	AgSnO ₂
Limiting continuous current	16 A
Inrush current (resistive) max.	(AC) 120 A / 0.05 s
Switching voltage (max.)	250 VAC
Switching power (resistive) max.	AC 4000 VA; DC (see load limit curve)
Recommended minimum load	5 V / 100 mA
Pull-in time (typ.)	15 ms
Drop-out time (typ.)	5 ms
Electrical life (NO; resistive load; 23 °C)	100 x 10 ³ switching operations
Mechanical life	10 x 10 ⁶ switching operations
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 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
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
Physical data/Mechanical data	
Width	15 mm / 0.591 inches
Height	86 mm / 3.386 inches
Mounting type	DIN-35 rail
Environmental requirements	
Ambient temperature (operation at U_N)	-40 ... +70 °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 (max. 10 A)



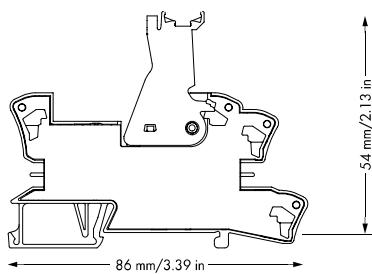
Current-Carrying Capacity Curve

Relay module; 1 make contact; Limiting continuous current: 16 A; for lamp loads; Red status indicator; Module width: 15 mm 788 Series

1



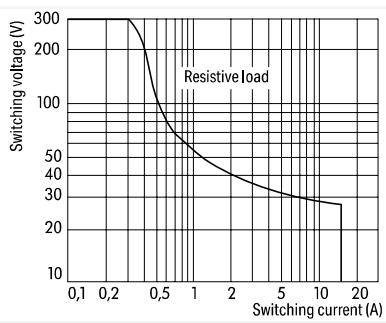
U_N	I_N	Item No.	PU
24 VDC	19 mA	788-356	20

**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.

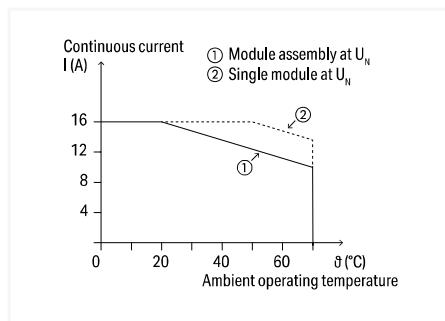
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



DC Load Limit Curve

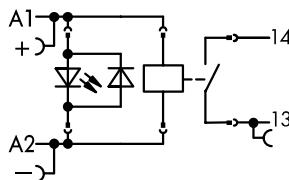
Control circuit	
Input voltage range	-15 ... +20 %
Load circuit	
Number of make/switch-on contacts	1
Contact material (relay)	AgSnO ₂
Limiting continuous current	16 A
Inrush current (resistive) max.	(AC) 80 A / 0.02 s; (AC) 30 A / 4 s
Switching voltage (max.)	250 VAC
Switching power (resistive) max.	AC 4000 VA; DC (see load limit curve)
Recommended minimum load	12 V / 100 mA
Pull-in time (typ.)	9 ms
Drop-out time (typ.)	6 ms
Bounce time (typ.)	3 ms
Electrical life (NO; resistive load; 23 °C)	50 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 surge voltage	4 kV
Pollution degree	3
Dielectric strength (control/load circuit) (AC, 1 min)	5 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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 (max. 10 A)



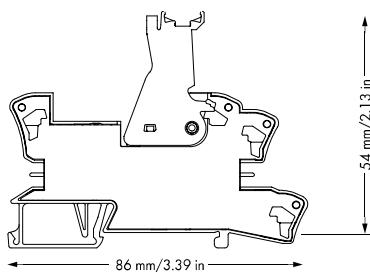
Current-Carrying Capacity Curve

Relay module; 1 make contact; Limiting continuous current: 16 A; Red status indicator; Module width: 15 mm 788 Series

1



U_N	I_N	Item No.	PU
24 VDC	17 mA	788-357	20

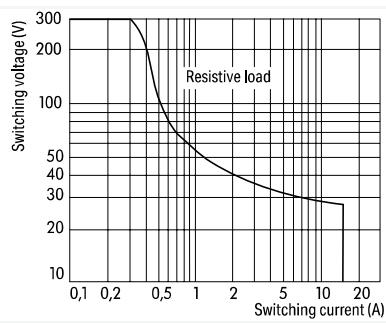


Safety information:

- 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.

