C Series TDR

… Solid state analog circuitry
… Delay on operate timing mode
… Compact size
… Relay output with SPST or SPDT contacts
… Timing selection: Fixed or knob adjustable
… Numerous models timing from 0.1 secs. to 300 secs.
… UL File #E96739 (M)
… CSA File #LR62586-3

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:
1 form A (SPST Normally open) - Diagram A
1 form B (SPST Normally closed) - Diagram A
1 form C (SPDT) - Diagram B

<table>
<thead>
<tr>
<th>Contact Rating (Resistive)</th>
<th>Max. switching power</th>
<th>30W, 50VA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max. switching voltage</td>
<td>60V DC, 125V AC</td>
</tr>
<tr>
<td></td>
<td>Max. switching current</td>
<td>1A DC, AC</td>
</tr>
<tr>
<td></td>
<td>Max. carrying current</td>
<td>.05A AC; 1A 30V DC</td>
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</tbody>
</table>

UL/CSA Rating 0.5A AC; 1A 30V, DC

Expected Life @ 25°C: 100,000 operations minimum at rated loads
Environmental Information
Temperature Range: Operating and storage: -25°C to +60°C, (-13°F to +140°F).

Mechanical Information:
Termination: .110 inch (standard), .250 inch or screw terminals (optional).
Enclosure: Black plastic case.
Mounting: Single screw or optional 2-screw panel mount Weight: 0.8 oz (23g) approx.

Outline Dimensions:

![Outline Dimensions Diagram]

Timing Specifications:
Timing - Fixed: 0.1 through 300 secs.
Timing Ranges: 0.1 - 60, 60 - 120, 120 - 180, 180 - 240, 240 - 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%
Release Time: 60 ms typical, 100 ms maximum.
Timing Cycle Interrupt Transfer: None.

Initial Dielectric Strength:
Between open contacts: 500V RMS, between contacts & coil: 500V RMS.

Input Information:
Voltage: AC units- 12V, 24V, and 115V
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.
Polarity Protection: On DC units - Yes.

Input Voltages & Limits:
### Nominal Minimum Maximum

<table>
<thead>
<tr>
<th>Nominal</th>
<th>Minimum</th>
<th>Maximum</th>
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</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>115V 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>
</tr>
</tbody>
</table>

### Wiring Diagrams:

**Diagram A**

- Single Pole - Single Throw
- Normally Open or Normally Closed
- Input Voltage
- AC or DC
- Polarity shown for DC only
- N.O. or N.C.
- Common

**Diagram B**

- Single Pole - Double Throw
- Input Voltage
- AC or DC
- Polarity shown for DC only
- Operation: Normally Open or Normally Closed

### Ordering Information:

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

<table>
<thead>
<tr>
<th>115</th>
<th>A</th>
<th>NO</th>
<th>.1</th>
<th>-60</th>
<th>S</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, 115V 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: NO= SPST - 1 form A, C = SPST - 1 form B. SPDT = 1 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 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 300 secs.

F: Denotes form of termination - blank = .110 male electro-plate solder terminals (standard), X = .250 male quick connect terminals (optional), S = screw terminals.

G: Denotes use of solid-state analog circuitry of C Series.