

# Description

# Legacy General Purpose Relays

## 788R Series

### DPDT and 3PDT 10 A



7885 Clear Cover



7885 Full-Feature Cover

## Description

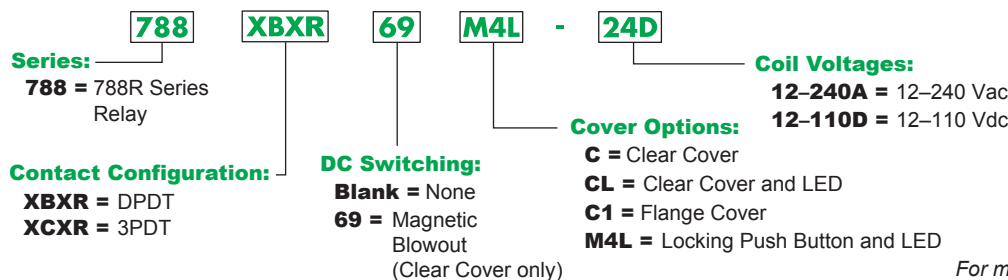
The 788R Series square base, plug-in relays offer clear, full-feature, top flange, and side flange covers as well as optional sockets and accessories.

Feature	Benefit
10 A max. switching current	Ideal choice for automation panels and controls
Clear or full-feature cover options	Full-feature covers include an LED indicator and a locking test button
DPDT and 3PDT contact configurations	Simultaneous control of separate circuits
Socket-mounting option	Simplified installation and maintenance; use of protection modules, hold-down clips, and other accessories
Gold-flashed contacts	Reduced contact oxidation and increased shelf life
Mechanical flag indicator (standard)	Display of the relay status during testing or operation

Contact Rating	Contact Configuration	Nominal Voltage	Coil Resistance (Ω)	Standard Part Number			
				Clear Cover	Clear Cover with LED	Flange Mount	Full-Feature
10 A	DPDT	24 Vac, 50/60 Hz	72	788XBXRC-24A	788XBXRCL-24A	788XBXRC1-24A	788XBXRM4L-24A
		48 Vac, 50/60 Hz	290	—	—	—	788XBXRM4L-48A
		120 Vac, 50/60 Hz	1700	788XBXRC-120A	788XBXRCL-120A	788XBXRC1-120A	788XBXRM4L-120A
		240 Vac, 50/60 Hz	6800	788XBXRC-240A	788XBXRCL-240A	788XBXRC1-240A	788XBXRM4L-240A
		12 Vdc	120	788XBXRC-12D	788XBXRCL-12D	788XBXRC1-12D	788XBXRM4L-12D
		24 Vdc	470	788XBXRC-24D	788XBXRCL-24D	788XBXRC1-24D	788XBXRM4L-24D
		48 Vdc	1800	788XBXRC-48D	788XBXRCL-48D	788XBXRC1-48D	788XBXRM4L-48D
	110 Vdc	7300	788XBXRC-110D	788XBXRCL-110D	788XBXRC1-110D	788XBXRM4L-110D	
	3PDT	12 Vac, 50/60 Hz	16.9	788XCXRC-12A	—	—	—
		24 Vac, 50/60 Hz	72	788XCXRC-24A	788XCXRCL-24A	788XCXRC1-24A	788XCXRM4L-24A
		48 Vac, 50/60 Hz	290	—	—	—	788XCXRM4L-48A
		120 Vac, 50/60 Hz	1700	788XCXRC-120A	788XCXRCL-120A	788XCXRC1-120A	788XCXRM4L-120A
		240 Vac, 50/60 Hz	6800	788XCXRC-240A	788XCXRCL-240A	788XCXRC1-240A	788XCXRM4L-240A
		12 Vdc	120	788XCXRC-12D	788XCXRCL-12D	788XCXRC1-12D	788XCXRM4L-12D
24 Vdc		470	788XCXRC-24D	788XCXRCL-24D	788XCXRC1-24D	788XCXRM4L-24D	
48 Vdc	1800	788XCXRC-48D	788XCXRCL-48D	788XCXRC1-48D	788XCXRM4L-48D		
110 Vdc	7300	788XCXRC-110D	788XCXRCL-110D	788XCXRC1-110D	788XCXRM4L-110D		

Note: Magnetic blowout versions are also available with an added contact rating of 3 A at 150 Vdc. Refer to the Part Number Explanation shown below.

## Part Number Explanation



For more information, contact Customer Service (1-847-441-2540).