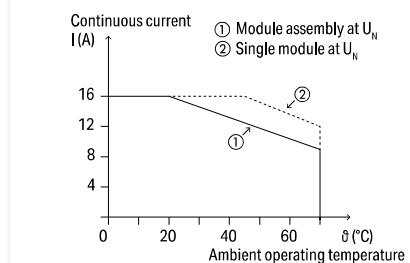
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



DC Load Limit Curve

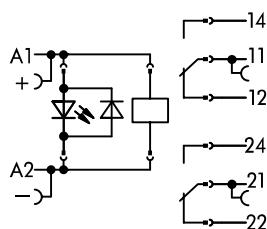
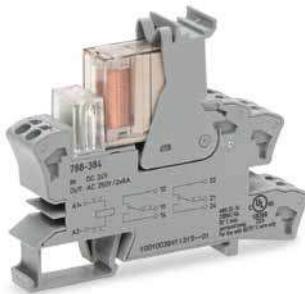
Control circuit	
Input voltage range	-10 ... +20 %
Load circuit	
Number of make/switch-on contacts	1
Contact material (relay)	AgSnO ₂ , W pre-make contact
Limiting continuous current	16 A
Inrush current (resistive) max.	(AC) 165 A / 0.02 s
Switching voltage (max.)	250 VAC
Switching power (resistive) max.	AC 4000 VA; DC (see load limit curve)
Recommended minimum load	12 V / 100 mA
Pull-in time (typ.)	10 ms
Drop-out time (typ.)	5 ms
Bounce time (typ.)	4 ms
Electrical life (NO; resistive load; 23 °C)	5 x 10 ³ switching operations
Mechanical life	5 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 60 min ⁻¹
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 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1.25 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
Environmental requirements	
Ambient temperature (operation at U_N)	-40 ... +70 °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



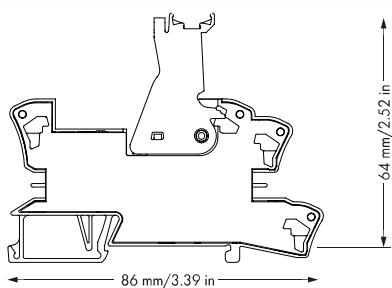
Current-Carrying Capacity Curve

**Relay module with driven contacts; Nominal input voltage: 24 VDC; 2 changeover contacts;
Limiting continuous current: 6 A; Red status indicator; Module width: 15 mm
788 Series**

1



U _N	I _N	Item No.	PU
24 VDC	31 mA	788-384	10

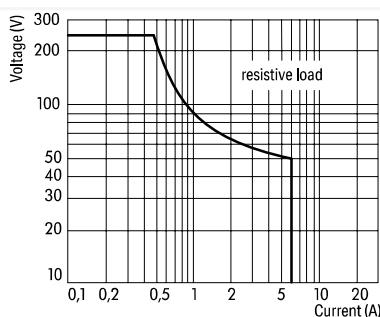


Safety information:

- Per EN 61810-3, it is only permitted to use 1 make contact/1 break contact for safety circuits (11-14 and 22-21 or 12-11 and 21-24).
- 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.

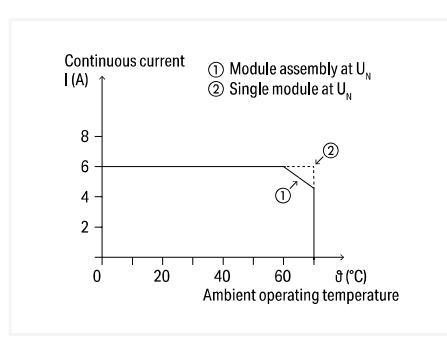
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



