



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

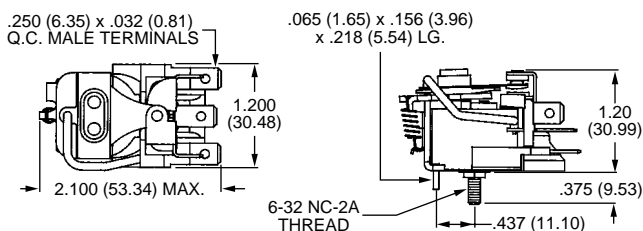
Mechanical Life

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.