

# 900 Series



## 900 Series Relay 30 and 50 Amp Heavy Duty Power Relay

General purpose relay that controls electrical loads

### Features

- Class F coil insulation system for 155°C Total Temperature
- Coil Molded in Dupont Rynite® PET for environmental protection
- Rugged construction rivets terminals to base
- 900, 900D and 900E are UL and cUL listed
- 900-1C, 900Q and 900R are UL and cUR recognized

### Typical Applications

- Motor Control • Control Panel Switching • Spa Controls

### Models

- 900:** Fast acting 30 Amp Power Relay
- 900-1C:** Same as 900 with addition of SPDT auxiliary snap switch rated 10 Amp, 1/4 HP
- 900Q:** Same as 900 with .250" Quick Connect Termination
- 900D:** Same as 900 with addition of blowout magnets for switching DC loads
- 900E:** Same as 900 with 50 Amp rating with box lug termination
- 900R:** Same as 900 with 50 Amp rating and standard screw terminals



Contact Data	
Configuration	Thru DPDT
Materials	5/16" Diameter Silver Cadmium Oxide (Fine Silver available on special order, min. qty. required)
Contact Ratings	
Movable Contact Size	Pole Configuration
900 900Q	SPST-NC short base SPST-NO short base SPST-NO-DM short base SPST-NC-DB long base
900-1C	SPDT short base DPST-NO short base DPST-NC long base
900D	DPST-NC short base DPDT long base
900E 900R	
UL Ratings	
30 Amp or 1 - 1/2 Hp at 120/240 VAC 2 Hp at 240 VAC, 3600 W at 120 or 240 VAC (ballast) 30 Amp at 240 VAC, 100,000 (cycle) resistive 20 Amp at 600 VAC 30 Amp at 28 VDC	
Same as 900 with addition of auxillary 1/4 HP at 125 or 250 VAC switch	
Same as 900 with additional rating of 20 Amp at 125 VDC	
50 Amp at 277 VAC resistive 100,000 cycles, 40 Amp general use (Inductive)	
Expected Life	Electrical at Rated Load (Min) 100,000 Operations   Mechanical Life 10,000,000 Operations
Dielectric Strength	2200 VRMS, 60 Hz Between Contacts   2200 VRMS, 60 Hz Between Other Elements
Agency Approvals	UL Recognized File No. E37066, 900, 900D and 900E are UL and cUL listed. Other versions are UR and cUR recognized (USA and Canadian Recognition)

Rynite® is a registered trademark of DuPont

All dimensions in Inches

# 900 Series

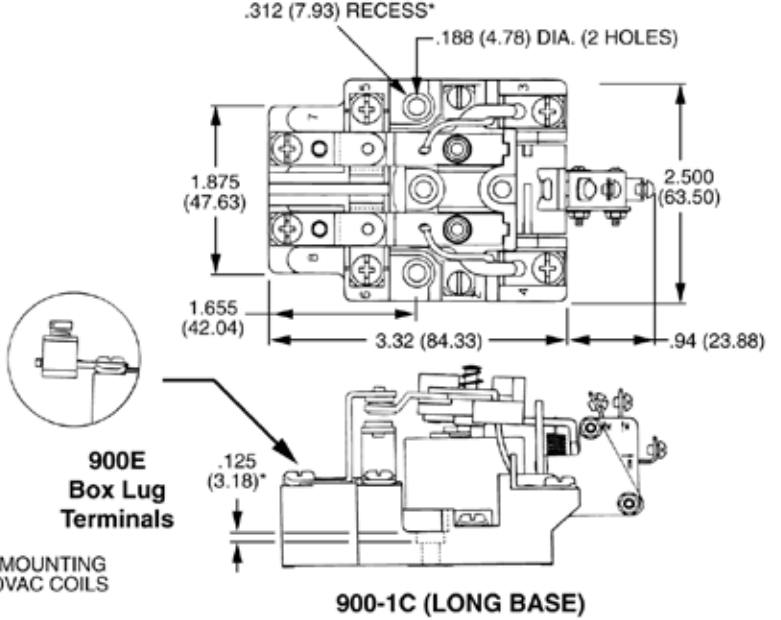
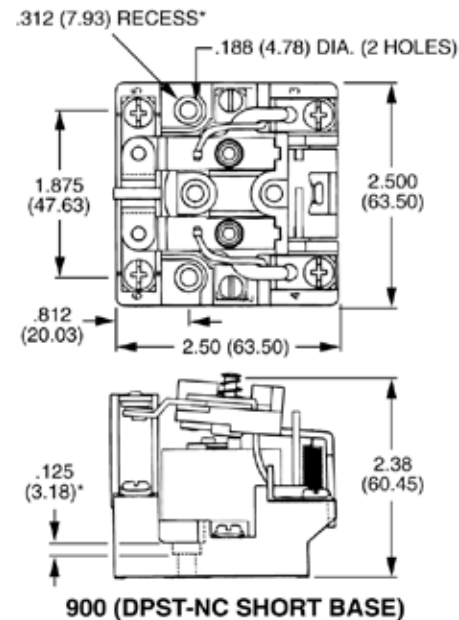
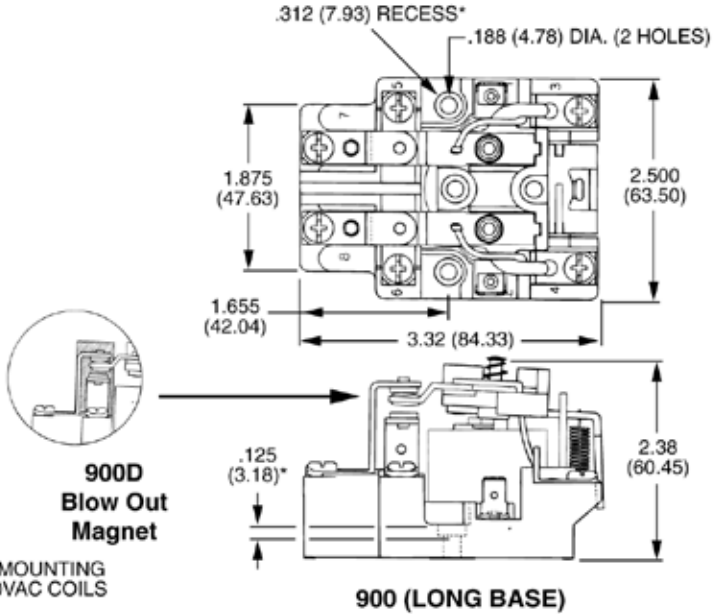
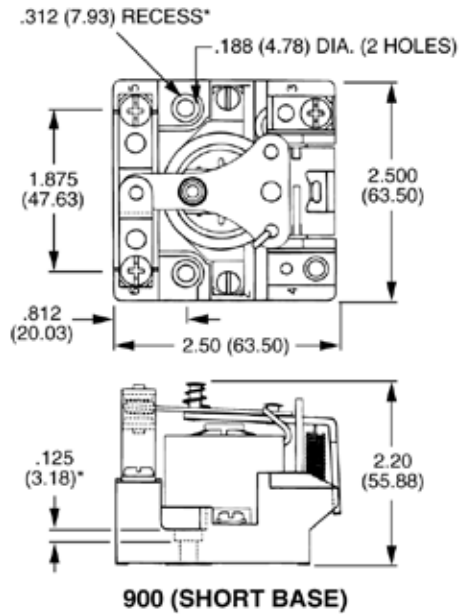


