

Schneider Electric/Legacy Electric General Purpose Relays

788 Series

SPDT, DPDT, 3PDT 12 A



UL listed when used with proper Schneider Electric/Legacy Electric sockets



788 Clear Cover



788 Full-Feature Cover

Description

The 788 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
12 A max. switching current	Ideal for automation panels & controls
Clear or full-feature cover options	Full-feature covers include LED indicator & locking test button
SPDT, DPDT & 3PDT contact configurations	Simultaneously control separate circuits
Socket mount option	Simplifies installation & maintenance while also allowing the use of protection modules, hold-down clips & other accessories
Gold-flashed contacts	Reduces contact oxidation & increases shelf life
Mechanical flag indicator	Standard feature displays relay status during testing or operation

Contact Rating	Contact Configuration	Nominal Voltage	Coil Resistance (Ω)	Feature	Standard Part Number: Clear Cover	Standard Part Number: Full-Feature
3 A at 150 Vdc	DPDT	120 Vac 50/60 Hz	1700	Blowout magnet	788XB69C-120A	—
		24 Vdc	470		788XB69C-24D	—
	SPDT	24 Vac 50/60 Hz	72	—	788XAXC-24A	—
		120 Vac 50/60 Hz	1700	—	788XAXC-120A	—
		12 Vdc	120	Flange Mount	788XAXC1-120A	—
				—	788XAXC-12D	—
		24 Vdc	470	Flange Mount	788XAXC1-12D	—
				—	788XAXC-24D	—
		24 Vdc	470	Flange Mount	788XAXC1-24D	—
				—	788XAXC-24D	—
	DPDT	24 Vac 50/60 Hz	72	—	788XBXC-24A	788XBXM4L-24A
		120 Vac 50/60 Hz	1700	—	788XBXC-120A	788XBXM4L-120A
		12 Vdc	120	Flange Mount	788XBXC1-120A	—
				—	788XBXC-12D	788XBXM4L-12D
		24 Vdc	470	Flange Mount	788XBXC1-12D	—
				—	788XBXC-24D	788XBXM4L-24D
		24 Vdc	470	Flange Mount	788XBXC1-24D	—
				—	788XBXC-24D	788XBXM4L-24D
	3PDT	110/125 Vdc	10000	—	788XBXC-110D	—
		24 Vac 50/60 Hz	72	—	788XCXC-24A	788XCXM4L-24A
		120 Vac 50/60 Hz	1700		788XCXC-120A	788XCXM4L-120A
		12 Vdc	120		788XCXC-12D	788XCXM4L-12D
		24 Vdc	470		788XCXC-24D	788XCXM4L-24D
		110/125 Vdc	10000		—	788XCXM4L-110D

Part Number Explanation

Series: 788 = 788 Series Relay	Contact Configuration: XAX = SPDT XBX = DPDT XCX = 3PDT	DC Switching: Blank = None 69 = Magnetic Blowout	Cover Options: C = Clear Cover C1 = Flange Cover M4L = Locking push button & LED	Coil Voltages: VAC = 6-240A VDC = 6-125D
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*Please note that LED-only versions are also available. Please contact Customer Service for more information (847-441-2540).

Schneider Electric/Legacy Electric General Purpose Relays

788 Series

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Specifications (UL 508)

Part Number	788XAX	788XBX/XCX
Contact Characteristics		
Terminal Style	Blade	Blade
Contact Configuration	SPDT	DPDT/3PDT
Maximum Current	12 A	12 A
Current Rating with Magnetic Blowout (69 feature)	–	3 A at 150 Vdc (DPDT only)
Contact Materials	Silver Alloy	Silver Alloy
Maximum Switching Voltage	300 V	300 V
Rated Switching Current at Voltage	Resistive: 12 A at 120 Vac 50/60 Hz; 16 A at 277 Vac 50/60 Hz; 16 A at 28 Vdc Motor: 1/2 hp at 240 Vac 50/60 Hz; 1/3 hp at 120 Vac 50/60 Hz Pilot Duty: B300	Resistive: 12 A at 120 Vac 50/60 Hz; 16 A at 277 Vac 50/60 Hz; 16 A at 28 Vdc Motor: 1/2 hp at 240 Vac 50/60 Hz; 1/3 hp at 120 Vac 50/60 Hz Pilot Duty: B300
Rated Current with Magnetic Blowout (Code 69)	–	3 A at 150 Vdc
Minimum Switching Requirement	100 mA at 5 Vdc (0.5 W)	100 mA at 5 Vdc (0.5 W)
Coil Characteristics		
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)
General Characteristics		
Electrical Life at Rated Load	100,000 operations	100,000 operations
Mechanical Life (Unpowered)	5,000,000 operations	5,000,000 operations
Operating Time (Response Time)	20 ms	20 ms
Dielectric Strength - Between Coil and Contact (AC)	2500 V(rms)	2500 V(rms)
Dielectric Strength - Between Poles (AC)	2500 V(rms)	2500 V(rms)
Ambient Air Temperature around the Device - Storage	-40 – +85 °C (-40 – +185 °F)	-40 – +85 °C (-40 – +185 °F)
Ambient Air Temperature around the Device - Operation	-40 – +55 °C (-40 – +131 °F)	-40 – +55 °C (-40 – +131 °F)
Vibration Resistance - Operational	3 g-n at 10-55 Hz	3 g-n at 10-55 Hz
Shock Resistance	10 g-n	10 g-n
Degree of Protection	IP 40	IP 40
Weight	88 g (3.10 oz)	88 g (3.10 oz)
Agency Approvals	UL with socket, UR (E43641), CE, CSA (LR40787), RoHS	UL with socket, UR (E43641), CE, CSA (LR40787), RoHS

