REGENT'S

TM301

IN-SERIES DELAY TIMER

Features

- "In-series" design for easy application with simplified wiring.
- Fast reset time—less than 0.02 sec.
- Calibrated direct-reading linear dial.
- Controls any relay, contactor, solenoid, or motor starter through NEMA size 2.
- Compact size. DIN rail or panel mount.
- Fixed time and remote time-setting options.
- Regent's 2 Year Warranty.

Ideal for:

- ► Packaging machinery
- ► Printing presses
- ► Filling machines
- ► Molding presses
- ► Solenoid valve control
- ► Heat sealing
- ► Rubber machinery
- ► Forming presses
- ► Weighing systems
- ► Repetitive gluing

Regent's *TM301* is an all-solid-state two-terminal delay timer designed for operation in series with 6 mA to 1 amp, 120 VAC relays and other industrial loads.

The *TM301* provides exceptionally stable, repeatable timing from 0.05 sec. to 5 min. for applications where conventional timers using synchronous motors, pneumatics, or relays are inaccurate, subject to breakdown, or have short service life in high-speed automatic control systems.

The control is supplied in a compact DIN-rail mount enclosure with screw terminals. As an option, the time-adjusting potentiometer may be remotely mounted.

Unlike similar timers that contain a miniature relay of inherently short life, which defeats the reliability of solid-state circuitry, the *TM301* contains no relay. This assures precise, trouble-free timing for dependable high-duty-cycle applications.

PART NUMBER BUILDER

TM301 *D* *10* *S*

- ***S*** = Seconds
- ***M*** = Minutes

Time Range (see SPECIFICATIONS)

Time Adjust Feature

- ***D*** = Integrated Dial
- ***R*** = Remote Potentiometer (ordered separately)
- ***F*** = Fixed Internally at factory

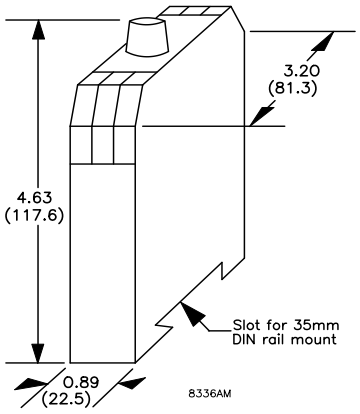
Series Name

FOR MORE INFORMATION CALL 203-732-6200 **e-mail: sales@regentcontrols.com**

OR VISIT US ONLINE AT www.regentcontrols.com

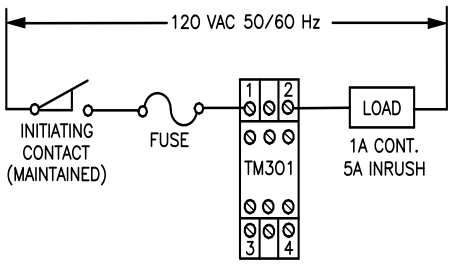
Regent's *TM301*
In-Series Delay Timer

DIMENSIONS

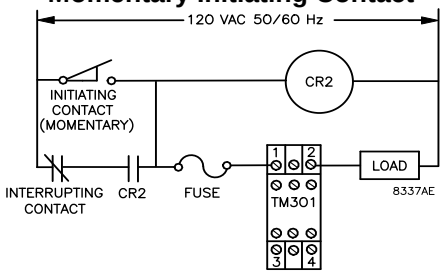


WIRING DIAGRAMS

Maintained Initiating Contact



Momentary Initiating Contact



OPERATION (refer to WIRING DIAGRAMS):

MAINTAINED INITIATING CONTACT:

1. On closure of initiating contact, timing begins.
2. At the end of timing, the load (or CR1) is energized by the *TM301*. A relay (CR1) with 120V coil connected as load will provide contacts with time-delay-after-energization; they can be normally-open or normally-closed.
3. When the initiating contact is opened, the timer resets and the load is de-energized. CR1 may be plug-in relay without use of paralleling resistor.

MOMENTARY INITIATING CONTACT:

1. On closure of initiating contact, timing begins and relay CR2 is energized, thus providing a holding current around the initiating contact.
2. At the end of timing, the load (or CR1) is energized by the *TM301* until the interrupting contact is opened, resetting the timer and de-energizing the load and CR2. Additional contacts on CR2 may be used as instantaneous contacts.

NOTE

1. Specify Remote option ('R' time adjust feature, see part number builder) if time adjustment potentiometer is to be mounted away from timer. Connect remote potentiometer to terminals 3,4.
2. See Timer22/23 series for other timing modes.

SPECIFICATIONS	*TM301*
Line Input	120 VAC +/- 20%, 50/60 Hz max.
Load Rating	
Voltage	120 VAC +/- 20%
Current	1 A continuous, 5 A inrush, inductive or resistive. Any contactor, solenoid valve, or motor starter through NEWA Size 2.
Recommended fuse	Littelfuse 322002
Timing	
Time range (minimum time) (other ranges available)	0.5 sec (50 msec) 5 sec (50 msec) 50 sec (0.5 sec) 5 min (3 sec) 1 sec (50 msec) 10 sec (100 msec) 100 sec (1 sec)
Repeat accuracy	+/- 1% of dial setting or +/-0.005 sec. whichever is greater
Calibration accuracy	+/- 5% of time range
Reset time	< 0.02 sec
Temperature	0 to 55°C (32 to 131°F)

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