

319E TDR SS



Installation
Instructions
March 2003
0319-000-06-00

OPERATION:

Timing begins when the start switch is closed. At the same time, the Timing LED goes on and a relaxation oscillator starts to run at a rate determined by the set-pot. The 319E times out when the oscillator count is equal to the level set by the range switch, a second LED turns on at time-out.

At time-out, the load relay is energized, transferring its contacts.

Reset occurs when the start switch is opened or when power is interrupted.

MOUNTING:

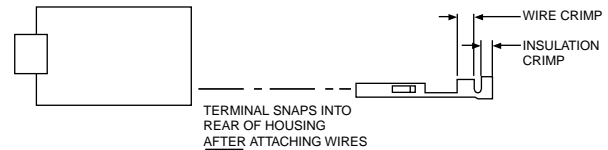
Mounting position of the 319E is not critical. However, the use of a retaining clip is recommended. To surface mount, use an ATC surface mounting socket No. 0000-825-64-00, with a retaining clip No. 0319-025-02-00.

To panel mount, cut a 2 1/8" square cutout.

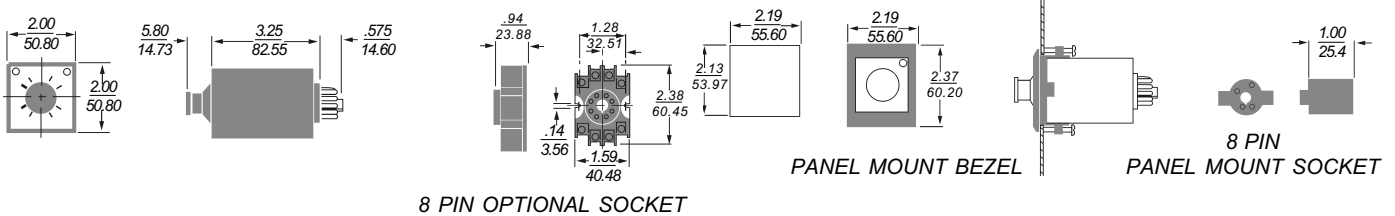
1. Position the bezel with the mounting screws on the side.
2. Snap the bezel assembly through the front of panel hole.

3. From the rear of the panel, loosely fit the mounting screws into the holes.
4. With the timer scale facing up, snap the unit into the bezel from the rear of the panel so it is retained in the cutout.
5. Tighten the mounting screws. Do not overtighten. Use ATC No. 0319-261-45-00 for plug-on panel mounting. Attach the wires to the solderless connector with a crimping tool.

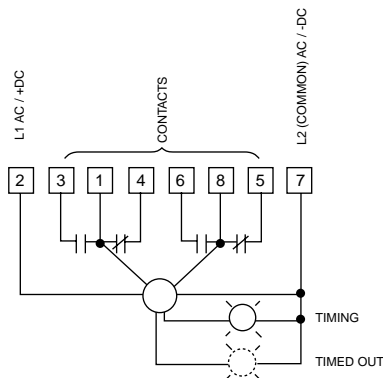
Wire Attachment Instructions



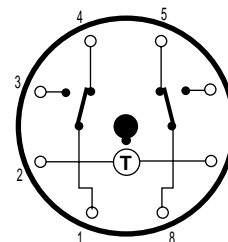
DIMENSIONS:



WIRING:



TERMINAL WIRING:



LOCKING THE RANGE SETTING:

Set required range. Remove knob, loosening with size 3/64 Allen Wrench. Pull off knob. Remove pin from end of shaft. Insert pin in either empty hole which will lock unit in position. Turn shaft ccw and replace knob with pointer at zero. Tighten set screw.

SETTING THE RANGE:

You have received either a 30 min or 100 min 5-range model; in either case you have to set the range. Position the knob near mid scale. Pull the spring loaded knob out and twist cw to increase to a longer range, turn ccw to decrease down to a smaller range. A click will be heard as you make the progression through the ranges. See Specifications for minimum and maximum ranges. All graphics and electrical connections are switched by rotating the knob.

SPECIFICATIONS:

MODELS

Choice of two five dial-selected ranges
319E030F

From 0.3 sec to 30 min

319E100F

From 1 sec to 100 min

Operating Voltages

24VDC or any voltage between 24VAC and 240VAC

Both operate in **on delay** mode only

RANGES AND MIN. SETTING

	Range	Min. Setting
319E030F:	0-0.3 sec	0.03 sec
	0-3 sec	0.03 sec
	0-30 sec	0.3 sec
	0-3 min	1.8 sec
	0-30 min	18.0 sec
319E100F:	0-1 sec	0.03 sec
	0-10 sec	0.1 sec
	0-100 sec	1 sec
	0-10 min	6 sec
	0-100 min	60 sec

SETTING ACCURACY

10% of range.

REPEAT ACCURACY

Varies as a function of line voltage and temperature.

±1% of setting or 2.0 ms, when temperature is constant and line voltage is constant or varies within limits*

±4% of setting or 2.0 ms, when line voltage is constant and temperature varies within limits*
±6% of setting or 2.0 ms, when line voltage and temperature vary within limits*

*Variations of line voltage must be within -20% and +10%; of temperature between 0° and 70°C (32° and 158°F)

RESET

- 0 to 20 msec power interruption: guaranteed NO reset
- 20 to 65 msec
It may reset (40 msec typical)
- Over 65 msec: guaranteed reset

LOAD RELAY

TYPE: DPDT,

LIFE: 10,000,000 operations (no load)

CONTACT RATING:

7amps, 24 to 240VAC or 24VDC

POWER REQUIREMENTS

24VAC to 240VAC, 50/60 Hz

in rush 1.5 amps; Power required 1.2 watts

24VDC

in rush 1.5 amps; Power required 1.2 watts

TEMPERATURE RATING

0° to 70°C (32° to 158°F)

WEIGHT

NET: 6 oz

SHIPPING: 10 oz

MOUNTING

Plug-in octal base; mounts in any position. Optional Surface mounting socket.

HOUSING

Dust, moisture and impact-resistant molded plastic case.

A WORD ABOUT SAFETY

Most of ATC's products are designed for general and not for specific applications. Because of this, we usually are not aware of how they eventually will be used. However, they are frequently employed in controlling automatic machinery or processes. Although ATC makes products of high reliability, every product, given enough time, can be expected to fail. Statistically, devices can fail at any time. Failure typically means failure to provide logic signal or power to an electrical load when it should or to provide it when it should be absent. Less often, failure means failure to meet some other specification. Since the failure of automatic machinery or processes can create hazardous conditions for personnel or property, whatever the definition of failure might be, it is necessary to consider the consequences of failure and design in such a way that failure will not create a hazard to personnel or property. The design must insure that any failure will result in a fail safe condition and there will be no danger to personnel and/or property involved in the use of the product. Designs incorporating controls of any kind should be carefully considered to provide for their eventual failure.

Important Notice

Our recommendations, if any, for the use of this product are based on tests believed to be reliable. The greatest care is exercised in the selection of our raw materials and in our manufacturing operations. However, since the use of this product is beyond the control of the manufacturer, no guarantee or warranty, express or implied is made as to such use or effects incidental to such use, handling or possession or the results to be obtained, whether in accordance with the directions or claimed so to be. The manufacturer expressly disclaims responsibility therefore. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing laws and/or patents covering any material or use.



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Warranties of sales, disclaimer thereof and limitations of liability are covered exclusively by Automatic Timing & Controls printed warranty statement for the controls. These instructions do not expand, reduce, modify, or alter Automatic Timing & Controls warranty statement and no warranty or remedy in favor of a customer or any other person arises out of these instructions.