C10 Series TDR

- Solid state analog circuitry
- Delay on operate timing mode
- DPDT (2 form C) isolated 10 ampere relay contacts
- Timing selection: Knob adjustable or Fixed
- Numerous models timing from 0.1 secs. to 480 secs.
- UL File #E96739 (M)
- CSA File # LR62586-3

Specifications

Timing Mode:
Delay on operate timing cycle begins upon application of input power. The relay contacts transfer at the end of the delay period and will remain transferred until input voltage is removed. Reset occurs when input voltage is removed.

Timing Diagram:

Contact Information:
Arrangement: 2 form C (DPDT) - Diagram C
Contact Material: Silver - Cadmium Oxide
Rating (Resistive):
10A @ 240V AC Resistive
15A @ 30V DC Resistive
15A @ 120V AC Resistive
1/3 HP @ 120V AC
1/2 HP @ 250V AC
Expected Life @ 25°C:
10 Million operations, Mechanical
100,000 operations minimum at rated loads
Environmental Information:
Temperature Range:
Storage: -60°C to +105°C (-76°F to +221°F)
Operating: -45°C to +70°C (-49°F to +158°F)

Mechanical Information:
Termination: 8 Pin Octal Style Plug or 11-Pin Spade Terminals (Dia. C&D)
Enclosure: White plastic case. Knob adjustable models have a dial scale for reference only. "LC" version has a black case.
Weight: 4 on (114g) approx.

Outline Dimension:

Timing Specifications:
Timing - Fixed: 0.1 through 480 sees.
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%
Release Time: 60 ms typical, 100 ms maximum
Timing Cycle Interrupt Transfer: None

Initial Dielectric Strength:
Between open contacts: 1000V RMS, Between adjacent contact: 1500V RMS
Between contacts & coil: 1500V RMS

Input Information:
Voltage:
AC units- 12V, 24V, and 120V. Other voltages are available.
DC units- 12V, 24V, 48V and 110V. Other voltages are available.
Power Requirement: AC units: 3 VA or less, DC units 3 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>
</table>

**Wiring Diagrams:**

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**Ordering Information:**
Definition of a part number for the Amperite C10 Series Time Delay Relay.
Example:
<table>
<thead>
<tr>
<th>120</th>
<th>A</th>
<th>P</th>
<th>1</th>
<th>-60</th>
<th>L</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
</tbody>
</table>

**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:** Denotes contact form:
P = DPDT - 2 form C.

**D & E:** Denotes range of knob adjustability for timing (in seconds) where:
D = Minimum time delay.
E = Maximum time delay for adjustable TDR's.
Note:
1.) Ranges Available: 0.1 - 60, 60 - 120, 120 - 180, 180 - 240, 240 - 300 & 300 - 480 secs. Custom timing is available.
2.) Both values (D & E) can be replaced by a single value for a factory preset time delay in seconds from 0.1 through 480 secs.

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

**G:** Denotes use of solid-state analog circuitry of C10 series.