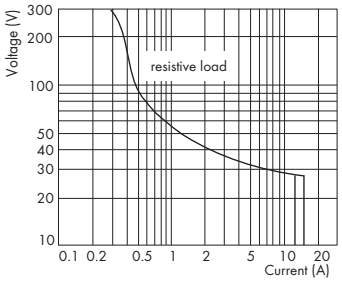
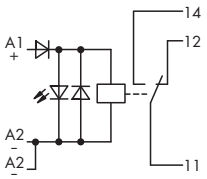
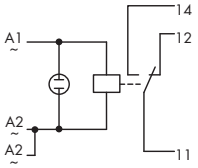
Relay Modules in DIN-Rail Mounted Enclosure

	Relay with 1 changeover contact (1 u) Nominal input voltage V_N 24 V DC	Relay with 1 changeover contact (1 u) Nominal input voltage V_N 24 V DC, 230 V AC/DC





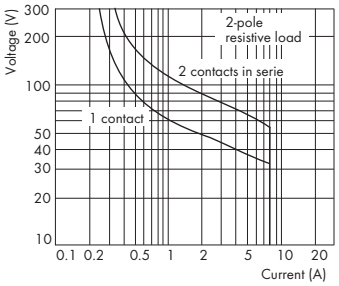


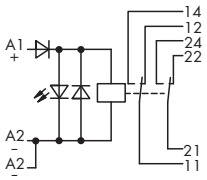
Other coil voltages contact factory

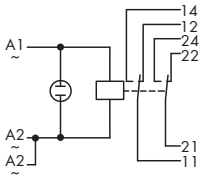
Description	V_N	I_N	Item No.	Pack. Unit	V_N	I_N	Item No.	Pack. Unit
Relay modules in DIN-rail mounted enclosure, for DIN 35 rail	24 V DC	19 mA	**789-304**	1	24 V AC/DC 230 V AC	20 mA 4.2 mA	**789-504** **789-508**	1 1

Technical Data	Accessories see page 162	Accessories see page 162
Contact material	AgNi 90/10	AgNi 90/10
Input voltage range	V_N -15 % ... +10 %	V_N -15 % ... +10 %
Max. switching voltage	250 V AC/DC	250 V AC/DC
Max. make current (resistive) at a 10 % duty cycle	4 s 25 A (AC)	4 s 25 A (AC)
Max. continuous current	12 A	12 A
Max. Switching power (resistive)	3000 VA AC, DC see load limit curve	3000 VA AC, DC see load limit curve
Recommended minimum load	> 100 mA / 12 V AC/DC	> 100 mA / 12 V AC/DC
Operating power	400 mW	0.96 VA
Pull-in/drop-out/bounce time typ.	7 ms / 3 ms / 3 ms	15 ms / 15 ms / 3 ms
Nominal operating mode	continuous duty	continuous duty
Dielectric strength contact-coil (AC, 1 min)	5 kV	5 kV
Dielectric strength open contact	1 kV	1 kV
Nominal voltage acc. to VDE 0110 Part 1/4.97, IEC 60664-1	250 V / 4 kV / 3	250 V / 4 kV / 3
Mechanical life at 1000 W, AC 250 V	30 x 10^6 switching operations	30 x 10^6 switching operations
Service life at lamp load	1.2 x 10^3 switching operations	1.2 x 10^3 switching operations
Ambient operating temperature	-25 °C ... +40 °C	-25 °C ... +40 °C
Storage temperature	-40 °C ... +85 °C	-40 °C ... +85 °C
Dimensions (mm) W x H x L	17.5 x 55 x 90	17.5 x 55 x 90
	Height from upper-edge of DIN 35 rail	Height from upper-edge of DIN 35 rail
Wire connection	CAGE CLAMP®	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Stripped lengths	5 ... 6 mm / 0.22 in	5 ... 6 mm / 0.22 in
Approvals	DIN VDE 0160 and IEC 60255; DIN VDE 0435 (corresp. parts)	DIN VDE 0160 and IEC 60255; DIN VDE 0435 (corresp. parts)

	Relay with 2 changeover contacts (2 u) Nominal input voltage V_N 24 V, 48 V, 110 V DC	Relay with 2 changeover contacts (2 u) Nominal input voltage V_N 24 V AC/DC, 115 V, 230 V AC







