

#### 319B Solid-State TDR INSTALLATION INSTRUCTIONS January, 2001 319B...1X 319-000-04-00

## DESCRIPTION

The Series 319B Time Delay Relay (TDR) is a plug-in solid-state timer featuring an FET input for extended time ranges (up to 30 seconds), a long-life dust-proof relay, and an indicating light which is on during timing.

# INSTALLATION

Mounting position of the 319B is not critical. However the use of a retaining clip is recommended for both horizontal and vertical mounting. Use a standard industrial 8-pin socket or an ATC surface mounting socket No. 00008256300, with a retaining clip No. 03190250600.



### WIRING



# OPERATION

Timing begins when power is applied to terminals 2 and 7. Timing is indicated by the pilot light which turns on at the start and goes off at the end of the time delay. The relay transfers at the end of timing and will hold until power is removed. Reset occurs at this time.

# **SPECIFICATIONS**

Environmental

Contact Ratings

**Temperature Range** Voltage Requirements Resistant 0° to 150° F (-17° to 65° C) 102-132V, 50/60 Hz.

Dust, Moisture & Impact

204-264V, 50/60 Hz. 7A, 250V AC 3A, 30V DC

Note: 5-8-6 terminals are parallel 7A SPDT contacts for increased life and load.

Life

Accuracy: Setting Repeat

50,000,000 operations no load

10% of Range ±1% Constant conditions ±6% over extremes of voltage and temperature .1 sec minimum

Reset Time

Note: A short reset time affects accuracy. Error varies from a 4% loss in the following time cycle with a 0.1 second reset, to no error with 10 seconds of reset.



### A WORD ABOUT SAFETY

ATC products are designed for general, non-specific applications. Because of this, we are usually not aware of how our products will be used. However, they are frequently employed in controlling automated machinery, processes and voltage/phase monitoring.

Although ATC makes products of extremely high reliability, over time it is possible for the device to fail. Statistically, every device will fail in any given time frame for any reason. Failure means (1) failure to provide a logic signal or power to an electrical load when it should or (2) the provision of such a signal or power when it should be absent. Also, failure means the product has failed to meet some other specification. In all cases, failure means the product has done something unwanted or unexpected.

Since the failure of automatic machinery or processes can create hazardous conditions for personnel and/or property, it is imperative to consider the consequences of failure when designing an application in which the ATC product is used, such that the failure will not create a hazard to personnel or property. The design must ensure that any failure will result in a fail safe condition and that no danger exists to personnel and/or property involved in the use of the product.

Designs incorporating controls of any kind should be carefully considered for their eventual failure.