



177 SPDT



177 SPST-NO-DM

# 177 SERIES

## COMPACT INDUSTRIAL CONTROL RELAY

### 15 AND 30 AMP

### FEATURES

- Compact Design Yet Handles 30 Amps or 1 HP at 120VAC
- Molded Rynite® Coil Provides Class F Insulation
- Up Stop Provides Contact Protection on SPST-NO-DM
- 1/4" Diameter Silver Cadmium Oxide Contacts

### CONTACT DATA

#### CONFIGURATION:

Thru SPDT Including SPST-NO-DM

#### MATERIALS:

1/4" Diameter All Contacts  
Silver Cadmium Oxide (Std.)

### CONTACT RATINGS

MODEL	POLE CONFIGURATION	UL RATINGS*
177	SPST-NO SPST-NC SPDT	15 amp or 3/4 HP at 120VAC 15 amp or 1 HP at 240VAC 15 amp at 28VDC
	SPST-NO-DM SPST-NC-DB*	30 amp or 1 HP at 120VAC 20 amp or 1-1/2 HP at 240VAC 30 amp at 28VDC 20 amp at 480VAC (resistive) 30 amp at 12VDC (Tungsten)

\* SPST-NC-DB Not Presently Available

**UL RECOGNIZED FILE NO.:** E37066

**CSA CERTIFIED FILE NO.:** LR20690

### EXPECTED LIFE

#### Electrical At Rated Load (Minimum)

100,000 Operations Except as Noted

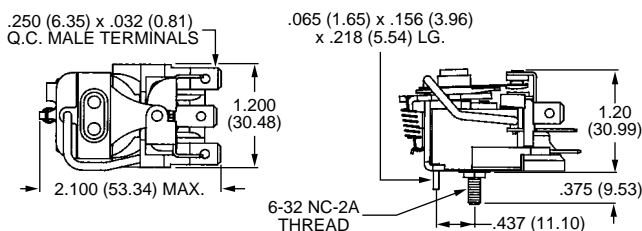
#### Mechanical Life

10,000,000 Operations

### DIELECTRIC STRENGTH

1200 VRMS, 60 Hz Between Contacts  
2200 VRMS, 60 Hz Between Other Elements

### DIMENSIONS [Unit Inch (mm)]



STANDARD WITH STUD SHOWN – OPTIONAL WITHOUT STUD



### COIL DATA

	NOMINAL VOLTAGE	RESISTANCE IN OHMS ± 10%	NOMINAL COIL POWER
AC Coils	6VAC	2.7	4.7VA
	12VAC	11	
	24VAC	42	
	120VAC	1100	
	240VAC	4400	
DC Coils	6VDC	18	2W
	12VDC	72	
	24VDC	285	
	110VDC	6000	

**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. 15 Milliseconds

**Release Time:** Approx. 15 Milliseconds

### ENVIRONMENTAL DATA

**Operating Ambient:** AC: -45° to 70°C  
DC: -45° to 100°C

**Coil Temperature Rise:** (25°C Ambient – Continuous Duty)  
AC: 70°C Approx. @ 60 Hz – Use at 50 Hz will Cause Slight Increase in Coil Rise  
DC: 45°C Approx.

### MECHANICAL DATA

**Terminals:** All Versions

.250" x .032" Quick Connect/Solder Type

**Weight:** Approx. 2.5 oz. (87 g)

### ORDERING INFORMATION

AC Coils				
	Pole Config.	24VAC	120VAC	240VAC
15 Amp Rating	SPST-NO	20952-82	20952-83	20952-84
	SPST-NC	20954-82	20954-83	20954-84
	SPDT	20950-82	20950-83	20950-84
30 Amp Rating	SPST-NO-DM	20935-82*	20935-83*	20935-84
DC Coils				
	Pole Config.	12VDC	24VDC	110VDC
15 Amp Rating	SPST-NO	20953-81	20953-82	20953-83
	SPST-NC	20955-81	20955-82	20955-83
	SPDT	20951-81	20951-82	20951-83
30 Amp Rating	SPST-NO-DM	20936-81*	20936-82*	20936-83

\*Black Items are Normally Stocked.

Blue Items are Non Stock. Minimum May Be Required.