

100ML

# DELTROL

## controls



DIVISION OF DELTROL CORP.

# 100ML SERIES GENERAL PURPOSE MAGNETIC LATCHING RELAYS

### FEATURES

- Inexpensive, General Purpose Latching Relays
- Pole Configuration Up to 6PDT
- Molded Class F Coils Handle High Ambient Temperatures, Resist Moisture and Dust
- Snap Action, One Piece Armature Eliminates Interconnections
- No Power Required to Maintain Contact Status - Only a Pulse to Change

### CONTACT DATA

#### CONFIGURATION:

Thru 6PDT

#### 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

MOVEABLE CONTACT SIZE	POLE CONFIGURATION	UL RATINGS**
1/8" Diameter	SPDT	5 amp or 1/8 HP at 120 VAC 5 amp or 1/4 HP at 277VAC 5 amp at 28VDC
	DPDT	
	3PDT	
	4PDT	
	5PDT	
3/16" Diameter	6PDT	
	SPDT	10 amp or 1/3 HP at 120 VAC* 10 amp or 1/2 HP at 277VAC 10 amp at 28VDC
	DPDT	
	3PDT	
	4PDT	
	5PDT	
6PDT		

\* 3 Pole and 6 Pole Rated at 6-2/3 Amp When Switching Greater Than 150VAC Unless Polarity is the Same on All Poles

\*\* UL and CSA on Model 100ML and 101ML Only

**UL RECOGNIZED FILE NO.:** E37066

**CSA CERTIFIED FILE NO.:** LR20690

### EXPECTED LIFE

**Electrical At Rated Load (Minimum)**  
100,000 Operations

#### Mechanical Life

10,000,000 Operations

### DIELECTRIC STRENGTH

800 VRMS, 60 Hz Between Contacts  
2200 VRMS, 60 Hz Between Other Elements

### MODELS

**100ML:** 5 Amp Latching Relay

**101ML:** 10 Amp Latching Relay

**102ML:** 5 & 10 Amp Latching Relay. No UL or CSA Recognition

**103ML:** 5 & 10 Amp Latching Relay Polarized for Applications Requiring Rejection of Wrong Signals Responds to External Change in Operating Polarity. No UL Or CSA Recognition



### COIL DATA

	NOMINAL VOLTAGE	RESISTANCE IN OHMS ± 10%	NOMINAL COIL POWER
AC Coils	6VAC	4.5	3.5VA
	12VAC	18	
	24VAC	72	
	120VAC	1850	
	240VAC	7200	
DC Coils	6VDC	20	2W
	12VDC	80	
	24VDC	315	
	110VDC	6800	

