

# MODEL 300

## Programmable Timer

- Multiple timing & voltage ranges
- Digital timing circuit
- Five function modes
- Easy to program

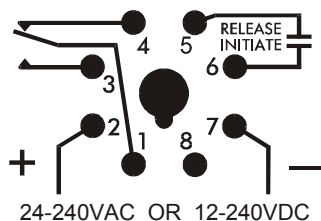
### DESCRIPTION

The **Model 300 Programmable Timer** is designed to replace over 100 standard timers. One Model 300 can be set for one of five functions, covers four timing ranges, and has a universal power supply for any AC voltage from 24 to 240 volts, or DC voltage from 12 to 240 volts.

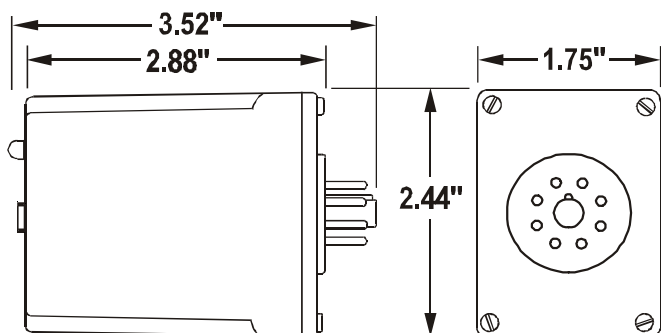
The digital design of the Model 300 provides high accuracy, repeatability and response time. The output of the Model 300 is a heavy-duty SPDT electro-mechanical output relay.

Programming options are chosen by simply setting the four DIP switches on top of the relay, and then adjusting a potentiometer for percent of delay. A LED indicator illuminates when the relay is energized.

### PIN DRAWING



### DIMENSIONS



(dimensions have tolerance of  $\pm 0.06$ )

Shows No Power Applied



### SPECIFICATIONS

| MODEL                 | 300   |
|-----------------------|---|
| Supply voltage        | 24-240VAC, 50/60 Hz or 12-240VDC  |
| Maximum AC voltage    | 280 VAC   |
| Maximum DC voltage    | 385 VDC   |
| Power consumption     | 3.1 watts at 240VAC<br>1.8 watts at 240VDC  |
| Functional modes      | see PROGRAMMING table   |
| Timing ranges         | see PROGRAMMING table   |
| Accuracy              | $\pm 5\%$   |
| Repeatability         | 0.1%  |
| Response time         | 100msec   |
| Contacts              | SPDT  |
| Contact Rating        | 10A at 240VAC resistive   |
| Expected relay life   | Mechanical: 10 million operations<br>Electrical: 100,000 operations at rated load |
| Operating temperature | +14° to +122° F   |
| Humidity tolerance    | 0-97% without condensation  |
| Case material         | ABS plastic   |
| Mounting              | 8-pin socket (not included)*  |
| Weight                | 4.5 oz.   |

\* order 8-pin socket number 51 x 120

### PROGRAMMING

| TIMING RANGE        | SWITCH 1 | SWITCH 2 |
|---------------------|----------|----------|
| 0.15 to 15 seconds  | OFF      | ON       |
| 0.6 to 60 seconds   | ON       | OFF      |
| 5 to 480 seconds    | ON       | ON       |
| 0.6 to 64 minutes   | OFF      | OFF      |
| FUNCTIONS           | SWITCH 3 | SWITCH 4 |
| Interval-on-Operate | ON       | OFF      |
| Delay-on-Operate    | ON       | ON       |
| Delay-on-Release    | ON       | OFF      |
| Recycle Start-ON    | OFF      | OFF      |
| Recycle Start-OFF   | OFF      | ON       |

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# MODEL 300

# Programmable Timer

READ ALL INSTRUCTIONS BEFORE INSTALLING, OPERATING OR SERVICING THIS DEVICE.  
KEEP THIS DATA SHEET FOR FUTURE REFERENCE.

