Legacy General Purpose Relays

781R Series

SPDT 15 A

UL Listed when used with corresponding sockets



781R Clear Cover



781R Full-Feature Cover

Description

The 781R Series plug-in relays offer clear or full-feature covers with multiple mounting options and accessories.

Feature	Benefit
15 A max. switching current	Ideal choice for automation control panels
14 mm width	Slim design to save valuable space
Clear or full-feature cover options	Full-feature covers include an LED indicator and a locking test button
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	Full-Feature
15 A	SPDT	12 Vac, 50/60 Hz	44	781XAXRC-12A	781XAXRCL-12A	781XAXRM4L-12A
		24 Vac, 50/60 Hz	177	781XAXRC-24A	781XAXRCL-24A	781XAXRM4L-24A
		48 Vac, 50/60 Hz	708	781XAXRC-48A	781XAXRCL-48A	781XAXRM4L-48A
		120 Vac, 50/60 Hz	4,430	781XAXRC-120A	781XAXRCL-120A	781XAXRM4L-120A
		240 Vac, 50/60 Hz	17,720	781XAXRC-240A	781XAXRCL-240A	781XAXRM4L-240A
		12 Vdc	115	781XAXRC-12D	781XAXRCL-12D	781XAXRM4L-12D
		24 Vdc	450	781XAXRC-24D	781XAXRCL-24D	781XAXRM4L-24D
		48 Vdc	1,800	781XAXRC-48D	781XAXRCL-48D	781XAXRM4L-48D
		110 Vdc	9,460	781XAXRC-110D	781XAXRCL-110D	781XAXRM4L-110D

Part Number Explanation

781 XAXR M4L - 24D

Series:
781 = 781R Series Relay

Contact Configuration:
XAXR = SPDT

Cover Options:
C = Clear Cover
CL = Clear Cover and LED
M4L = Locking Push Button and LED

Coil Voltages:
12–240A = 12–240 Vac
12–110D = 12–110 Vdc

For more information, contact customer service (1-847-441-2540).

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Specifications

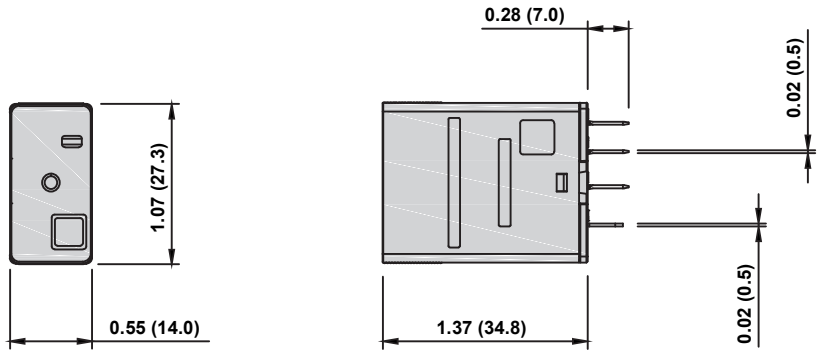
Part Number		781XAXR
Contact Characteristics		
Terminal Style		Blade
Contact Material		Silver Alloy
Contact Configuration		SPDT
Carrying Current		15 A
Maximum Switching Voltage		IEC: 250 Vac / 28 Vdc UL/CSA: 300 Vac / 28 Vdc
Rated Switching Current at Voltage (Conforming to IEC AC-1 and DC-1)	at 250 Vac	N.O.: 15 A; N.C.: 7.5 A
	at 28 Vdc	N.O.: 15 A; N.C.: 7.5 A
Rated Switching Current at Voltage (Conforming to UL)	Resistive	15 A at 277 Vac, 50/60 Hz, 100 k cycles 15 A at 28 Vdc, 100 k cycles
	Motor	1/2 hp at 120 Vac, 1 k cycles 1 hp at 277 Vac, 1 k cycles
	Pilot Duty	B300
Rated Switching Current at Voltage (Conforming to CSA)	Resistive	15 A at 150 Vac, 50/60 Hz, 100 k cycles 10 A at 277 Vdc, 100 k cycles 15 A at 28 Vdc, 100 k cycles
	Motor	1/2 hp at 120 Vac, 1 k cycles 1 hp at 277 Vac, 1 k cycles
	Pilot Duty	B300
Minimum Switching Requirement		10 mA at 17 Vdc
Coil Characteristics		
Maximum Operating Voltage		110% (AC/DC)
Maximum Pickup Voltage		85% (AC/DC)
Drop-out Voltage Threshold		15% (AC); 10% (DC)
Average Consumption		Standard: 1.6 VA (AC); 1.1 W (DC) With LED: 1.9 VA (AC); 1.4 W (DC)
General Characteristics		
Electrical Life at Rated Load		100,000 operations
Mechanical Life (Unpowered)		10,000,000 operations
Operating Time (Response Time)		20 ms
Dielectric Strength	Between Coil and Contact (AC)	2000 V (rms)
	Between Poles (AC)	2000 V (rms)
	Between Contacts (AC)	1500 V (rms)
Ambient Air Temperature Around the Device	Storage	−40 to +85 °C (−40 to +185 °F)
	Operation	−40 to +55 °C (−40 to +131 °F)
Vibration Resistance—In Operation		±1 mm (10–35 Hz) and 3 gn (35–150 Hz)
Shock Resistance		15 gn
Degree of Protection (Housing Only)		IP40
Weight		29 g (1.02 oz)
Agency Approvals		UL with socket, UR (E164862), CE, CSA (LR44087), RoHS

