

Description

Magnecraft General Purpose Relays

781R Series

SPDT 15 A



UL listed when used with proper Magnecraft sockets



781R Clear Cover 781R Full-Feature Cover

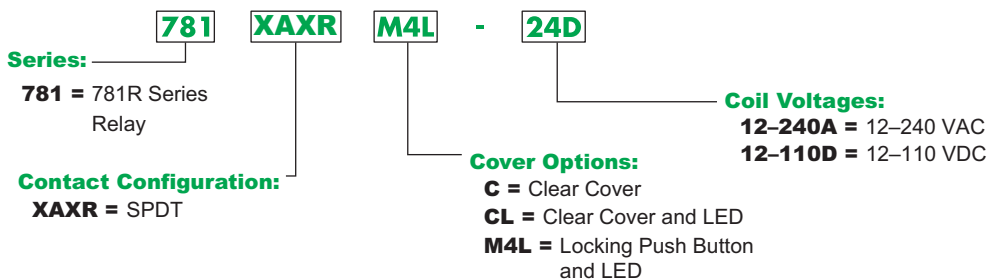
Description

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 for automation control panels
14 mm width	Slim design saves valuable space
Clear or full-feature cover options	Full-feature covers include LED indicator and locking test button
Socket mount option	Simplifies installation and maintenance while also allowing the use of protection modules, hold-down clips and other accessories
Gold-flashed contacts	Reduces contact oxidation and increases shelf life
Mechanical flag indicator	Standard feature displays relay status during testing or operation

Contact Rating	Contact Configuration	Nominal Voltage	Coil Resistance (Ω)	Standard Part Number: Clear Cover	Standard Part Number: Clear Cover with LED	Standard Part Number: Full-Feature
15 A	SPDT	12 Vac 50/60Hz	44	781XAXRC-12A	781XAXRCL-12A	781XAXRM4L-12A
		24 Vac 50/60Hz	177	781XAXRC-24A	781XAXRCL-24A	781XAXRM4L-24A
		48 Vac 50/60Hz	708	781XAXRC-48A	781XAXRCL-48A	781XAXRM4L-48A
		120 Vac 50/60Hz	4430	781XAXRC-120A	781XAXRCL-120A	781XAXRM4L-120A
		240 Vac 50/60Hz	17720	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	1800	781XAXRC-48D	781XAXRCL-48D	781XAXRM4L-48D
	110 Vdc	9460	781XAXRC-110D	781XAXRCL-110D	781XAXRM4L-110D	

Part Number Explanation



Please contact Customer Service for more information (847-441-2540).

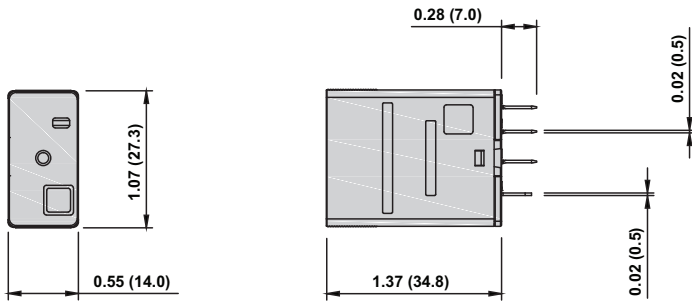
Specifications

Part Number	781XAXR
Contact Characteristics	
Terminal Style	Blade
Contact Configuration	SPDT
Maximum Current	15 A
Contact Materials	Silver Alloy
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)	NO: 15 A at 250 Vac, NC: 7.5 A at 250 Vac NO: 15 A at 28 Vdc, NC: 7.5 A at 28 Vdc
Rated Switching Current at Voltage (NO & NC) (Conforming to UL)	Resistive: 15 A at 120 Vac 50 / 60 Hz, 100k cycles Resistive: 15 A at 277 Vac 50 / 60 Hz, 100k cycles Resistive: 15 A at 28 Vdc, 100k cycles Motor: 1/2 HP at 120 Vac, 1k cycles Motor: 1 HP at 277 Vac, 1k cycles Pilot Duty: B300
Rated Switching Current at Voltage (NO & NC) (Conforming to CSA)	Resistive: 15 A at 120 Vac 50 / 60 Hz, 100k cycles Resistive: 10 A at 277 Vac 50 / 60 Hz, 100k cycles Resistive: 15 A at 28 Vdc, 100k cycles Motor: 1/2 HP at 120 Vac, 1k cycles Motor: 1 HP at 277 Vac, 1k 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)
Dielectric Strength - Between Poles (AC)	2000 V(rms)
Dielectric Strength - Between Contacts (AC)	1500 V(rms)
Ambient Air Temperature around the Device - Storage	-40 to +85 °C (-40 to +185 °F)
Ambient Air Temperature around the Device - Operation	-40 to +55 °C (-40 to +131 °F)
Vibration Resistance - Operational	+/- 1 mm (10-35 Hz) and 3 g-n (35-150 Hz)
Shock Resistance	15 g-n
Degree of Protection (Housing Only)	IP 40
Weight	29 g (1.02 oz)
Agency Approvals	UL with socket, UR (E164862), CE, CSA (225619), RoHS