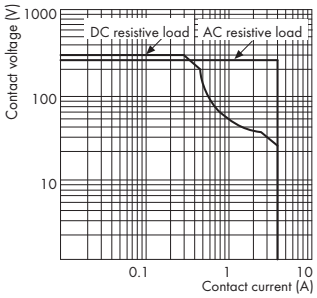
Other coil voltages contact factory

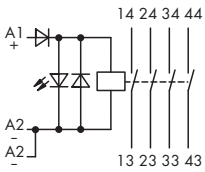
Description	V_N	I_N	Item No.	Pack. Unit	V_N	I_N	Item No.	Pack. Unit
Relay modules in DIN-rail mounted enclosure, for	24 V DC	21 mA	**789-312**	1	24 V AC/DC	22 mA	**789-512**	1
DIN 35 rail	48 V DC	13 mA	**789-313**	1	115 V AC	7.6 mA	**789-515**	1
	110 V DC	6 mA	**789-315**	1	230 V AC	4.2 mA	**789-516**	1

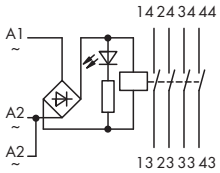
Technical Data	Accessories see page 162	Accessories see page 162
Contact material	AgNi 90/10	AgNi 90/10
Input voltage range	V_N -15 % ... +10 %	V_N -15 % ... +10 %
Max. switching voltage	250 V AC/DC	250 V AC/DC
Max. make current (resistive) at a 10 % duty cycle	4 s / 15 A	4 s / 15 A
Max. continuous current	8 A	8 A
Max. Switching power (resistive)	2000 VA AC, DC see load limit curve	2000 VA AC, DC see load limit curve
Recommended minimum load	> 100 mA / 12 V AC/DC	> 100 mA / 12 V AC/DC
Operating power	400 mW	0.96 VA
Pull-in/drop-out/bounce time typ.	7 ms / 2 ms / 3 ms	7 ms / 2 ms / 3 ms
Nominal operating mode	continuous duty	continuous duty
Dielectric strength contact-coil (AC, 1 min)	5 kV	5 kV
Dielectric strength open contact	1 kV	1 kV
Dielectric strength contact-contact	2.5 kV	1.5 kV
Nominal voltage acc. to VDE 0110 Part 1/4.97, IEC 60664-1	250 V / 4 kV / 3	250 V / 4 kV / 3
Mechanical life	3 x 10^7 switching operations	5 x 10^6 switching operation
Ambient operating temperature	-25 °C ... +40 °C	-25 °C ... +40 °C
Storage temperature	-40 °C ... +85 °C	-40 °C ... +85 °C
Dimensions (mm) W x H x L	17.5 x 55 x 90	17.5 x 55 x 90
	Height from upper-edge of DIN 35 rail	Height from upper-edge of DIN 35 rail
Wire connection	CAGE CLAMP®	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Stripped lengths	5 ... 6 mm / 0.22 in	5 ... 6 mm / 0.22 in
Approvals	DIN VDE 0160 and IEC 60255;	DIN VDE 0160 and IEC 60255;
	DIN VDE 0435 (corresp. parts)	DIN VDE 0435 (corresp. parts)

Relay Modules in DIN-Rail Mounted Enclosure

	Relay with 4 make contacts (4 a) Nominal input voltage V_N 24 V DC	Relay with 4 make contacts (4 a) Nominal input voltage V_N 12 V, 24 V AC/DC



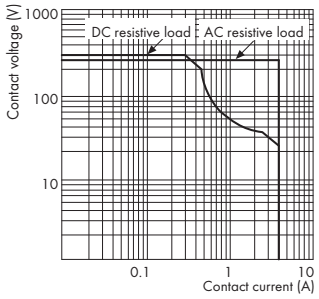


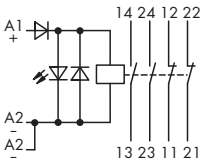


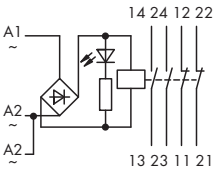
Description	V_N	I_N	Item No.	Pack. Unit	V_N	I_N	Item No.	Pack. Unit
Relay modules in DIN-rail mounted enclosure, for DIN 35 rail	24 V DC	12 mA	**789-352**	1	12 V AC/DC	21 mA	**789-551**	1
					24 V AC/DC	12 mA	**789-552**	1