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DPDT and 3PDT 10 A

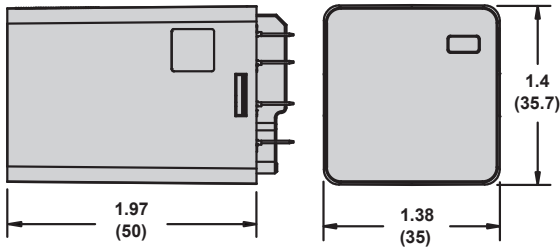
## Specifications

Part Number		788XBXR	788XCXR
<b>Contact Characteristics</b>			
Terminal Style		Blade	Blade
Contact Material		Silver Alloy	Silver Alloy
Contact Configuration		DPDT	3PDT
Carrying Current		10 A	10 A
Maximum Switching Voltage		IEC: 250 Vac / 28 Vdc UL/CSA: 300 Vac / 30 Vdc	IEC: 250 Vac / 28 Vdc UL/CSA: 300 Vac / 30 Vdc
Rated Switching Current (Conforming to IEC AC-1 and DC-1)		N.O.: 10 A at 250 Vac / 28 Vdc N.C.: 5 A at 250 Vac / 28 Vdc	N.O.: 10 A at 250 Vac / 28 Vdc N.C.: 5 A at 250 Vac / 28 Vdc
Rated Switching Current (Conforming to UL)	Resistive	10 A at 277 Vac, 50/60 Hz, 200 k cycles 10 A at 30 Vdc, 200 k cycles	10 A at 277 Vac, 50/60 Hz, 200 k cycles 10 A at 30 Vdc, 200 k cycles
	Motor	1/3 hp at 120 Vac, 6 k cycles 1 hp at 277 Vac, 6 k cycles	1/3 hp at 120 Vac, 6 k cycles 1 hp at 277 Vac, 6 k cycles
	Pilot Duty	B300, 6 k cycles	B300, 6 k cycles
Rated Current with Magnetic Blowout (Code 69)		UL: 3 A at 150 Vdc (DPDT only), 6 k cycles	UL: 3 A at 150 Vdc (DPDT only), 6 k cycles
Minimum Switching Requirement		10 mA at 17 Vdc	10 mA at 17 Vdc
<b>Coil Characteristics</b>			
Maximum Operating Voltage		110% (AC/DC)	110% (AC/DC)
Maximum Pickup Voltage		85% (AC); 80% (DC)	85% (AC); 80% (DC)
Drop-out Voltage Threshold		15% (AC); 10% (DC)	15% (AC); 10% (DC)
Average Consumption		3 VA (AC); 1.4 W (DC)	3 VA (AC); 1.4 W (DC)
<b>General Characteristics</b>			
Electrical Life at Rated Load		100,000 operations	100,000 operations
Mechanical Life (Unpowered)		5,000,000 operations	5,000,000 operations
Operating Time		20 ms	20 ms
Dielectric Strength	Between Coil and Contact (AC)	2500 V (rms)	2500 V (rms)
	Between Poles (AC)	2000 V (rms)	2000 V (rms)
	Between Open Contacts (AC)	1500 V (rms)	1500 V (rms)
Ambient Air Temperature Around the Device	Storage	-40 to +85 °C (-40 to +185 °F)	-40 to +85 °C (-40 to +185 °F)
	Operation	-40 to +55 °C (-40 to +131 °F)	-40 to +55 °C (-40 to +131 °F)
Vibration Resistance—In Operation		±1 mm (10–35 Hz) and 3 gn (35–150 Hz)	±1 mm (10–35 Hz) and 3 gn (35–150 Hz)
Shock Resistance		10 gn	10 gn
Degree of Protection (Housing Only)		IP40	IP40
Weight		83 g (2.93 oz)	83 g (2.93 oz)
Agency Approvals		UL with socket, UR (E164862), CE, CSA (LR44087), RoHS	UL with socket, UR (E164862), CE, CSA (LR44087), RoHS

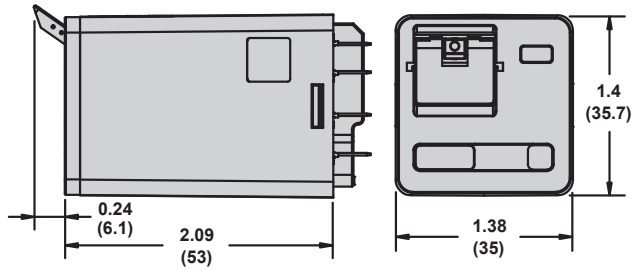
Note: Actual product performance may vary depending on the application and environmental conditions.

