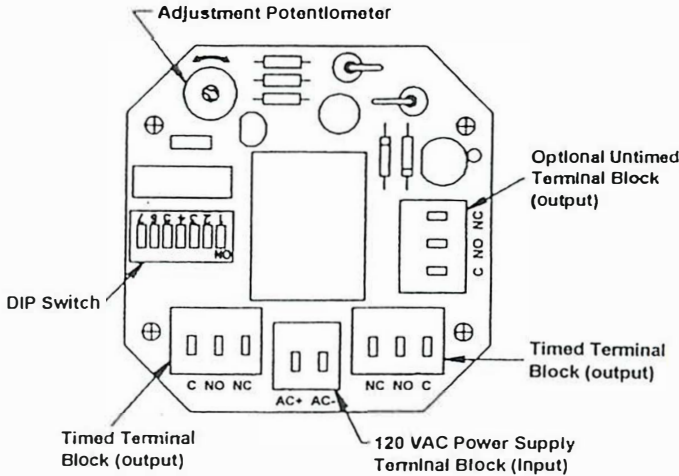




# Model TR Time Delay Relay

## Installation and Wiring Instructions



DIP Switch Positions

	1	2	3	4	5	6	7
0-1	OFF	ON	ON	OFF	OFF	OFF	OFF
0-3	OFF	ON	ON	ON	OFF	OFF	OFF
0-7	OFF	ON	ON	ON	ON	OFF	OFF
0-15	OFF	ON	ON	ON	ON	ON	OFF
0-31	OFF	ON	ON	ON	ON	ON	ON

Time Delay Range in Minutes

Power Supply: 120 VAC  
 Maximum Temperature: 150°F (65°C)  
 Timed Relay Contacts: 2 SPDT  
 Timed Relay Rating: 10 A @ 120/240 VAC  
 (resistive load)  
 5 A @ 30 VDC  
 Time Delay Ranges: 5 field adjustable from 0-1 to 0-31 minutes

Dimensions: 2-3/4" X 2-3/4" X 1-1/2" H  
 (70 X 70 X 38.1 mm)  
 Weight: 2.3 ounces (65 grams)

The Dwyer Model TR Time Delay Relay is an optional accessory which is installed between the typical snap action switch used in most pressure, flow, level and temperature controls and the alarm, pump, motor, etc. being controlled. Because of the sensitivity and low deadband inherent in many of these sensing devices, the equipment they control may be subjected to excessive intermittent operation when conditions are quickly varying at or near the setpoint. This circuit allows enough time for the condition to shift past that temporary point of fluctuation before equipment is turned on or off thus avoiding "chattering" and the excessive wear on controlled devices.

### Time Delay Adjustment

Select delay range from chart above and set DIP switches in appropriate positions. Within that range, adjust the one-turn (360°) potentiometer for the exact time delay interval required. For example: if a 5 minute delay is required, set DIP switches to 0-7 minute positions. Then use potentiometer to adjust to 5 minute period.

### Wiring

Wire in accordance with local codes and install in suitable enclosure. Do not exceed electrical ratings. Electrical components must be kept dry at all times. Connect wiring by pushing stripped and tinned leads into appropriate openings on sides of terminal blocks. To connect un-tinned stranded leads or to remove wires, first depress spring releases on top of terminal blocks with a small screwdriver. Connect 120 VAC to Power Supply Terminals shown in drawing. This circuit is not designed for other voltages.

Connect circuit(s) being controlled to Timed Terminal Blocks. Normally open contacts will close and normally closed contacts will open when time interval set above expires. Units marked TR 1 will initiate the time delay cycle with increasing flow, pressure, etc. past the setpoint and units marked TR 2 will do so on a decrease. This action is factory set and not designed for field change. The single untimed terminal (if included) will respond immediately to the sensing device switch action with no time delay. Replace all enclosure covers before placing in service.