Technical Data	Accessories see page 162	Accessories see page 162
Contact material	AuAg10 over AgNi 15	AuAg10 over AgNi 15
Input voltage range	V_N -15 % ... +10 %	V_N -15 % ... +10 %
Max. switching voltage	250 V AC / 30 V DC	250 V AC / 30 V DC
Max. switching current	4 A AC / 3 A DC	4 A AC / 3 A DC
Max. Switching power (resistive)	1000 VA / 90 W, resistive see load limit curve	1000 VA / 90 W, resistive see load limit curve
Recommended minimum load	> 100 µA / 100 mV DC	> 100 µA / 100 mV DC
Pull-in/drop-out/bounce time typ.	15 ms / 10 ms / 1 ms	20 ms / 20 ms / 1 ms
Nominal operating mode	continuous duty	continuous duty
Max. switching frequency with load	6 min^{-1}	6 min^{-1}
Dielectric strength contact-coil (AC, 1 min)	1.5 kV	1.5 kV
Dielectric strength open contact	0.75 kV	0.75 kV
Dielectric strength contact-contact	1 kV	1 kV
Nominal voltage acc. to VDE 0110 Part 1/4.97, IEC 60664-1	230 V / 2.5 kV / 3	230 V / 2.5 kV / 3
Ambient operating temperature	-25 °C ... +40 °C	-25 °C ... +40 °C
Storage temperature	-40 °C ... +85 °C	-40 °C ... +85 °C
Dimensions (mm) W x H x L	17.5 x 55 x 90	17.5 x 55 x 90
	Height from upper-edge of DIN 35 rail	Height from upper-edge of DIN 35 rail
Wire connection	CAGE CLAMP®	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Stripped lengths	5 ... 6 mm / 0.22 in	5 ... 6 mm / 0.22 in
Approvals	DIN VDE 0110 Part1 / 4.97 IEC 60 664-1;	DIN VDE 0110 Part1 / 4.97 IEC 60 664-1;
	DIN VDE 0435 (corresp. parts), EN 61 810	DIN VDE 0435 (corresp. parts), EN 61 810

	Relay with 2 break and 2 make contacts (2 ar) Nominal input voltage V_N 24 V DC	Relay with 2 break and 2 make contacts (2 ar) Nominal input voltage V_N 12 V, 24 V AC/DC







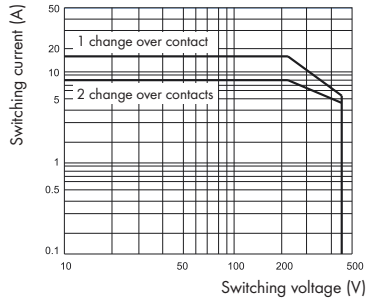
Note: Inductive loads have to be attenuated by an appropriate protective circuit in order to protect relay coils and contacts!

Description	V_N	I_N	Item No.	Pack. Unit	V_N	I_N	Item No.	Pack. Unit
Relay modules in DIN-rail mounted enclosure, for DIN 35 rail	24 V DC	12 mA	**789-336**	1	12 V AC/DC	21 mA	**789-535**	1
					24 V AC/DC	12 mA	**789-536**	1

Technical Data	Accessories see page 162	Accessories see page 162
Contact material	AuAg10 over AgNi 15	AuAg10 over AgNi 15
Input voltage range	V_N -15 % ... +10 %	V_N -15 % ... +10 %
Max. switching voltage	250 V AC / 30 V DC	250 V AC / 30 V DC
Max. switching current	4 A AC / 3 A DC	4 A AC / 3 A DC
Max. Switching power (resistive)	1000 VA / 90 W, resistive see load limit curve	1000 VA / 90 W, resistive see load limit curve
Recommended minimum load	> 100 µA / 100 mV DC	> 100 µA / 100 mV DC
Pull-in/drop-out/bounce time typ.	15 ms / 10 ms / 1 ms	20 ms / 20 ms / 1 ms
Nominal operating mode	continuous duty	continuous duty
Max. switching frequency with load	6 min^{-1}	6 min^{-1}
Dielectric strength contact-coil (AC, 1 min)	1.5 kV	1.5 kV
Dielectric strength open contact	0.75 kV	0.75 kV
Dielectric strength contact-contact	1 kV	1 kV
Nominal voltage acc. to VDE 0110 Part 1/4.97, IEC 60664-1	230 V / 2.5 kV / 3	230 V / 2.5 kV / 3
Ambient operating temperature	-25 °C ... +40 °C	-25 °C ... +40 °C
Storage temperature	-40 °C ... +85 °C	-40 °C ... +85 °C
Dimensions (mm) W x H x L	17.5 x 55 x 90	17.5 x 55 x 90
	Height from upper-edge of DIN 35 rail	Height from upper-edge of DIN 35 rail
Wire connection	CAGE CLAMP®	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Stripped lengths	5 ... 6 mm / 0.22 in	5 ... 6 mm / 0.22 in
Approvals	DIN VDE 0110 Part1 / 4.97 IEC 60 664-1;	DIN VDE 0110 Part1 / 4.97 IEC 60 664-1;
	DIN VDE 0435 (corresp. parts), EN 61 810	DIN VDE 0435 (corresp. parts), EN 61 810

