

## DOD Series TDR



- ... Solid state analog circuitry
- ... True delay on dropout: Timing cycle after power removal
- ... DPDT (2 form C) isolated 4 ampere relay contacts
- ... Timing selection: Knob adjustable or Fixed
- ... Numerous models timing from 0.1 secs. to 300 secs.
- ... UL File #E96739 (M)
- ... CSA File #LR62586

### **Timing Mode:**

Upon the application of input voltage the relay immediately energizes. The timing cycle begins when input voltage is removed. When the timing cycle is complete, the relay will de-energize. The relay contacts will reset when input voltage is reapplied.

## **Timing Diagram:**



#### **Contact Information:**

Arrangement: 2 form C (DPDT) - Diagrams C & D

Contact Material: Gold Clad Silver Alloy

Rating (Resistive):

Maximum Switching Power - 1000 VA, 90W

Maximum Switching Voltage - 250V AC, 48V DC

Maximum Switching Current - 4 Amperes

Nominal Switching Capacity - 4A 250V AC, 3A 30V DC

UL/CSA Ratings - 4A 1/20 HP 125, 250V AC, 3A 30V DC

Expected Life @ 25°C:

100 Million operations, Mechanical

Electrical: 100,000 operations at 4A 250V AC

200,000 operations at 3A 30V DC

#### **Environmental Information:**

Temperature Range: Ambient: -40°C to +65°C (-40°F to +149°F)

#### **Mechanical Information:**

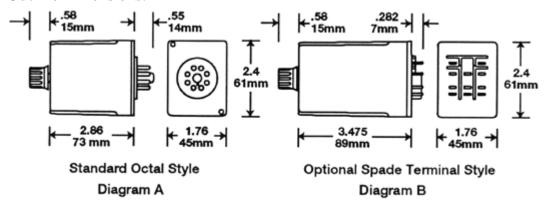
Termination: 8 pin Octal Style Plug or 11 pin spade terminals (Diagram C&D)

Enclosure: Black plastic case. Knob adjustable models have a dial scale for reference

only.

Weight: 4 oz (114g) approx.

#### **Outline Dimensions:**



#### **Timing Specifications:**

Timing - Fixed: 0.1 secs. through 300 secs.

Timing Ranges: Standard timing ranges are as follows:

.1 to 10 secs., .6 to 60 secs., 1.2 to 120 secs., 3 to 300 secs. Custom timing is available.

Timing Adjustment: Knob adjustable potentiometer.

Timing Tolerance: Fixed Units:  $\pm 5\%$ ; Adjustable Units: -0 to +25% of maximum

specified delay time.

Minimum specified value or less at low end.

Repeatability:  $\pm 5\%$ .

#### **Initial Dielectric Strength:**

Between open contacts: 750V RMS, Between adjacent contacts: 1000V RMS, Between contacts & coil: 1500V RMS

#### **Input Information:**

Voltage: AC units- 12V, 24V, and 120V; DC units- 12V, 24V, 48V and 110V. Other

voltages are available.

Power Requirement: AC units: 2 VA or less; DC units: 2 Watts or less

Transient Protection: 1 JOULE MOV Polarity Protection: On DC units - Yes

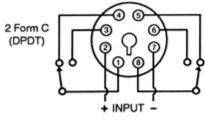
#### **Input Voltages & Limits:**



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Nominal	Minimum	Maximum
12V AC	10V	14V
24V AC	20V	28V
120V AC	105V	130V
12V DC	11V	14V
24V DC	20V	32V
48V DC	41V	55V
110V DC	95V	125V

## **Wiring Diagrams:**



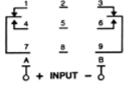
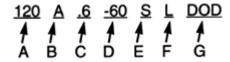


Diagram C Diagram D

# AMPERITE

## **Ordering Information:**

Definition of a part number for the Amperite DOD Series Time Delay Relay. Example:



**A:** Denotes nominal input voltage. Voltages Available: 12, 24 & 120V AC; 12, 24, 48 & 110V DC. **Custom Voltages are available.** 

**B:** Denotes type of input current required for operation:

A = AC - Alternating Current

D = DC - Direct Current

C & D: Denotes range of knob adjustability for timing (in seconds or minutes) where:

C = Minimum time delay. D = Maximum time delay for adjustable TDR'S.

Note: 1.) Ranges available: See standard timing ranges above. **Custom Timing is available.** 

2.) Both values (C & D) can be replaced by a single value for a factory preset time delay in seconds or minutes from 0.1 secs. through 300 secs.

**E:** Denotes use of seconds or minutes in timing value(s), S = seconds, M = minutes.

**F:** Enter "L" if optional 11-pin spade terminals are required (Diagrams B & D).

**G:** Denotes DPDT (2 form C) 4 amp delay on dropout DOD Series Time Delay Relay.

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