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: ± 5%; Adjustable Units: -0 to +25% of maximum specified delay time.
Minimum specified value or less at low end.
Repeatability: ± 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:
<table>
<thead>
<tr>
<th>Nominal</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>12V AC</td>
<td>10V</td>
<td>14V</td>
</tr>
<tr>
<td>24V AC</td>
<td>20V</td>
<td>28V</td>
</tr>
<tr>
<td>120V AC</td>
<td>105V</td>
<td>130V</td>
</tr>
<tr>
<td>12V DC</td>
<td>11V</td>
<td>14V</td>
</tr>
<tr>
<td>24V DC</td>
<td>20V</td>
<td>32V</td>
</tr>
<tr>
<td>48V DC</td>
<td>41V</td>
<td>55V</td>
</tr>
<tr>
<td>110V DC</td>
<td>95V</td>
<td>125V</td>
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</tbody>
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**Wiring Diagrams:**

Diagram C

Diagram D

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

120 A 6 -60 S L DOD

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.