

TIME DELAYS

TD Series

For protection of HVAC/R equipment, the TD Series of Time Delays provide the solution. Choose the Delay on Make, Delay on Break or By-pass Timer that solve the problem.

APPLICATIONS

- Protection from short cycling of compressor
- Ideal for compressor staging
- By-pass a control or device during start-up

BENEFITS

- Fixed or adjustable Delay Ranges
- Broad input voltage range
- 1.0 Amp rating
- · Varying models work with or without anticipator circuit.
- Terminal or wire connections available
- Compact size Electronic Potential Relay Technology

TD60 Series

Delay on Make Timers

APPLICATION

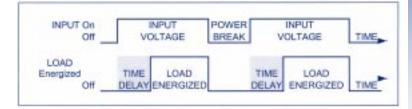
"ON" Delay On Make

- Multi Purpose "delay on Make" timing.
- Protects Air-conditioning, Refrigeration and Heat pumps from damage which may be caused by short cycling of compressor.
- For compressor staging and stagger starting multiple units.
- Helps to reduce power surges in multiple compressor applications.

MODE OF OPERATION

Upon application of power, the time delay initiates. On completion of selected delay period, the load is energized. Timer will reset on power interruption or when thermostat disconnects.

TIMING DIAGRAM





SPECIFICATIONS

Delay Range (Adjustable) 6 sec. to 8 min. Delay Range (Fixed) 3 or 5 minutes Initiate Timer 70milliseconds 19 to 250 VAC. 50/60Hz Input Voltage* Maximum Load 1 amp. 10 amp. inrush Operating Temperature 0° 'F to $+160^{\circ}$ F (-18°C to $+71^{\circ}$ C) Dimensions 2" x 2" x 0.75", (5.08 x 5.08 x 1.9 cm) Mounting Nonpositional: single hole mounting Connections 1/4" quick male terminals or 6" long leads

All Parameters are subject to change as per special requirements.

* In TD69 Series, For 110/240 Volt application cut jumper.

SELECTION GUIDE

PART NO.	DELAY PERIOD	CONNECTIONS	
TD68**	Adj. 6 Sec. to 8 Min.	(2) 1/4" Male Terminals	
TD69	Adj. 6 Sec. to 8 Min.	_ " _	
TD693	Fixed 3 Min.	- " -	
TD695	Fixed 5 Min.	- " -	
TD69W	Adj. 6 Sec. to 8 Min.	(2) 6" LG. Wire Leads	
TD693W	Fixed 3 Min.	_ " _	
TD695W	Fixed 5 Min.	- " -	

^{**} This timer is not for use with Cooling anticipator.

TD70 Series

Delay on Break Timers

MODE OF OPERATION

Upon application of power, Load is energized immediately. When Thermostat opens or on Power interruption, Load is de-energized and time delay initiates. Load will be energized again after delay time has elapsed.

APPLICATION

"OFF" Delay On Break

Protects Air-conditioning, Refrigeration and Heat pumps from damage which may be caused by short cycling of compressor.

TIMING DIAGRAM





SPECIFICATIONS

Delay Range (Adjustable) 6 sec. to 5 min. Delay Range (Fixed) 3 or 5 minutes. **Initiate Timer** 70 milliseconds. 19 to 250 VAC. 50/60Hz Input Voltage* Maximum Load 1 amp., 10 amp. Inrush. Operating Temperature $0^{\circ}F$ to $+160^{\circ}F$ (-18°C to $+71^{\circ}C$) 2" x 2" x 0.75", (5.08 x 5.08 x 1.9 cm) **Dimensions** Mounting Nonpositional: single hole mounting Connections 1/4" quick male terminals or 6" long leads.

All Parameters are subject to change as per special requirements.

* In TD73 Series, For 110/240 Volt application cut jumper.

SELECTION GUIDE

PART NO.	DELAY PERIOD	CONNECTIONS
TD72**	Adj. 6 Sec. to 5 Min.	(2) 1/4" Male Terminals
TD73	Adj. 6 Sec. to 5 Min.	- " -
TD733	Fixed 3 Min.	- " -
TD735	Fixed 5 Min.	- " -
TD73W	Adj. 6 Sec. to 5 Min.	(2) 6" LG. Wire Leads
TD733W	Fixed 3 Min.	- " -
TD735W	Fixed 5 Min.	- " -
TD74***	Adj. 6 Sec. to 5 Min.	(4) 1/4" Male Terminals

** This timer is not for use with Cooling anticipator.

*** 4 Terminals Timer - see information below.

TD74



SPECIFICATIONS

Delay Range (Adjustable)

Initiate Timer

Input Voltage

Input Voltage (H Series)

Maximum Load

Minimum Load

Operating Temperature

Dimensions

6 sec. to 5 min.

70 milliseconds.

19 to 30 VAC. 50/60Hz

110 to 250 VAC. 50/60Hz

1 amp., 10 amp. Inrush.

40 milliamps.

0°F to +160°F (-18°C to +71°C)

2" x 2" x 0.75" (5.08 x 5.08 x 1.9

Dimensions 2" x 2" x 0.75", (5.08 x 5.08 x 1.9 cm)
Mounting Nonpositional: single hole mounting
Connections 1/4" quick male terminals.

All Parameters are subject to change as per special requirements.

SELECTION GUIDE

 PART NO.
 INPUT
 VOLTAGE

 TD74
 Adj. 6 Sec. to 5 Min.
 19 to 30 Vac 50/60Hz

 TD74H*
 Adj. 6 Sec. to 5 Min.
 110 to 250 Vac 50/60Hz

* This timer is not for use with Cooling anticipator.