Coil Data			
	Nominal Voltage	Resistance In Ohms $\pm$ 10%	Nominal Coil Power
AC Coils	6 VAC	.85	9.5 VA
	12 VAC	2.85	
	24 VAC	11.5	
	120 VAC	295	
	240 VAC	1170	
	480 VAC	4860	
DC Coils	6 VDC	18	2 W
	12 VDC	72	
	24 VDC	290	
	48 VDC	1150	
	110 VDC	6050	
Coil Voltages	AC: Up to 600 Volts/60 Hz   DC: Up 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. 30 Milliseconds		
Release Time	Approx. 30 Milliseconds		
Environmental Data			
Operating Ambient	AC: -45° to 80°C @ 30 Amps   AC: -45° to 70°C @ 50 Amps DC - 45° to 115°C @ 30 Amps   DC: -45° to 105°C @ 50 Amps		
Coil Temperature Rise	(25°C Ambient - Continuous Duty) AC: 70°C Approx. @ 60Hz - Use at 50 Hz will cause slight increase in Coil Rise DC: 35°C Approx.		
Mechanical Data			
Terminals	Screw type on all but series 900Q which has Quick Connect .250"		
Weight	Short Base Versions 8 oz. Approx (227 g.)   Long Base Versions 10 oz. Approx (283 g.)		

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## Dimensional View

Units: Inches [mm]



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## Ordering Information

### Model 900 30 Amp Part Numbers

AC Coils				DC Coils		
Pole Config.	24 VAC	120 VAC	240 VAC	12 VDC	24 VDC	110 VDC
SPST-NO	20237-82*	20237-83*	20237-84	20333-81	20333-82	20333-84
SPST-NC	20330-82	20330-83	20330-84	20334-81	20334-82	20334-84
SPST-NO-DM	20238-82*	20238-83*	20238-84	20242-81	20242-82	20242-84
SPST-NC-DB	20332-82	20332-83	20332-84	20336-81	20336-82	20336-84
SPDT	20239-82*	20239-83*	20239-84	20243-81*	20243-82*	20243-84
DPST-NO	20240-82*	20240-83*	20240-84*	20244-81*	20244-82*	20244-84
DPST-NC	20331-82	20331-83	20331-84	20335-81	20335-82	20335-84
DPDT	20241-82*	20241-83*	20241-84*	20245-81*	20245-82*	20245-84*

### Model 900-1C 30 Amp Part Numbers

DPST-NC	20361-82	20361-83	20361-84	20367-81	20367-82	20367-84
DPST-NO	20248-82	20248-83	20248-84	20249-81	20249-82*	20249-84
DPDT	20246-82	20246-83*	20246-84	20247-81	20247-82	20247-84

(\*) Normally Stocked  
 Non stocked items require a minimum order

Part Number	Description
20257-80	OPTIONAL B-5 DUST COVER FOR SERIES 900 RELAY

- Sealed knock-out holes for standard conduit fittings.
- Relay mounts on pre-drilled base.
- Aluminum construction
- Snap action cover release.
- Size: 5" W x 3" H x 4" D