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

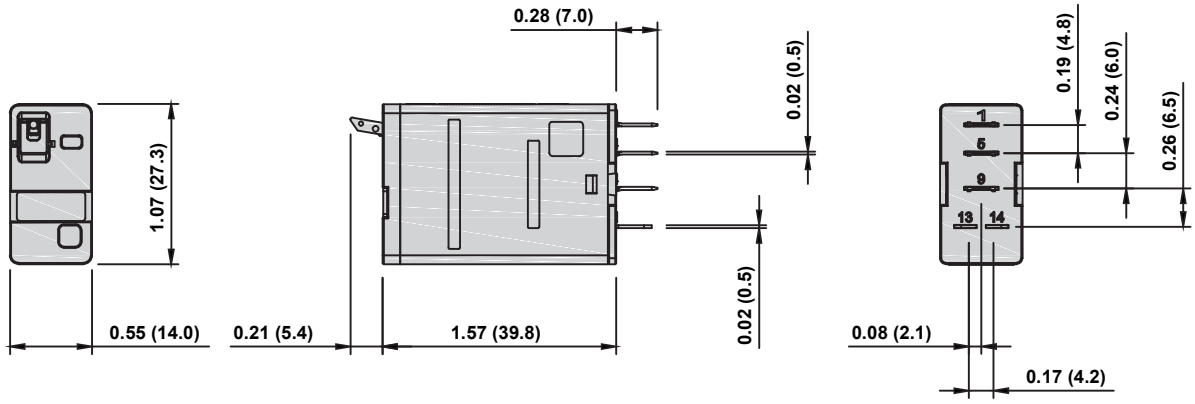
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Dimensions, in. (mm)

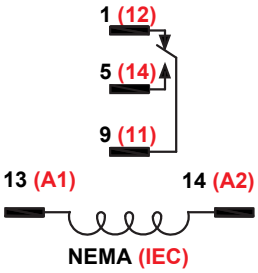
Clear Cover Dimensions



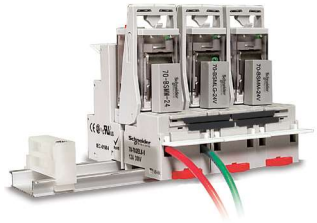
Full-Feature Cover Dimensions



Wiring Diagram

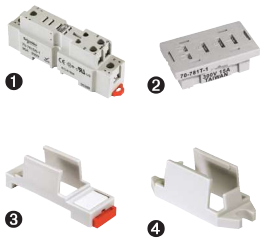


Legacy General Purpose Relays
781R Series Accessories



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 ❶	DIN or panel mounting with screw terminals and clamping plates	781XAXR	10	70-781D5R-1A
Socket ❷	PCB mounting		10	70-781T-1
Adapter ❸	Direct DIN rail mounting		10	16-781C
Adapter ❹	Direct panel mounting		10	16-781C1



Socket Accessories

Description	Function	For Use with Sockets	Coil Voltage	Pkg. Min.	Standard Part Number
Metal Spring Clip ❶	Securing the relay in the socket	70-781D5R-1A, 70-781T-1	—	10	16-781SC
Plastic ID Hold-Down Clip ❷	Securing the relay in the socket and providing labeling	70-781D5R-1A	—	10	16-781IDC
Extruded Aluminum DIN Rail, 1 m (39.37 in.) ❸	Quick installation and removal of sockets		—	10	16-700DIN
DIN Rail End Clip ❸	Holding the sockets firmly in place on a DIN rail	—	—	10	16-DCLIP-1
Small Socket Modules					
Protection Diode	Protecting the external drive circuitry from inductive voltages	70-781D5R-1A	6–250 Vdc	10	70-BSMD-250
LED Indicator ❹	Providing coil status at a glance		24 Vac/Vdc	10	70-BSMLG-24
MOV Suppressor	Protection from damaging electrical spikes		120 Vac/Vdc	10	70-BSMM-120
			24 Vac/Vdc	10	70-BSMM-24
			240 Vac/Vdc	10	70-BSMM-240

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