

# 339B Series

An economical solid-state TDR with octal plug-in base, the 339 maintains excellent repeat accuracy despite wide voltage and temperature variations. even after long periods of down-time. Two models are available. Each has six dial selected ranges from fractions of a second to as long as 10 hours. Each model has a selectable on-delay or interval timing mode.

**WIDE CHOICE OF RANGES:** In addition to the short ranges expected of an electronic TDR, the 339 is also available with ranges as long as 10 hours. An unusually versatile timer, the 339A has six dial-selected ranges—from 0.3 SEC to 3 hours or 1 SEC to 10 hours—and provides dial-adjustable timing periods between 0.075 seconds and 10 hours. A single 339 model thus accommodates the needs of a wide range of applications, allowing the user to select easily and precisely—an appropriate range to permit optimum setting accuracy. The dial face automatically displays the selected range.

**CYCLE PROGRESS INDICATION:** The 339's LED annunciator provides a unique and effective method of cycle progress indication. Off before timing, the LED blinks at an ever-increasing rate as the cycle progresses; once every 3-1/2 seconds during the first 10% of the cycle, twice during the second 10%, and so on. At time-out, the LED stays on constantly, pulsing at a high rate. (In the 1 and 10-second ranges, the LED is off before timing, steady on during timing, and pulsing on after time-out.)

**HIGH ACCURACY:** The 339's timing circuit is not a simple RC circuit, but utilizes the sophistication of a proprietary integrated circuit that includes counting technology along with a stable oscillator to provide repeatable time delays.

**MULTIPLE TIMING MODES:** Every 339 can be used for either ON-delay or interval timing operation. The timing mode is selectable by a switch on the 339 housing.

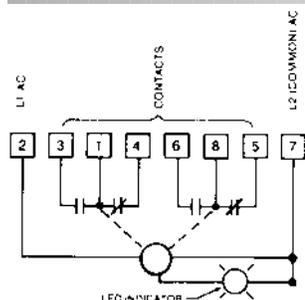
## OPERATION

Timing begins when the start switch is closed. This starts an oscillator which runs at a frequency determined by the time setting. A fixed number of counts from the oscillator determines the end of the time cycle. The time required to accomplish this depends on the oscillator frequency. During timing, a LED located on the dial face blinks. For the first ten percent of the cycle, the LED repeatedly blinks once followed by a pause, for the second 10%, it blinks twice and so on indicating the cycle progress. It flashes rapidly and continuously after time out.

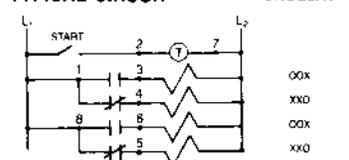
**ON-DELAY MODE:** At time out, the built-in relay transfers its contacts. These contacts remain transferred until the start switch is opened or power is removed by some other means. The 339 then resets and is ready for another cycle.

**INTERVAL MODE:** When timing begins, the built-in relay transfers its contacts. The contacts remain transferred until time out. The timer will not start again until the start switch is opened or power is removed by some other means. The 339 then resets and is ready for another cycle.

## WIRING



### TYPICAL CIRCUIT

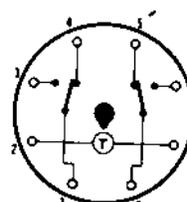


\*For interval operation with a momentary start switch, jumper 2 and 3.

### INTERVAL

### TERMINAL WIRING

- X○
- X○X
- X○
- X○X



Plug-In Adjustable Time Delay Relay



|  |   |     |  |  |
|--|---|-----|--|--|
| MODEL NUMBER >>>>>>                      | 339B  |     |  |  |
|  | Range   |     |  |  |
|  | Six dial-selected ranges (.3 or 3 SEC, MIN, HR) | 359 |  |  |
|  | Six dial-selected ranges (1 or 10 SEC, MIN, HR) | 200 |  |  |
|  | Voltage & Frequency                             |     |  |  |
|  | 120 VAC, 50/60 Hz                               | Q   |  |  |
|  | 240 VAC, 50/60 Hz                               | R   |  |  |
|  | 24 VAC, 50/60 Hz, 24 VDC                        | T   |  |  |
|  | 12 VDC  | E   |  |  |
|  | Arrangement                                     |     |  |  |
|  | ON-Delay, Interval mode                         | 2   |  |  |
|  | Special   | 0   |  |  |
|  | Features  |     |  |  |
|  | Standard  | X   |  |  |
|  | Special   | K   |  |  |
| ACCESSORIES                              |   |     |  |  |
| 8 Pin surface/DIN rail socket            | 0000-825-85-00                                  |     |  |  |
| Hold down for above socket (2 required)  | 0339-025-03-00                                  |     |  |  |
| Hold down for other sockets (2 required) | 0339-025-02-00                                  |     |  |  |
| Panel mounting bracket                   | 0339-320-01-00                                  |     |  |  |
| Plug-in socket kit (8-pin)               | 0319-261-45-00                                  |     |  |  |

Time Delay Relays // 339B Series