



105ML Series Magnetic Latching Relay 5 & 10 Amp Plug-In Octal Base

Magnetic Latching relay that controls electrical loads

Features

- Snap-action, one piece armature eliminates interconnections
- Molded Class F coils handle high ambient temperatures, resist moisture and dust
- High impact Polycarbonate dust cover

Typical Applications

- Railroads • Public Transit

Models

- 105ML:** Magnetic latching relay terminates to standard pin type octal receptacles, Deltrol type 105 sockets for SPDT and DPDT, Conxall Type 77-20 Sockets for 3PDT, 4PDT and 5PDT

Contact Data	
Configuration	Thru 5PDT
Materials	5 Amp: 1/8" Diameter Moveable Fine Silver 3/16" Diameter Stationary Fine Silver 10 Amp: 3/16" Diameter Moveable Silver Cadmium Oxide 3/16" Diameter Stationary Fine Silver Gold Flash is Standard on all Contacts Gold Diffused Available on Special Order - Min Qty. Req'd
Contact Ratings	
Movable Contact Size	Pole Configuration
1/8" Diameter	SPDT DPDT 3PDT 4PDT 5PDT
3/16" Diameter	SPDT DPDT 3PDT 4PDT 5PDT
	UL Ratings
	5 Amp or 1/8 HP at 120 VAC 5 Amp or 1/4 HP at 240 VAC 5 Amp at 28 VDC
	10 Amp or 1/3 HP at 120 VAC 10 Amp or 1/2 HP at 240 VAC 10 Amp at 28 VDC
Expected Life	Electrical at Rated Load (Min) 100,000 Operations Mechanical Life 10,000,000 Operations
Dielectric Strength	800 VRMS, 60 Hz Between Contacts 1500 VRMS, 60 Hz Between Other Elements

All dimensions in Inches

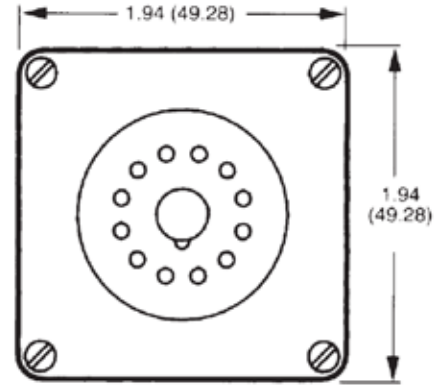
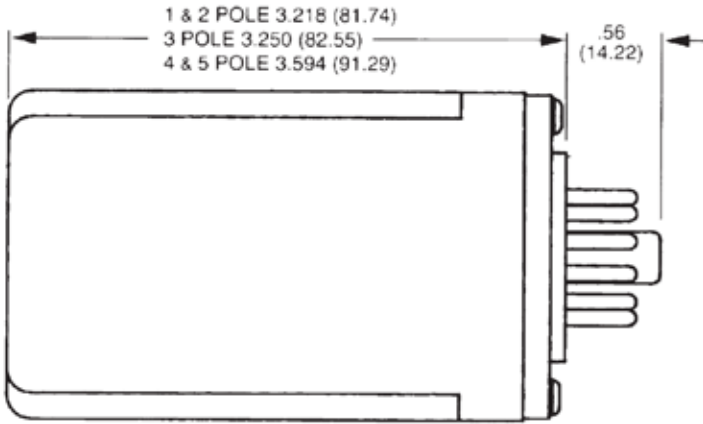
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Coil Data			
	Nominal Voltage	Resistance In Ohms \pm 10%	Nominal Coil Power
AC Coils	6 VAC	4.5	3.5 VA
	12 VAC	18	
	24 VAC	72	
	120 VAC	1850	
	240 VAC	7200	
DC Coils	6 VDC	20	2 W
	12 VDC	80	
	24 VDC	315	
	110 VDC	6800	
Coil Voltages	AC: Up to 277 Volts/60 Hz DC: Up to 125 Volts		
Coil Treatment	Molded Rynite® PET Std. Class F		
Insulation Resistance	100 Megohms Minimum		
UL Insulation System File No.	E74443 S155D 155°C Total Temperature Std. (Covers S105 Class A and S130D Class B Requirements)		
Operate Data			
Pick Up (at 25°C)	AC Volts 85% or Less of Nominal DC Volts 75% or Less of Nominal		
Operate Time	Approx. 20 Milliseconds		
Release Time	Approx. 20 Milliseconds		
Environmental Data			
Operating Ambient	AC: -45° to 70° DC: -45° to 85°C		
Coil Temperature Rise	(25°C Ambient - Continuous Duty) AC: 45°C Approx. @ 60Hz - Use at 50 Hz will cause slight increase in Coil Rise DC: 45°C Approx.		
Mechanical Data			
Terminals	Octal type with 8, 11, 20 pins		
Cover	Polycarbonate- Flammability Rating 94V2		
Weight	All Versions Approx. 8.6 oz. (244 g)		

