



Solving your relay requirements since 1922

## ST1 Series Solid State Delay-On-Make Timers

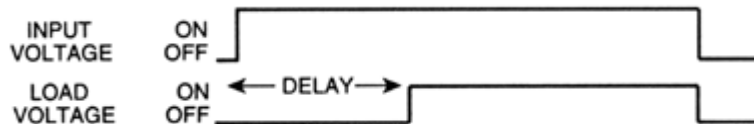


- ... 100% solid state circuitry - no moving parts
- ... Two terminal series connection to load
- ... Fixed or field adjustable delays from milliseconds to hours
- ... Up to 1 ampere continuous load current
- ... CMOS digital circuitry
- ... UL File #E96739(M)
- ... CSA File #LR62586

### 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



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- .1 to 10 minutes
- 1 to 100 minutes
- 10 to 1000 minutes
- .1 to 10 hours
- 1 to 100 hours

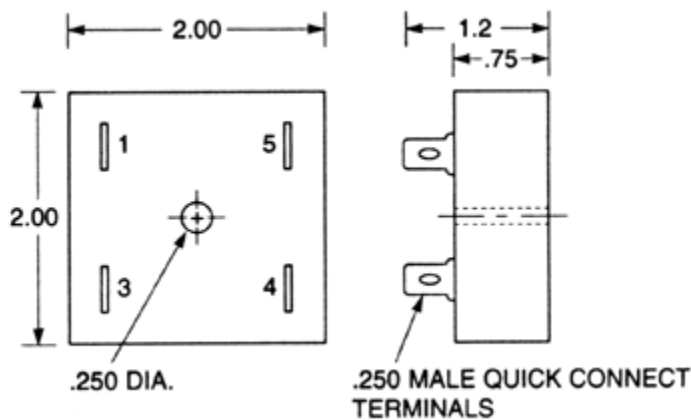
\*See External Resistor Selection Graph for specific resistor value.

Timing tolerance: fixed units = +/- 10%

Timing repeatability: +/- 2%

Timing cycle interrupt transfer: none

**Outline Dimensions:**



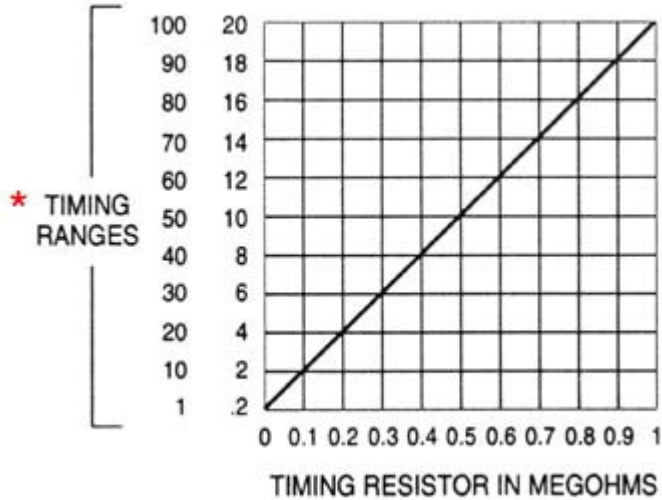
**AC (60 Hz) and DC INPUT VOLTAGES & LIMITS:**

Nominal	Minimum	Maximum
12V	10V	14V
24V	20V	28V
48V	41V	55V
110V	95V	125V
120V	105V	130V
230V	190V	255V



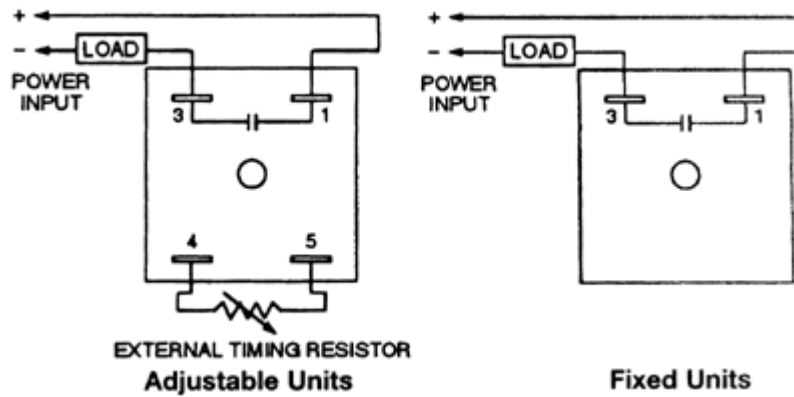
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### External Resistor Selection:



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

### Wiring Diagrams:



### Mechanical Information:

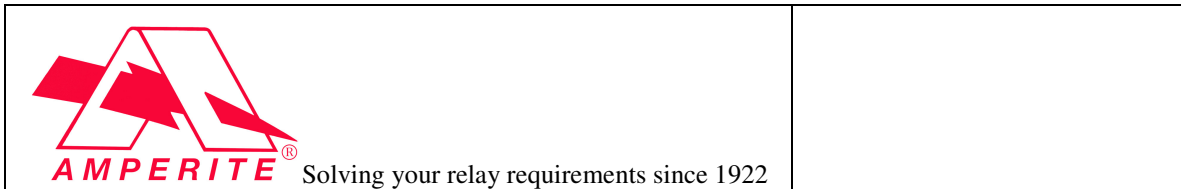
Enclosure 2 x 2 x 3/4 inch black plastic, epoxy sealed. Center hole mounting. Two or four 1/4 inch quick connect male terminals.



### Ordering Information:

Ordering Information: Definition of a part number for the Amperite ST1 Series Time Delay Relay:

Example:



120 A 1 - 100 S ST1  
↑ ↑ ↑ ↑ ↑ ↑  
A B C D E F

**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.