Relay Modules in DIN-Rail Mount Enclosure

	Relay with 1 changeover contact (1 u), manual configuration, electrical and mechanical activation indicator	Relay with 2 changeover contacts (2 u), manual configuration, electrical and mechanical activation indicator



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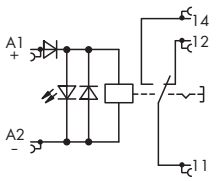
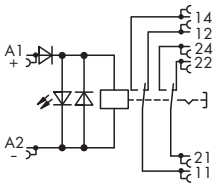




Note: Inductive loads have to be attenuated by an appropriate protective circuit in order to protect relay coils and contacts.

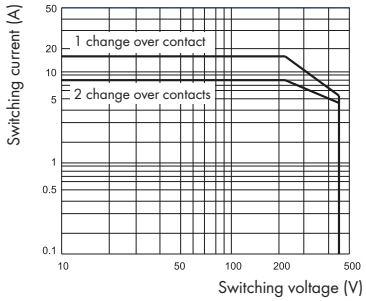
Description	V_N	I_N	Item No.	Pack. Unit	V_N	I_N	Item No.	Pack. Unit
Relay module in DIN 35-rail mount enclosure	24 VDC		**789-1341**		24 VDC		**789-1346**	

Technical Data	Accessories see page 162	Accessories see page 162
Coil		
Input voltage range	U_N -10% ... +10 %	U_N -10% ... +10 %
Contacts		
Contact material	AgNi	AgNi
Max. continuous current	12 A	2 x 8 A
Max. make current (resistive) at a 10 % duty cycle	16 A	8 A
Max. switching voltage	250 VAC	250 VAC
Max. Switching power (resistive)	3000 VA AC	2 x 2000 VA AC
Pull-in/drop-out/bounce time typ.	15 ms / 8 ms / -	15 ms / 8 ms / -
Mechanical life	5 x 10^6 switching operations	5 x 10^6 switching operations
General specifications:		
Nominal voltage to EN 60664	250 V / 4 kV / 3	250 V / 4 kV / 3
Dielectric strength contact-coil	5 kV_{eff}	5 kV_{eff}
Surge capacity open contact	1 kV_{eff}	1 kV_{eff}
Dielectric strength contact-contact (AC, 1 min.)	-	1.5 kV_{eff}
Ambient operating temperature (V_N)	-25 °C ... +50 °C	-25 °C ... +50 °C
Storage temperature	-40 °C ... +70 °C	-40 °C ... +70 °C
Dimensions (mm) W x H x L	17.5 x 55 x 90	17.5 x 55 x 90
	Height from upper-edge of DIN 35 rail	Height from upper-edge of DIN 35 rail
Wire connection	CAGE CLAMP®	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Stripped lengths	5 ... 6 mm / 0.22 in	5 ... 6 mm / 0.22 in
Standards/Specifications	EN 60664-1	EN 60664-1

(OT = On-time)

Relay Modules in DIN-Rail Mount Enclosure

	Relay with 1 changeover contact (1 u), manual configuration, electrical and mechanical activation indicator	Relay with 2 changeover contacts (2 u), manual configuration, electrical and mechanical activation indicator



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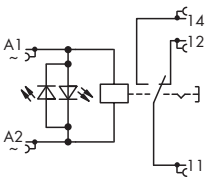
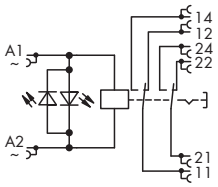




Note: Inductive loads have to be attenuated by an appropriate protective circuit in order to protect relay coils and contacts.

