STB Series
Solid State
Triggered
Delay-On-Release Timers

... 100% solid state circuitry - no moving parts
... CMOS digital timing circuitry
... Fixed or field adjustable delays from milliseconds to hours
... 2 amperes continuous load current (10 amperes available, consult factory)
... UL File # Pending
... CSA File #Pending

Timing Mode:
Power is applied to the relay prior to the timing cycle. Upon application of power to the trigger input terminal the load is energized. When power is removed from the trigger terminal the time delay cycle is initiated. At the end of the delay time the load is de-energized. Reset is accomplished by reapplying power to the trigger input terminal.

Timing Diagram:

Contact Information:
Solid state switching device 1 form A; normally open series connection. Continuous current rating 2 amperes. Maximum inrush 20 amperes. Voltage drop 2.5 volts RMS or less @ 2 amperes. (For 10 ampere load current rating consult factory)
**Timing Specifications:**
Timing: factory fixed, or .1 seconds to 100 hours in any of the ranges below. Timing is set by user supplied resistor or potentiometer. Custom timing available.

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

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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<tbody>
<tr>
<td>12V</td>
<td>10V</td>
<td>14V</td>
</tr>
<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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External Resistor Selection:

![Graph showing External Resistor Selection](image)

Wiring Diagram:

![Adjustable Units Wiring Diagram](image)

![Fixed Units Wiring Diagram](image)

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

Ordering Information:
Definition of a part number for the Amperite STB Series Time Delay Relay:

Example:

120 A .2 - 20 S STB

A: Denotes nominal input voltage. Voltages available: 12V, 24V, 120V & 230V AC; 12V, 24V, 48V & 110V DC. **Custom voltages are available.**

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

C & D: Denotes range of adjustability by 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 STB Series triggered delay-on-release relay.