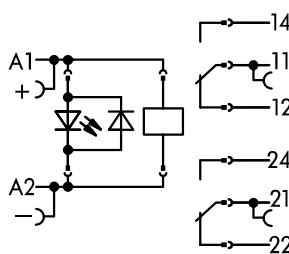
DC Load Limit Curve

Control circuit	
Input voltage range	-15 ... +10 %
Load circuit	
Number of changeover/switchover contacts	2
Contact material (relay)	AgNi
Limiting continuous current	6 A
Inrush current (resistive) max.	(AC) 14 A / 4 s
Switching voltage (max.)	250 VAC
Switching power (resistive) max.	AC 1500 VA; DC see load limit curve
Switching capacity	AC-15: 3 A / 250 VAC; DC-13: 3 A / 24 VDC
Recommended minimum load	5 V / 10 mA
Pull-in time (typ.)	10 ms
Drop-out time (typ.)	4 ms
Electrical life (NO; resistive load; 23 °C)	100 x 10 ³ switching operations
Mechanical life	10 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 300 min ⁻¹
Mechanical force-guided operation	Type A
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)	4 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1.5 kV _{rms}
Dielectric strength (load/load circuit) (AC, 1 min)	3 kV _{rms}
B10d (AC 1)	250 V; 6 A; 1 NO: 600,000 switching operations 250 V; 3 A; 1 NO: 900,000 switching operations 250 V; 1.5 A; 1 NO: 1,800,000 switching operations
B10d (AC 15)	250 V; 3 A; 1 NO: 180,000 switching operations 250 V; 2 A; 1 NO: 560,000 switching operations 250 V; 0.75 A; 1 NO: 4,600,000 switching operations
B10d (DC 13)	24 V; 3 A; 1 NO: 360,000 switching operations 24 V; 1.5 A; 1 NO: 740,000 switching operations 24 V; 0.75 A; 1 NO: 4,200,000 switching operations
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
Physical data/Mechanical data	
Width	15 mm / 0.591 inches
Height	86 mm / 3.386 inches
Depth from upper-edge of DIN-rail	64 mm / 2.52 inches
Mounting type	DIN-35 rail
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

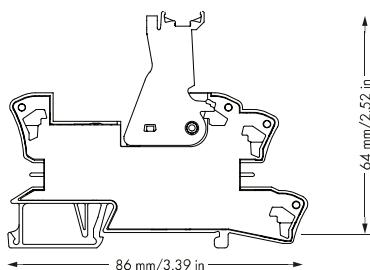


Current-Carrying Capacity Curve

Relay module with driven contacts; 2 changeover contacts; Limiting continuous current: 0.3 A; Green status indicator; Module width: 15 mm 788 Series



U_N	I_N	Item No.	PU
24 VDC	30 mA	788-906	10

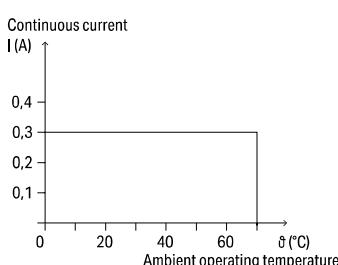


Safety information:

- Per EN 61810-3, it is only permitted to use 1 make contact/1 break contact for safety circuits (11-14 and 22-21 or 12-11 and 21-24).
- 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 protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.

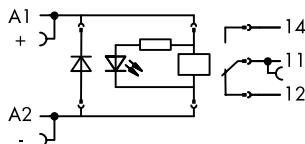


Current-Carrying Capacity Curve

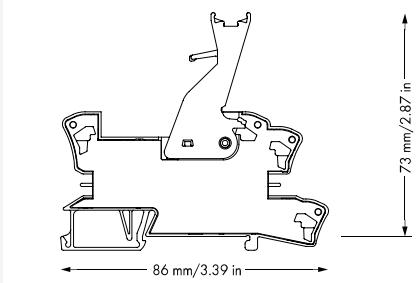
Control circuit	
Input voltage range	-15 ... +10 %
Load circuit	
Number of changeover/switchover contacts	2
Contact material (relay)	AgNi + Au
Limiting continuous current	0.3 A
Switching voltage (max.)	60 VAC
Switching power (resistive) max.	AC 18 VA
Recommended minimum load	0.1 V / 1 mA / 1 mW
Pull-in time (typ.)	15 ms
Drop-out time (typ.)	12 ms
Electrical life (NO; resistive load; 23 °C)	200 x 10 ³ switching operations
Mechanical life	50 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 600 min ⁻¹
Mechanical force-guided operation	Type A
Signaling	
Status indicator	Green LED
Safety and protection	
Rated voltage	250 V
Rated surge voltage	4 kV
Pollution degree	2
Dielectric strength (control/load circuit) (AC, 1 min)	4 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1.5 kV _{rms}
Dielectric strength (load/load circuit) (AC, 1 min)	2.5 kV _{rms}
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
Physical data/Mechanical data	
Width	15 mm / 0.591 inches
Height	86 mm / 3.386 inches
Depth from upper-edge of DIN-rail	64 mm / 2.52 inches
Mounting type	DIN-35 rail
Environmental requirements	
Ambient temperature (operation at U_N)	-40 ... +70 °C
Ambient temperature UL (operation at U_N)	-40 ... +40 °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 61810-3; UL 508 (max. 40 °C)