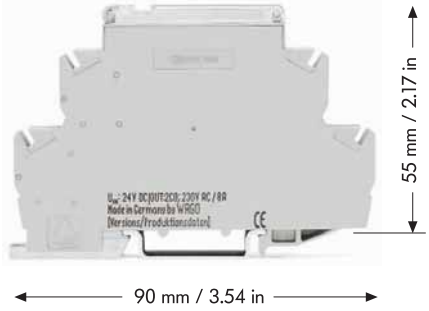
Description	V_N	I_N	Item No.	Pack. Unit	V_N	I_N	Item No.	Pack. Unit
Relay module in DIN 35-rail mount enclosure	230		**789-1544**		230		**789-1549**	

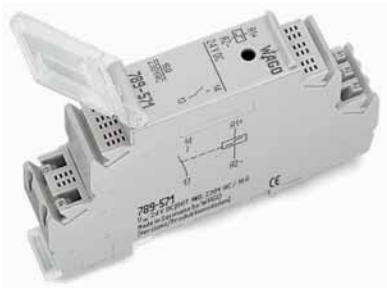
Technical Data	Accessories see page 162	Accessories see page 162
Coil		
Input voltage range	U_N -10% ... +10 %	U_N -10% ... +10 %
Contacts		
Contact material	AgNi	AgNi
Max. continuous current	12 A	2 x 8 A
Max. make current (resistive) at a 10 % duty cycle	16 A	8 A
Max. switching voltage	250 VAC	250 VAC
Max. Switching power (resistive)	3000 VA AC	2 x 2000 VA AC
Pull-in/drop-out/bounce time typ.	15 ms / 8 ms / -	15 ms / 8 ms / -
Mechanical life	5 x 10^6 switching operations	5 x 10^6 switching operations
General specifications:		
Nominal voltage to EN 60664	250 V / 4 kV / 3	250 V / 4 kV / 3
Dielectric strength contact-coil	5 kV_{eff}	5 kV_{eff}
Surge capacity open contact	1 kV_{eff}	1 kV_{eff}
Dielectric strength contact-contact (AC, 1 min.)	-	1.5 kV_{eff}
Ambient operating temperature (V_N)	-25 °C ... +50 °C	-25 °C ... +50 °C
Storage temperature	-40 °C ... +70 °C	-40 °C ... +70 °C
Dimensions (mm) W x H x L	17.5 x 55 x 90	17.5 x 55 x 90
	Height from upper-edge of DIN 35 rail	Height from upper-edge of DIN 35 rail
Wire connection	CAGE CLAMP®	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Stripped lengths	5 ... 6 mm / 0.22 in	5 ... 6 mm / 0.22 in
Standards/Specifications	EN 60664-1	EN 60664-1

(OT = On-time)

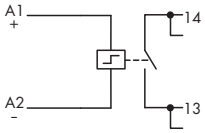
Relay Modules in DIN-Rail Mounted Enclosure

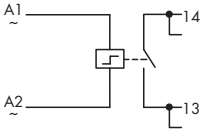
	Latching relay with 1 make contact (1 a) Nominal input voltage V_N 24 V DC	Latching relay with 1 make contact (1 a) Nominal input voltage V_N 230 V AC





Lamp load: max. load 1500 W
Fluorescent lamp, dual circuit:
max. load 20 x 58 W series compensated
Electronic ballasts: 10 x 58 W

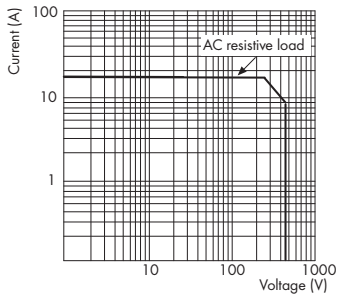




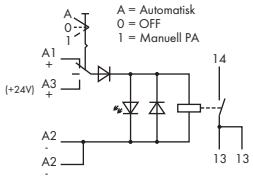
Description	V_N	I_N	Item No.	Pack. Unit	V_N	I_N	Item No.	Pack. Unit
Relay modules in DIN-rail mounted enclosure, for DIN 35 rail	24 V DC	42 mA	**789-571**	1	230 V AC	10 mA	**789-570**	1