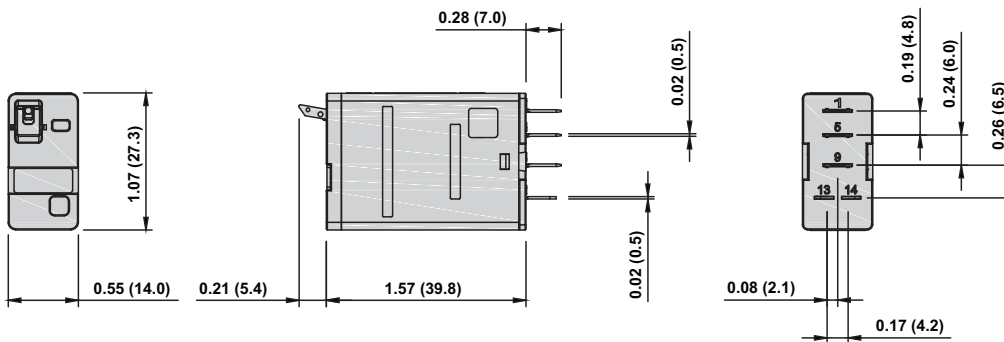
Note: Actual product performance may vary depending on application and environmental conditions.

Dimensions — inches (millimeters)

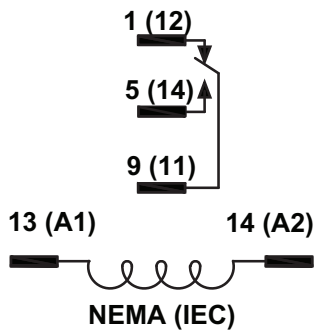
Clear Cover Dimensions



Full-Feature Cover Dimensions



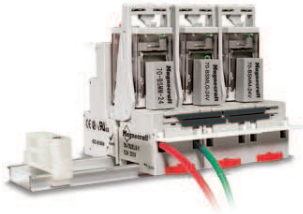
Wiring Diagram



Description

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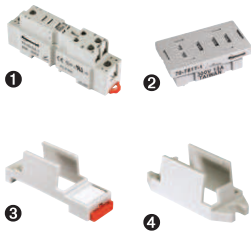
781R Series Accessories



Description

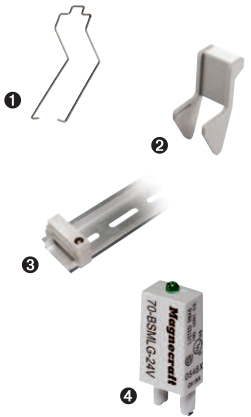
Optional sockets offer customizable, Fingersafe solutions including protection modules, hold-down clips, and ID tags. Sockets are DIN rail and panel mount compatible.

Relay Accessories



Description	Function	For Use With Relays	Pkg. Min.	Standard Part Number
Socket ①	DIN/Panel mount with screw terminals and clamping plates	781R	10	70-781D5R-1A
Socket ②	PCB-mount socket		10	70-781T-1
Adapter ③	Mount directly to DIN rail		10	16-781C
Adapter ④	Mount directly to panel		10	16-781C1

Socket Accessories



Description	Function	For Use With Sockets	Coil Voltage	Pkg. Min.	Standard Part Number
Metal Spring Clip ①	Secures relay in socket	70-781D5R-1A, 70-781T-1	–	10	16-781SC
Plastic ID Hold-Down Clip ②	Secures relay in socket and provides labeling	70-781D5R-1A	–	10	16-781IDC
Extruded Aluminum DIN Rail, 39.37" (1000 mm) ③	Quick installation and removal of sockets	70-781D5R-1A	–	10	16-700DIN
DIN Rail End Clip ④	Holds sockets firmly in place on DIN rail	–	–	10	16-DCLIP-1
Small Socket Module	Protection Diode <i>(Protects external drive circuitry from inductive voltages)</i>	70-781D5R-1A	6 to 250 Vdc	10	70-BSMD-250
Small Socket Module ④	LED Indicator <i>(Provides coil status at a glance)</i>		24 Vac/Vdc	10	70-BSMLG-24
Small Socket Module	MOV Suppressor <i>(Protects from damaging electrical spikes)</i>		120 Vac/Vdc	10	70-BSMM-120
			24 Vac/Vdc	10	70-BSMM-24
			240 Vac/Vdc	10	70-BSMM-240

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