Relay module; 1 changeover contact; Limiting continuous current: 16 A; with manual operation; Red status indicator; Module width: 15 mm 788 Series

1



U_N	I_N	Item No.	PU
24 VDC	17 mA	788-341	15

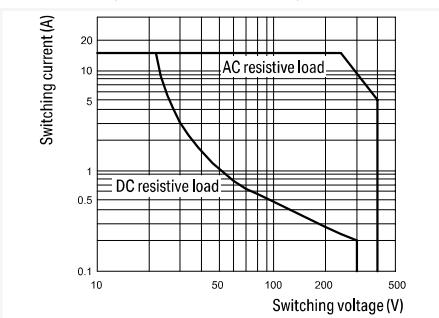


Safety information:

- 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.

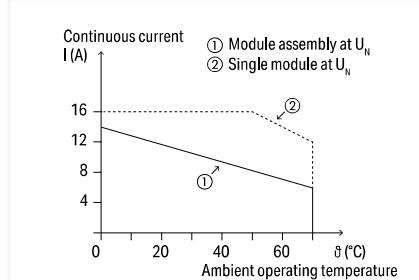
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



DC Load Limit Curve

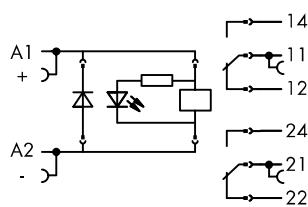
Control circuit	
Input voltage range	±10 %
Load circuit	
Number of changeover/switchover contacts	1
Contact material (relay)	AgNi
Limiting continuous current	16 A
Inrush current (resistive) max.	(AC) 32 A / 0.02 s; (AC) 24 A / 4 s
Switching voltage (max.)	250 VAC
Switching power (resistive) max.	AC 4000 VA; DC (see load limit curve)
Switching capacity	AC-15: 3 A / 240 VAC; DC-13: 2 A / 24 VDC
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 ³ switching operations
Mechanical life	5 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 300 min ⁻¹
Signaling	
Status indicator	Red LED; mechanical
Safety and protection	
Rated voltage	250 V
Rated surge voltage	4 kV
Pollution degree	3
Dielectric strength (control/load circuit) (AC, 1 min)	5 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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 (max. 10 A)



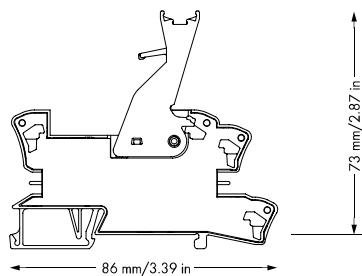
Current-Carrying Capacity Curve

Relay module; 2 changeover contacts; Limiting continuous current: 8 A; with manual operation; Red status indicator; Module width: 15 mm 788 Series

1



U_N	I_N	Item No.	PU
24 VDC	17 mA	788-346	15

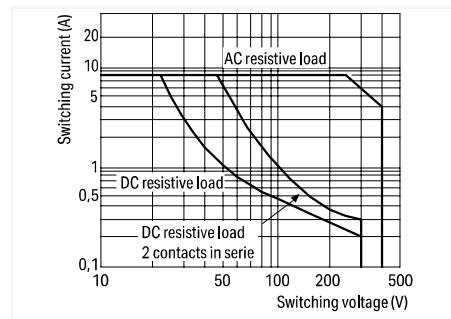


Safety information:

- 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.