Technical Data	Accessories see page 162	Accessories see page 162
Contact material	AgCdO	AgCdO
Input voltage range	V_N -15 % ... +10 %	V_N -15 % ... +10 %
Max. switching voltage	400 V AC	400 V AC
Min. switching current	0.1 A	0.1 A
Max. switching current	50 A (20 ms)	50 A (20 ms)
Max. continuous current	16 A	16 A
Max. Switching power (resistive)	4000 VA AC / 300 W DC	4000 VA AC / 300 W DC
Minimum switch-on time	40 ms	40 ms
Minimum break time	180 ms	180 ms
Coil control	Impuls	Impuls
Fuse protection	circuit breaker max. 16 A B-charakteristic	circuit breaker max. 16 A B-charakteristic
Nominal operating mode	continuous duty	continuous duty
Max. switching frequency with load	6 min^{-1}	6 min^{-1}
Max. switching frequency without load	4 s^{-1}	4 s^{-1}
Dielectric strength contact-coil (AC, 1 min)	4 kV	4 kV
Nominal voltage acc. to VDE 0110 Part 1/4.97,	250 V / 4 kV / 3	250 V / 4 kV / 3
IEC 60664-1		
Mechanical life	1 x 10^5 switching operations	1 x 10^5 switching operations
Mechanical life at max. load (resistance)	5 x 10^4 switching operations	5 x 10^4 switching operations
Ambient operating temperature	-25 °C ... +40 °C	-25 °C ... +40 °C
Storage temperature	-40 °C ... +85 °C	-40 °C ... +85 °C
Dimensions (mm) W x H x L	17.5 x 55 x 90	17.5 x 55 x 90
	Height from upper-edge of DIN 35 rail	Height from upper-edge of DIN 35 rail
Wire connection	CAGE CLAMP®	CAGE CLAMP®
Cross sections	0.08 mm^2 ... 2.5 mm^2 / AWG 28 ... 14	0.08 mm^2 ... 2.5 mm^2 / AWG 28 ... 14
Stripped lengths	5 ... 6 mm / 0.22 in	5 ... 6 mm / 0.22 in
Approvals	DIN VDE 0160 and IEC 60255;	DIN VDE 0160 and IEC 60255;
	DIN VDE 0435 (corresp. parts); DIN VDE 0632	DIN VDE 0435 (corresp. parts); DIN VDE 0632

	Relay with 1 make contact (1a), manual-0-automatic switch	Capability of different lamp loads: (switching operations acc. to EN 60669)



Type of load	Capability	Electrical life
Incandescent lamp	2200 W	20.000
Halogen lamp 230 V AC	1400 W	50.000
Halogen trafo	120 VA	20.000
Fluorescent lamp not comp., CB, cos φ 0,4-0,6	20 x 58 W	25.000
Fluorescent lamp comp., Conv. ballast, C parallel	9 x 58 W	25.000
Fluorescent lamp comp., Conv. ballast, Duo-circuit	600 W	20.000
Fluorescent lamp with electronic ballast	12 x 58 W	25.000
Energy saving lamp 15 W	25 pcs	20.000
Energy saving lamp 13 W	30 pcs	20.000
Energy saving lamp 9 W	38 pcs	20.000
Gas discharge lamp	1000 W	20.000
Dulux-Lamp not compensated	800 W	20.000
Dulux-Lamp compensated	500 W	20.000
Max. capacitance at 230 V AC	60 µF	min. 5.000



Note: Inductive loads have to be attenuated by an appropriate protective circuit in order to protect relay coils and contacts!

Description	V_N	Item No.	Pack. Unit	
Relay modules in DIN-rail mounted enclosure, for DIN 35 rail	24 V DC	**789-323**	1	