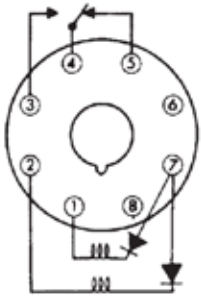
105ML

Dimensional View

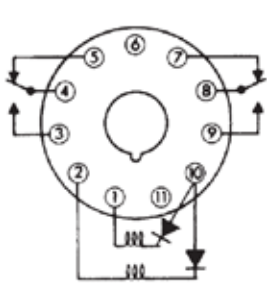
Units: Inches [mm]



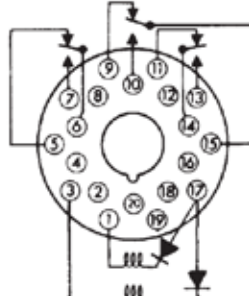
105ML WIRING DIAGRAMS



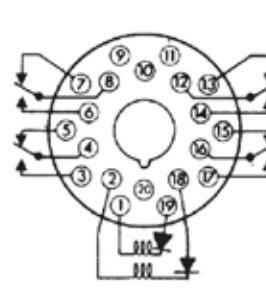
105ML - AC SPDT



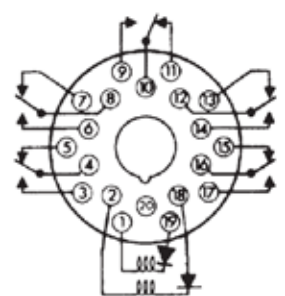
105ML - AC DPDT



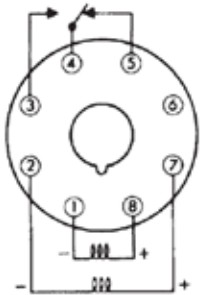
105ML - AC 3PDT



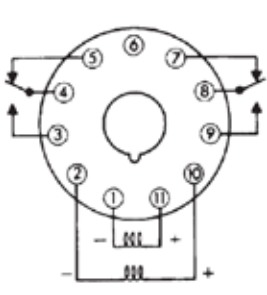
105ML - AC 4PDT



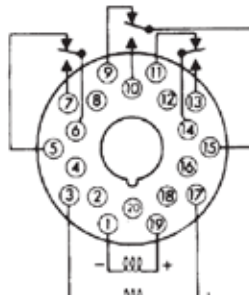
105ML - AC 5PDT



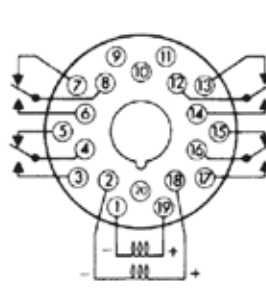
105ML - DC SPDT



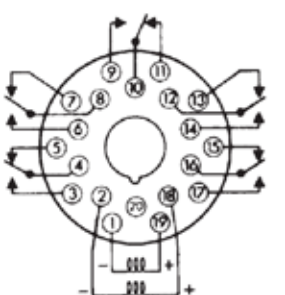
105ML - DC DPDT



105ML - DC 3PDT



105ML - DC 4PDT



105ML - DC 5PDT

(Shown With Pin 1 Energized)

Ordering Information

Pole Config.	AC Coils			DC Coils		
	24 VAC	120 VAC	240 VAC	12 VDC	24 VDC	110 VDC
SPDT	20034-82	20034-83*	20034-84	20037-81	20037-82*	20037-84
DPDT	20035-82	20035-83*	20035-84	20038-81	20038-82*	20038-84
3PDT	20036-82	20036-83	20036-84	20039-81	20039-82	20039-84
4PDT	20263-82	20263-83	20263-84	20261-81	20261-82	20261-83
5PDT	20267-82	20267-83	20267-84	20265-81	20265-85	20265-83

(*) Normally Stocked

Non stocked items require a minimum order