ST1 Series Solid State Delay-On-Make Timers

- 100% solid state circuitry - no moving parts
- Two terminal series connection to load
- Fixed or field adjustable delays from milliseconds to hours
- Up to 1 ampere continuous load current
- CMOS digital circuitry
- UL File #E96739(M)
- CSA File #LR62586

Timing Mode:
Delay on operate begins upon application of input power. The load is energized at the end of the delay period and remains so until input power is removed.

Timing Diagram:

Contact Information:
Solid state switching device 1 form A, normally open series connection. Continuous current rating 1 ampere. Maximum inrush 10 amperes. Minimum load current 5 milliamperes. Voltage drop typically 2.5 volts RMS @ 1 ampere.

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

Timing Specifications:
Timing: Factory fixed, or .1 seconds to 100 hours in any one of eight ranges. Timing is set by user supplied resistor or potentiometer.

*Timing ranges:
.1 to 10 seconds
.2 to 20 seconds
1 to 100 seconds
10 to 1000 seconds
.1 to 10 minutes
1 to 100 minutes
10 to 1000 minutes
.1 to 10 hours
1 to 100 hours

*See External Resistor Selection Graph for specific resistor value.

Timing tolerance: fixed units = +/- 10%
Timing repeatability: +/- 2%
Timing cycle interrupt transfer: none

Outline Dimensions:

AC (60 Hz) and DC INPUT VOLTAGES & LIMITS:

<table>
<thead>
<tr>
<th>Nominal</th>
<th>Minimum</th>
<th>Maximum</th>
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</thead>
<tbody>
<tr>
<td>12V</td>
<td>10V</td>
<td>14V</td>
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<tr>
<td>24V</td>
<td>20V</td>
<td>28V</td>
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<tr>
<td>48V</td>
<td>41V</td>
<td>55V</td>
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<tr>
<td>110V</td>
<td>95V</td>
<td>125V</td>
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<tr>
<td>120V</td>
<td>105V</td>
<td>130V</td>
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<tr>
<td>230V</td>
<td>190V</td>
<td>255V</td>
</tr>
</tbody>
</table>
External Resistor Selection:

* Note: use appropriate timing scale in accordance with Timing ranges specified above.

Wiring Diagrams:

Mechanical Information:
Enclosure 2 x 2 x 3/4 inch black plastic, epoxy sealed. Center hole mounting. Two or four 1/4 inch quick connect male terminals.

Ordering Information:
Ordering Information: Definition of a part number for the Amperite ST1 Series Time Delay Relay:
Example:
A: Denotes nominal input voltage. Voltages available: 12, 24, 48, 120, and 230 volts AC; 12, 24, 36, 48, and 110 volts DC. For other voltages consult factory.

B: Denotes type of input power required for operation
A = AC - Alternate Current
D = DC - Direct Current

C&D: Denotes range of adjustability using an external resistor or potentiometer, where C is the minimum timing and D is the maximum timing. Standard timing span is 100:1. For fixed timing units specify a single number.

E: Denotes unit of time delay: S = seconds; M = minutes; H = hours.

F: Denotes Amperite ST1 Series solid state, normally open time delay.