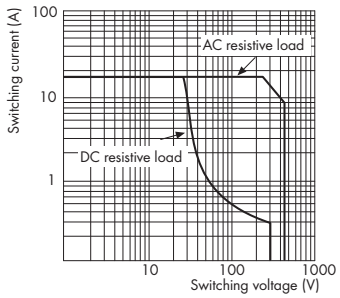
Technical Data

Accessories see page 162

Contact material	Ag-Legierung
Input voltage range	V_N -15 % ... +20 %
Current input at rated voltage (coil 20 °C)	19 mA
Max. switching voltage	250 V AC
Max. make current	120 A at 230 V AC (50 ms)
Max. continuous current	16 A
Max. Switching power (resistive)	4000 VA AC, resistance see load limit curve
Recommended minimum load	> 100 mA / 12 V AC/DC
Operating power	400 mW
Pull-in/drop-out/bounce time typ.	15 ms / 5 ms
Nominal operating mode	continuous duty
Dielectric strength contact-coil	4
Surge capacity open contact	1
Nominal voltage acc. to VDE 0110 Part 1/4.97,	250 V / 4 kV / 3
IEC 60664-1	
Mechanical life	10 x 10^6 switching operations
Mechanical life at max. load (resistance)	min. 100.000 switching operations
Mechanical life at max. lamp load	see "Lamp loads" table
Ambient operating temperature	-25 °C ... +40 °C
Storage temperature	-40 °C ... +70 °C
Dimensions (mm) W x H x L	17,5 x 55 x 90
	Height from upper-edge of DIN 35 rail
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Stripped lengths	5 ... 6 mm / 0.22 in
Approvals	DIN VDE 0140 part 1, DIN EN 61140;
	DIN VDE 0160, EN 50178;
	degree of protection II

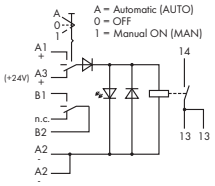
Relay Modules in DIN-Rail Mounted Enclosure

	Relay with 1 make contact (1 a), manual-0-automatic switch with monitoring contact	Capability of different lamp loads: (switching operations acc. to EN 60669)



Type of load	Capability	Electrical life
Incandescent lamp	2200 W	20.000
Halogen lamp 230 V AC	1400 W	50.000
Halogen trafo	120 VA	20.000
Fluorescent lamp not comp., CB, cos φ 0,4-0,6	20 x 58 W	25.000
Fluorescent lamp comp., Conv. ballast, C parallel	9 x 58 W	25.000
Fluorescent lamp comp., Conv. ballast, Duo-circuit	600 W	20.000
Fluorescent lamp with electronic ballast	12 x 58 W	25.000
Energy saving lamp 15 W	25 pcs	20.000
Energy saving lamp 13 W	30 pcs	20.000
Energy saving lamp 9 W	38 pcs	20.000
Gas discharge lamp	1000 W	20.000
Dulux-Lamp not compensated	800 W	20.000
Dulux-Lamp compensated	500 W	20.000
Max. capacitance at 230 V AC	60 µF	min. 5.000

Note:
Inductive loads have to be attenuated by an appropriate protective circuit in order to protect relay coils and contacts!



Description	V_N	Item No.	Pack. Unit	
Relay modules in DIN-rail mounted enclosure, for DIN 35 rail	24 V DC	**789-325**	1	

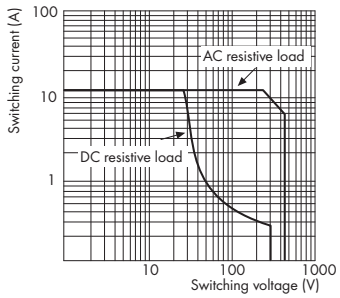
Technical Data

Accessories see page 162

Contact material	Ag alloy	
Input voltage range	V_N -15 % ... +20 %	
Current input at rated voltage (coil 20 °C)	19mA	
Max. switching voltage	250 V AC	
Max. make current	120 A at 230 V AC (50 ms)	
Max. continuous current	16 A	
Max. Switching power (resistive)	4000 VA AC, resistance see load limit curve	
Recommended minimum load	> 100 mA / 12 V AC/DC	
Operating power	400 mW	
Pull-in/drop-out/bounce time typ.	15 ms / 5 ms / -	
Nominal operating mode	continuous duty	
Dielectric strength contact-coil	4 kV_{eff}	
Surge capacity open contact	1 kV_{eff}	
Nominal voltage acc. to IEC 60664-1	250 V / 4 kV / 3	
Mechanical life	10 x 10^6 switching operations	
Mechanical life at max. load (resistance)	min. 100.000 switching operations	
Mechanical life at max. lamp load	see "Lamp loads" table	
Signaling	Isolated monitoring contact	
	(B1/B2 closed in automatic mode;	
	max. 1 A, 250 V AC)	
Ambient operating temperature	-25 °C ... +40 °C	
Storage temperature	-40 °C ... +70 °C	
Dimensions (mm) W x H x L	17,5 x 55 x 90	
	Height from upper-edge of DIN 35 rail	
Wire connection	CAGE CLAMP®	
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14	
Stripped lengths	5 ... 6 mm / 0.22 in	
Standards/Specifications	DIN VDE 0160 EN 50178, degree of protection II	
(OT = On-time)		

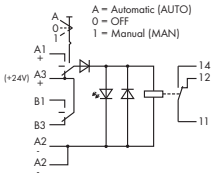
Relay Modules in DIN-Rail Mounted Enclosure