## Dimensions, in. (mm)

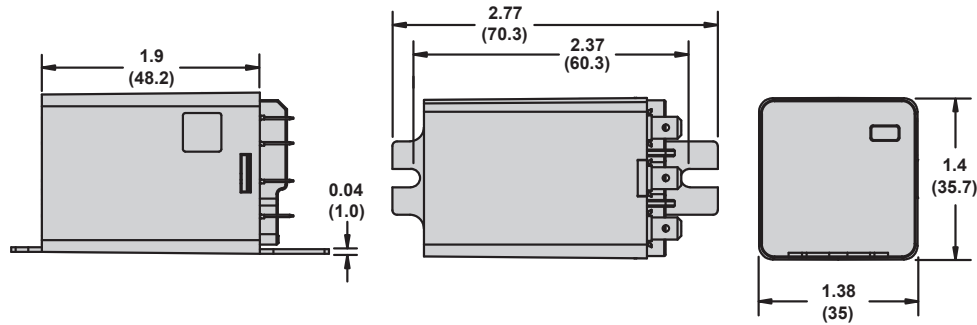
### Clear Cover Dimensions



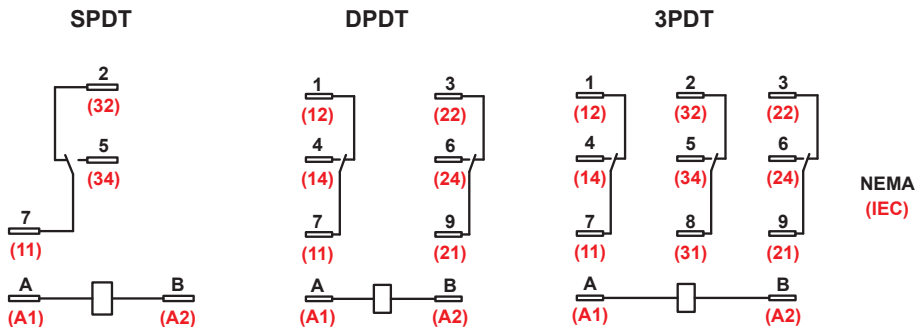
### Full-Feature Cover Dimensions



### Side Flange Cover Dimensions

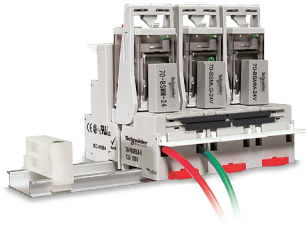


## Wiring Diagrams



# Legacy General Purpose Relays

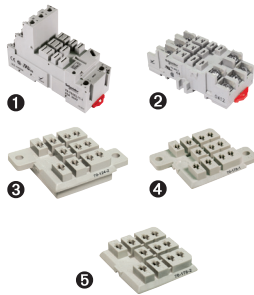
## 788R Series Accessories



### Description

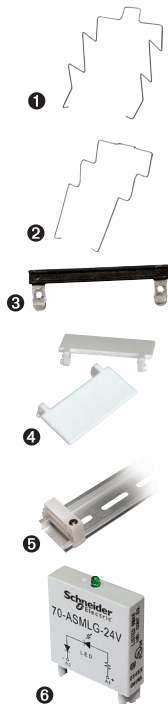
Optional sockets offer customizable solutions including protection modules, hold-down clips, and ID tags. Sockets are finger-safe according to IP20, and compatible with DIN rail or panel mounting.

### Relay Accessories



Description	Function	For Use with Relays	Pkg. Min.	Standard Part Number
Socket 1	DIN mounting with elevator terminals	788XBXR/ XCXR	10	70-788EL11-1
Socket 2	DIN or panel mounting with screw terminals and clamping plates		10	70-463-1
Socket 3	0.187 in. Quick Connect terminals with mounting tabs		10	70-124-2
Socket 4	Printed circuit terminals—with mounting tabs		10	70-178-1
Socket 5	Printed circuit terminals—without mounting tabs		10	70-178-2

### Socket Accessories



Description	Function	For Use with Sockets	Coil Voltage	Pkg. Min.	Standard Part Number
Metal Spring Clip 1	Securing the relay in the socket	70-788EL11-1, 70-463-1, 70-124-1, 70-178-1, 70-178-2	—	10	16-1351
Metal Spring Clip 2	Securing the relay in the socket	70-463-1	—	10	16-1344
Insulated Coil Bus Jumper System 3	Wireless socket connection	70-788EL11-1	—	10	16-750/788CBJ-1
Plastic ID Tag 4	Write-on plastic labels		—	10	16-750/788FT-1
Extruded Aluminum DIN Rail, 1 m (39.37 in.) 5	Quick installation and removal of sockets	70-788EL11-1, 70-463-1	—	10	16-700DIN
DIN Rail End Clip 6	Holding the sockets firmly in place on a DIN rail	—	—	10	16-DCLIP-1
<b>Large Socket Module</b>					
MOV Suppressor	Protection from damaging electrical spikes	70-788EL11-1	24 Vac/Vdc	10	70-ASMM-24
Protection Diode	Protecting the external drive circuitry from inductive voltages		250 Vdc	10	70-ASMD-250
LED Indicator 6	Providing coil status at a glance		110/240 Vac/Vdc	10	70-ASMLG-110/240
RC Suppressor	Snubbing back the EMF of the relay coil		110/240 Vac	10	70-ASMR-110/240

Note: Using an LED or RC socket module can increase the coil power draw by up to 10%.