**Coil Voltages:** AC: Up to 277 Volts/60 Hz  
DC: Up to 125 Volts

**Coil Treatment:** Molded Rynite® 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 85°C  
DC: -45° to 100°C

**Coil Temperature Rise:** (25°C Ambient – Continuous Duty)

AC: 45°C Approx. @ 60 Hz – Use at 50 Hz will Cause Slight Increase in Coil Rise

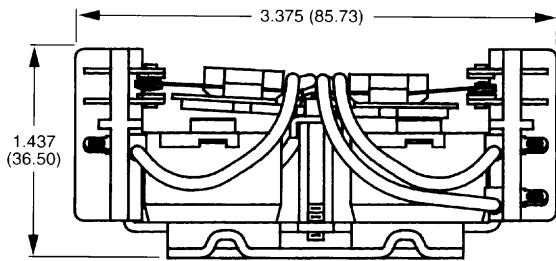
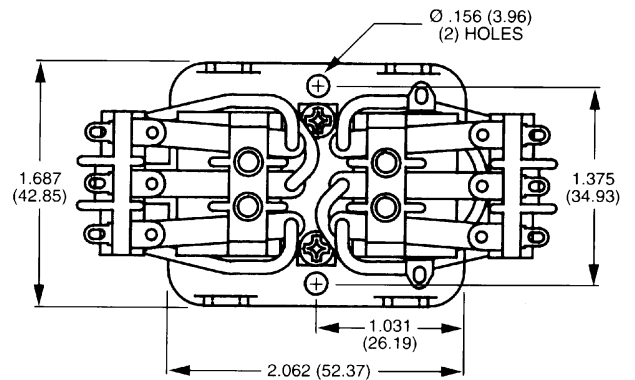
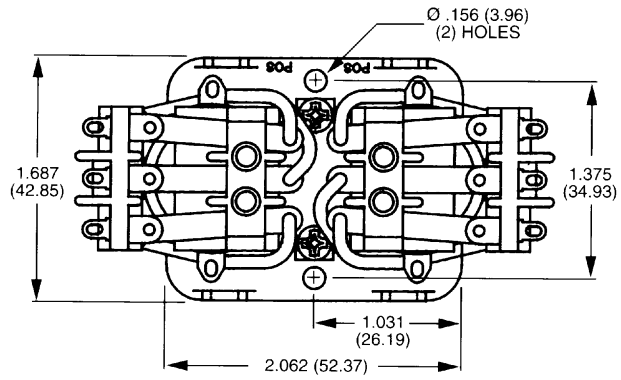
DC: 45°C Approx.

### MECHANICAL DATA

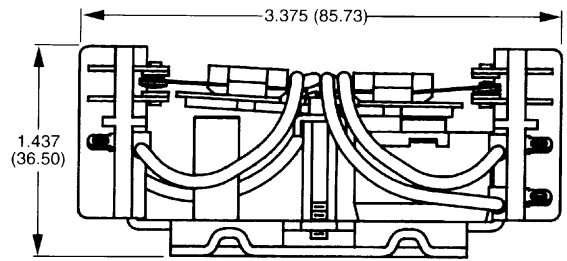
**Terminals:** All Versions Pierced Solder Lugs

**Weight:** Approx. 5 oz. (142 g)

## DIMENSIONS [Unit Inch (mm)]

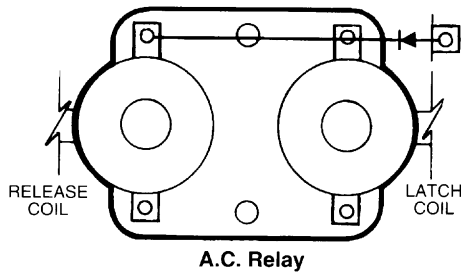


100ML/101ML

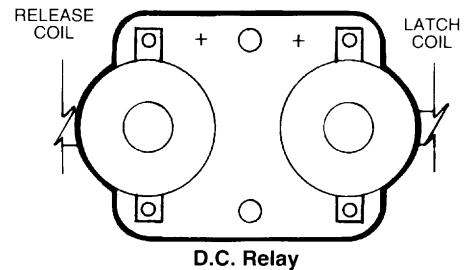


103ML

(102ML Dimensions Same as 103ML, but with Second Coil Added)



A.C. Relay



D.C. Relay

Note: Polarity Indicated Must be Observed

## ORDERING INFORMATION

### 5 AMP Part Numbers

MODEL	POLE CONFIG.	AC Coils			DC Coils		
		24VAC	120VAC	240VAC	12VDC	24VDC	110VDC
100ML	4PDT	20351-82	20351-83	20351-84	20024-81	20024-82	20024-83
	6PDT	20355-82	20355-83	20355-84	20026-81	20026-82	20026-83
102ML	4PDT	20028-82	20028-83	20028-84	---	---	---
	6PDT	20030-82	20030-83	20030-84	---	---	---

### 10 AMP Part Numbers

101ML	4PDT	20352-82	20352-83	20352-84	20025-81	20025-82	20025-83
	6PDT	20356-82	20356-83	20356-84	20027-81	20027-82	20027-83
102ML	4PDT	20029-82	20029-83	20029-84	---	---	---
	6PDT	20031-82	20031-83	20031-84	---	---	---

Blue Items Are Non Stock. Minimum Quantity May Be Required.