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

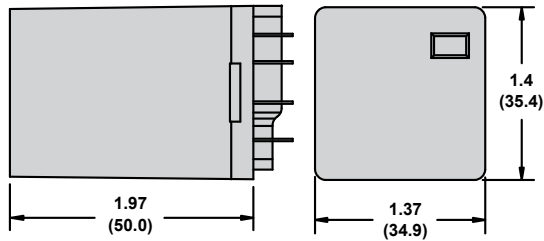
Schneider Electric/Legacy Electric General Purpose Relays

788 Series

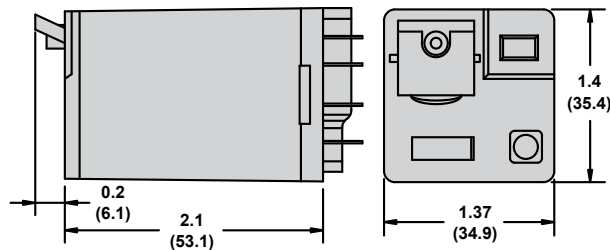
SPDT, DPDT, 3PDT 12 A

Dimensions — inches (millimeters)

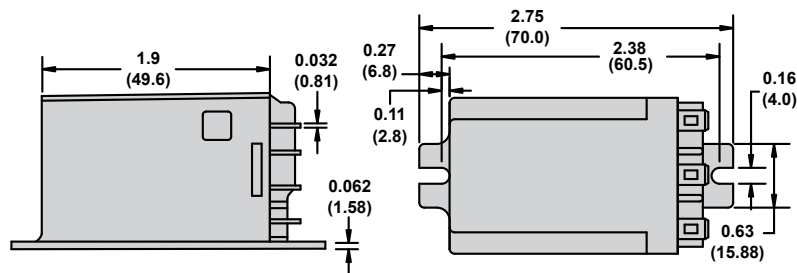
Plain Cover Dimensions



Full-Feature Cover Dimensions

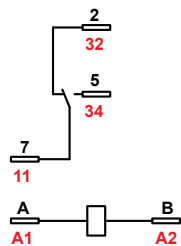


Top Flange Cover Dimensions - Code C1



Wiring Diagrams

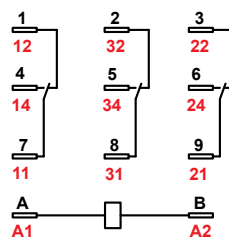
SPDT



DPDT



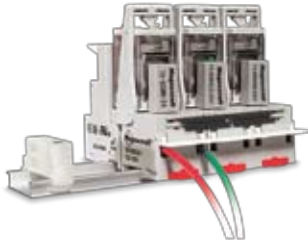
3PDT



NEMA
IEC

Description

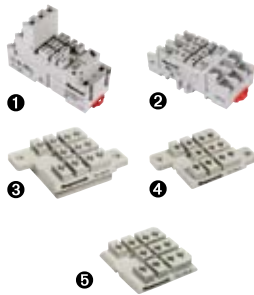
Schneider Electric/Legacy Electric General Purpose Relays 788 Series Accessories



Description

Optional sockets offer customizable, finger-safe™ solutions including protection modules, hold-down clips, and ID tags. Sockets are DIN rail and panel mount compatible.

Relay Accessories



Description	Function	For Use With Relays	Pkg. Min.	Standard Part Number
Socket ①	DIN mount with elevator terminals	788XAX / XBX / XCX	10	70-788EL11-1
Socket ②	DIN/Panel mount with screw terminals & 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	Secures relay in socket	70-788EL11-1, 70-463-1, 70-124-1, 70-178-1, 70-178-2	–	10	16-1351
Metal Spring Clip ②	Secures relay in 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 I.D. Tag ④	Write-on plastic labels	70-788EL11-1	–	10	16-750/788FT-1
Extruded Aluminum DIN Rail, 39.37" (1000 mm) ⑤	Quick installation and removal of sockets	70-788EL11-1, 70-463-1	–	10	16-700DIN
DIN Rail End Clip ⑥	Holds sockets firmly in place on DIN rail	–	–	10	16-DCLIP-1
Large Socket Module	MOV Suppressor (Protects from damaging electrical spikes)	70-788EL11-1	24 Vac/Vdc	10	70-ASMM-24
Large Socket Module	Protection Diode (Protects external drive circuitry from inductive voltages)		120 Vac/Vdc	10	70-ASMD-250
Large Socket Module ⑥	LED Indicator (Provides coil status at a glance)		110/240 Vac/Vdc	10	70-ASMLG-110/240
Large Socket Module	RC Suppressor (Snubs back EMF of relay coil)		110/240 Vac/Vdc	10	70-ASMR-110/240

Note: Use of LED or RC socket module may increase coil power draw by up to 10%.