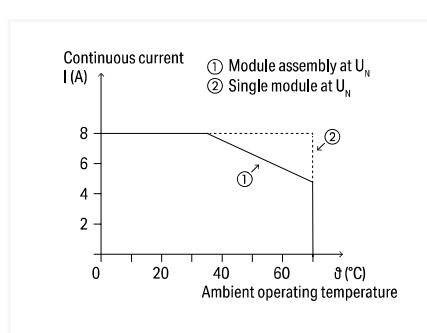
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



DC Load Limit Curve

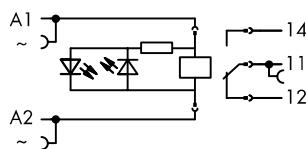
Control circuit	
Input voltage range	±10 %
Load circuit	
Number of changeover/switchover contacts	2
Contact material (relay)	AgNi
Limiting continuous current	8 A
Inrush current (resistive) max.	(AC) 16 A / 0.02 s; (AC) 12 A / 4 s
Switching voltage (max.)	250 VAC
Switching power (resistive) max.	AC 2000 VA; DC (see load limit curve)
Switching capacity	AC-15: 1.5 A / 240 VAC; DC-13: 1 A / 24 VDC
Recommended minimum load	12 V / 10 mA
Pull-in time (typ.)	15 ms
Drop-out time (typ.)	8 ms
Bounce time (typ.)	7 ms
Electrical life (NO; resistive load; 23 °C)	10 x 10 ³ switching operations
Mechanical life	5 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 300 min ⁻¹
Signaling	
Status indicator	Red LED; mechanical
Safety and protection	
Rated voltage	250 V
Rated surge voltage	4 kV
Pollution degree	3
Dielectric strength (control/load circuit) (AC, 1 min)	5 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
Dielectric strength (load/load circuit) (AC, 1 min)	2.5 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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



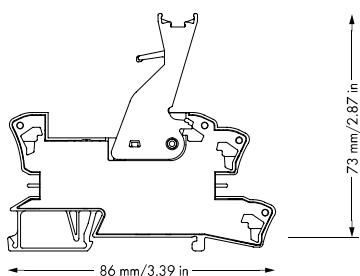
Current-Carrying Capacity Curve

Relay module; 1 changeover contact; Limiting continuous current: 16 A; with manual operation; Red status indicator; Module width: 15 mm 788 Series

1



U_N	I_N	Item No.	PU
24 VAC	32 mA	788-541	15
115 VAC	7 mA	788-543	15
230 VAC	4 mA	788-544	15

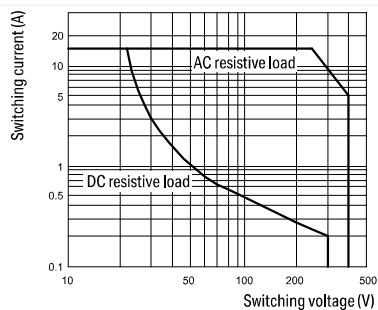


Safety information:

- 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.

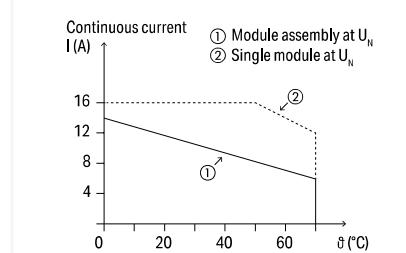
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



DC Load Limit Curve

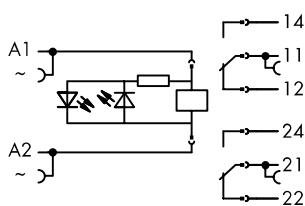
Control circuit	
Input voltage range	$\pm 10\%$
Load circuit	
Number of changeover/switchover contacts	1
Contact material (relay)	AgNi
Limiting continuous current	16 A
Inrush current (resistive) max.	(AC) 32 A / 0.02 s; (AC) 24 A / 4 s
Switching voltage (max.)	250 VAC
Switching power (resistive) max.	AC 4000 VA; DC (see load limit curve)
Switching capacity	AC-15: 3 A / 240 VAC; DC-13: 2 A / 24 VDC
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)	10×10^3 switching operations
Mechanical life	5×10^6 switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 300 min ⁻¹
Signaling	
Status indicator	Red LED; mechanical
Safety and protection	
Rated voltage	250 V
Rated surge voltage	4 kV
Pollution degree	3
Dielectric strength (control/load circuit) (AC, 1 min)	5 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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 (max. 10 A)