## GENERAL SAFETY

POTENTIALLY HAZARDOUS VOLTAGES ARE PRESENT AT THE TERMINALS OF THE MODEL 300.  
ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING.  
THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.

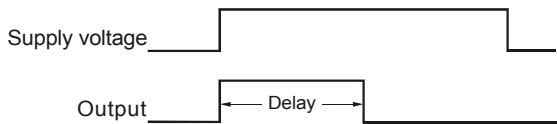
## Installation Instructions

### INSTALLATION

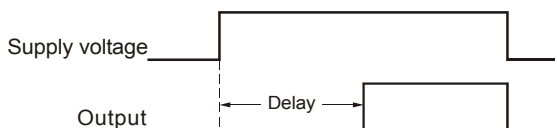
1. Mount the 8-pin socket in a suitable enclosure.
2. Connect the appropriate operating power to terminals 7 and 2.
3. Referring to the diagrams below and the **PROGRAMMING table** and **Pin Drawing**, on the reverse of this sheet, set the DIP switches for desired function and timing range.
4. Connect the load to the appropriate relay output terminals of the socket.
5. **For the Delay-on-Release function**, install a normally open switch on terminals 5 and 6 of the socket.

### FUNCTION DESCRIPTIONS

**Interval-on-Operate:** The output relay energizes when operating power is applied. When the timing period elapses, the relay de-energizes. The timer is reset by removing and reapplying power.

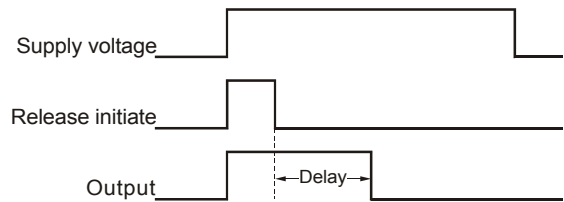


**Delay-on-Operate:** The delay period begins when operating power is applied. When the timing period elapses, the output relay energizes. The timer is reset and restarted by removing and reapplying power.

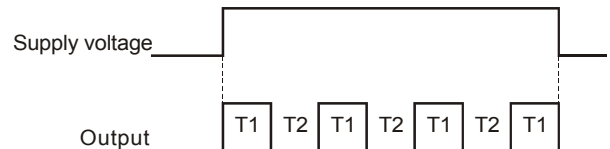


**Delay-on-Release:** Operating power is continuously applied to the timer. When the external release initiate switch is closed the output relay energizes. When the control switch is opened the timing period begins. If the control switch closes before the timing period elapses, the output relay remains energized and the timing period is reset. When the timing period elapses, the output relay de-energizes. The timer is restarted by re-closing the control switch. **Note: On initial power up, if the initiate switch is open, it will act like an interval timer.** Refer to diagram at top of next column

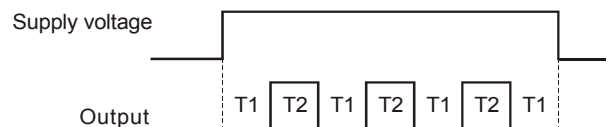
This diagram refers to Delay-on-Release function (previous column)



**Recycle Start-ON:** Operating power is continuously applied to the timer. When operating power is applied, the ON delay period begins. When the ON delay period elapses, the output relay de-energizes, and the OFF delay period begins. This cycle repeats until operating power is removed.



**Recycle Start-OFF -** Operating power is continuously applied to the timer. When operating power is applied, the OFF delay period begins. When the OFF delay period elapses, the output relay energizes, and the ON delay period begins. This cycle repeats until operating power is removed.



**NOTE: For recycle timing ON and Off times are equal.**

### WARRANTY

The **Model 300 Programmable Timer** is warranted to be free from defects in materials and workmanship, and is covered by our exclusive **5-Year Unconditional Warranty**. If this device fails to operate, for any reason, within five years from the date of purchase, we will repair or replace it, free. Contact the Time Mark Sales department, Monday through Friday; 8 a.m. to 5 p.m., CST, for further details.

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