	Relay with 1 changeover contact (1 u), manual-0-automatic switch with switch position monitoring	Capability of different lamp loads: (switching operations acc. to EN 60669)



Type of load	Capability	Electrical life
Incandescent lamp	2200 W	20.000
Halogen lamp 230 V AC	1400 W	50.000
Halogen trafo	120 VA	20.000
Fluorescent lamp not comp., CB, cos φ 0,4-0,6	20 x 58 W	25.000
Fluorescent lamp comp., Conv. ballast, C parallel	9 x 58 W	25.000
Fluorescent lamp comp., Conv. ballast, Duo-circuit	600 W	20.000
Fluorescent lamp with electronic ballast	12 x 58 W	25.000
Energy saving lamp 15 W	25 pcs	20.000
Energy saving lamp 13 W	30 pcs	20.000
Energy saving lamp 9 W	38 pcs	20.000
Gas discharge lamp	1000 W	20.000
Dulux-Lamp not compensated	800 W	20.000
Dulux-Lamp compensated	500 W	20.000
Max. capacitance at 230 V AC	60 µF	min. 5.000

Note:
Inductive loads have to be attenuated by an appropriate protective circuit in order to protect relay coils and contacts!



Description	V_N	Item No.	Pack. Unit	
Relay modules in DIN-rail mounted enclosure, for DIN 35 rail	24 V DC	**789-329**	1	

Technical Data

Accessories see page 162

Contact material	Ag alloy
Input voltage range	V_N -15 % ... +20 %
Current input at rated voltage (coil 20 °C)	19mA
Max. switching voltage	250 V AC
Max. make current	120 A at 230 V AC (50 ms)
Max. continuous current	12 A
Max. Switching power (resistive)	4000 VA AC, resistance see load limit curve
Recommended minimum load	> 100 mA / 12 V AC/DC
Operating power	400 mW
Pull-in/drop-out/bounce time typ.	15 ms / 5 ms / -
Nominal operating mode	continuous duty
Dielectric strength contact-coil	4 kV_{eff}
Surge capacity open contact	1 kV_{eff}
Nominal voltage acc. to IEC 60664-1	250 V / 4 kV / 3
Mechanical life	10 x 10^6 switching operations
Mechanical life at max. load (resistance)	min. 100.000 switching operations
Mechanical life at max. lamp load	see "Lamp loads" table
Signaling	Switch position monitoring
	(B1 = automatic, B3 = manual;
	max. 1 A, 24 V DC)
Ambient operating temperature	-25 °C ... +40 °C
Storage temperature	-40 °C ... +70 °C
Dimensions (mm) W x H x L	17,5 x 55 x 90
	Height from upper-edge of DIN 35 rail
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Stripped lengths	5 ... 6 mm / 0.22 in
Standards/Specifications	DIN VDE 0160 EN 50178, degree of protection II
(OT = On-time)	

Accessories, 789 Series

Push-in type jumper bars

Commoning

Description		Item No.	Pack. Unit
Push-in type jumper bars	uninsulated, 12-way, to be cut to the required length	**789-112**	100 (4x25)

Operating tool

Wire connection

Marking pen with fibre tip

Description		Item No.	Pack. Unit
Marking pen	for permanent marking	**210-110**	1
Operating tool, with partially insulated shaft	Type 2, blade (3.5 x 0.5) mm	**210-720**	1

Miniature quick marking card

Marking

Description		Item No.	Pack. Unit
Miniature WSB Quick marking system	**plain**	**248-501**	5 cards
Marking software and printer/plotter see Section 8			
Marking	**1 ...10 (10 x)**	**248-502**	5 cards
	11 ... 20 (10x)	**248-503**	5 cards
	21 ... 30 (10x)	**248-504**	5 cards
	31 ... 40 (10x)	**248-505**	5 cards
	41 ... 50 (10 x)	**248-506**	5 cards
	1 ... 50 (2 x)	**248-566**	5 cards
	K 1 ... K 10 (10 x)	**248-450**	5 cards
	K 11 ... K 20 (10 x)	**248-451**	5 cards
	K 100 (10 x)	**248-452**	5 cards
	U 1 ... U 10 (10 x)	**248-453**	5 cards
	U 11 ... U 20 (10 x)	**248-454**	5 cards
	U 100 (10 x)	**248-455**	5 cards
10 strips with 10 markers, white with black printing			