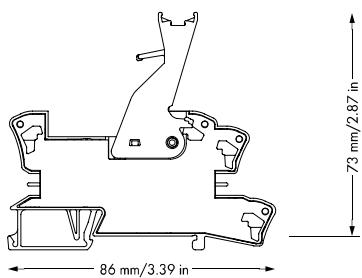
Current-Carrying Capacity Curve

**Relay module; 2 changeover contacts; Limiting continuous current: 8 A; with manual operation;
Red status indicator; Module width: 15 mm
788 Series**

1



U _N	I _N	Item No.	PU
24 VAC	32 mA	788-546	15
115 VAC	7 mA	788-548	15
230 VAC	4 mA	788-549	15

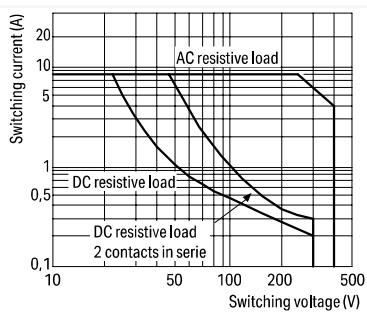


Safety information:

- 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.

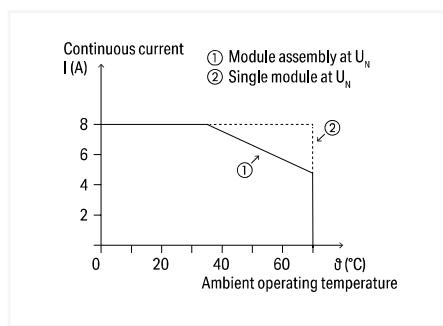
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



DC Load Limit Curve

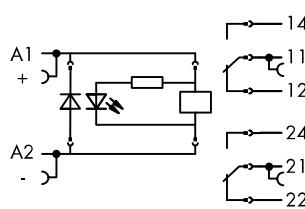
Control circuit	
Input voltage range	±10 %
Load circuit	
Number of changeover/switchover contacts	2
Contact material (relay)	AgNi
Limiting continuous current	8 A
Inrush current (resistive) max.	(AC) 16 A / 0.02 s; (AC) 12 A / 4 s
Switching voltage (max.)	250 VAC
Switching power (resistive) max.	AC 2000 VA; DC (see load limit curve)
Switching capacity	AC-15: 1.5 A / 240 VAC; DC-13: 1 A / 24 VDC
Recommended minimum load	12 V / 10 mA
Pull-in time (typ.)	15 ms
Drop-out time (typ.)	8 ms
Bounce time (typ.)	7 ms
Electrical life (NO; resistive load; 23 °C)	10 x 10 ³ switching operations
Mechanical life	5 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 300 min ⁻¹
Signaling	
Status indicator	Red LED; mechanical
Safety and protection	
Rated voltage	250 V
Rated surge voltage	4 kV
Pollution degree	3
Dielectric strength (control/load circuit) (AC, 1 min)	5 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
Dielectric strength (load/load circuit) (AC, 1 min)	2.5 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
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



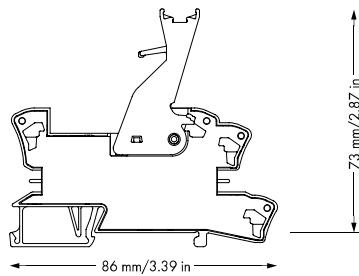
Current-Carrying Capacity Curve

Relay module; 2 changeover contacts; Limiting continuous current: 8 A; Railway; Red status indicator; Module width: 15 mm 788 Series

1



U_N	I_N	Item No.	PU
24 VDC	20 mA	788-390	15

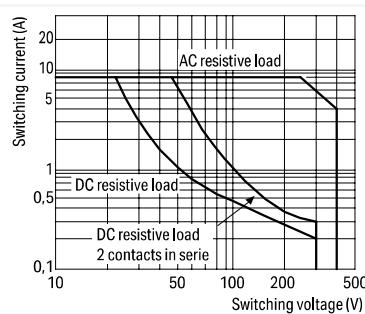


Safety information:

- 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.

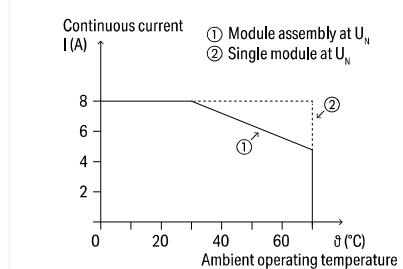
Note

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



DC Load Limit Curve

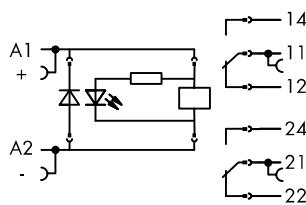
Control circuit	
Input voltage range	-30 ... +25 %
Load circuit	
Number of changeover/switchover contacts	2
Contact material (relay)	AgNi
Limiting continuous current	8 A
Inrush current (resistive) max.	(AC) 16 A / 0.02 s; (AC) 12 A / 4 s
Switching voltage (max.)	250 VAC
Switching power (resistive) max.	AC 2000 VA; DC (see load limit curve)
Switching capacity	AC-15: 1.5 A / 240 VAC; DC-13: 1 A / 24 VDC
Recommended minimum load	12 V / 10 mA
Pull-in time (typ.)	15 ms
Drop-out time (typ.)	8 ms
Bounce time (typ.)	7 ms
Electrical life (NO; resistive load; 23 °C)	10 x 10 ³ switching operations
Mechanical life	5 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 300 min ⁻¹
Signaling	
Status indicator	Red LED; mechanical
Safety and protection	
Rated voltage	250 V
Rated surge voltage	4 kV
Pollution degree	3
Dielectric strength (control/load circuit) (AC, 1 min)	5 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
Dielectric strength (load/load circuit) (AC, 1 min)	2.5 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
Environmental requirements	
Ambient temperature (operation at U_N)	-40 ... +70 °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



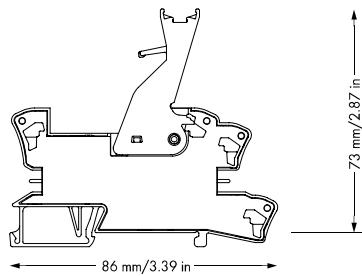
Current-Carrying Capacity Curve

Relay module; 1 changeover contact; Limiting continuous current: 16 A; with manual operation; Railway; Red status indicator; Module width: 15 mm 788 Series

1



U_N	I_N	Item No.	PU
24 VDC	20 mA	788-391	15

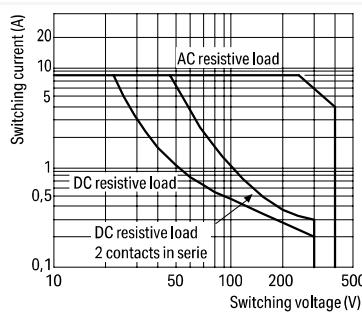


Safety information:

- 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.

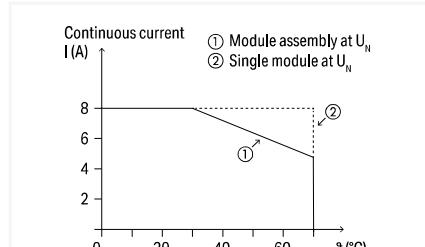
Note:

- Reinforced insulation between coil and contacts
- To protect the relay coils and contacts, inductive loads must be damped with an effective protection circuit.



DC Load Limit Curve

Control circuit	
Input voltage range	-30 ... +25 %
Load circuit	
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.)	250 VAC
Switching power (resistive) max.	AC 4000 VA; DC (see load limit curve)
Switching capacity	AC-15: 3 A / 240 VAC; DC-13: 2 A / 24 VDC
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 ³ switching operations
Mechanical life	5 x 10 ⁶ switching operations
Switching frequency with/without load (max.)	6 min ⁻¹ / 300 min ⁻¹
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 kV _{rms}
Dielectric strength (open contact) (AC, 1 min)	1 kV _{rms}
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
Physical data/Mechanical 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
Mounting type	DIN-35 rail
Environmental requirements	
Ambient temperature (operation at U_N)	-40 ... +70 °C
Ambient temperature UL (operation at U_N)	-40 ... +70 °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



Current-Carrying Capacity Curve