

# T170, T1400 & T1800 Series Electromechanical Time Switches

http://waterheatertimer.org/How-to-wire-T101-timer.html#171 http://waterheatertimer.org/Intermatic-timers-and-manuals.html#T1800

http://waterheatertimer.org/Intermatic-timers-and-manuals.html#T1400

# T170, T1400 & T1800 Series

## **24-Hour Time Switches**

The T170, T1400 and T1800 Series Mechanical 24-Hour Time Switches are designed for commercial, industrial and residential applications. The Skipper<sup>™</sup> feature enables users to omit operation on selected day(s) of the week.

#### Features

- Controls loads up to 40 Amps per pole
- Direct 24-Hour control on selected day(s) of the week
- 1 to 10 ON/OFF operations per day
- Minimum ON/OFF times of 1 hour
- Manual Override
- 4PST models are ideal for 3-phase load control
- All models equipped with one CUTOUT (ON), one OFF and three day-skipper screws
- Models with carryover automatically rewind when power resumes
- 16 hours of reserve power on models with carryovers
- Models with carryover require one hour of rewinding time for every two hours of power outage

### Ratings

Enclosure Type:	See table on back
Knockouts:	Combination $\frac{1}{2}$ "- $\frac{3}{4}$ " nominal knockouts, one on back and on each side, and two on bottom
Switch Type:	See table on back
Switch Rating:	Each Pole: 40 Amp Resistive, 120-480 VAC 40 Amp Tungsten Inductive or 1000 VA Pilot Duty, 120-277 VAC 2 HP (24 FLA) 120 VAC 5 HP (28 FLA) 240 VAC single-phase 4PST Models: 7.5 HP (28 FLA) 208 VAC 10 HP (28 FLA) 240 VAC three-phase
Power Input:	3W Maximum Models with carryover: 5W Max
Operating Temperature:	-40°F to 130°F (-40°C to 54°C)
Shipping Weight:	Type 1 - 3 lbs. (1.3 kg) Type 3R - 4 lbs. (1.8 kg) Type 3R with carryover 5 lbs. (2.3 kg)
Warranty:	Limited 1 year







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Model with Type 1 Enclosure	Model with Type 3R Enclosure	Switch	Carryover	Clock Motor VAC 60 Hz
T171	-	SPST	No	125
T172	-	SPST	No	208-277
T173	T173R	DPST	No	125
T174	T174R	DPST	No	208-277
T175	-	1N.O./1N.C.*	No	125
T176	-	1N.O./1N.C.*	No	208-277
-	T1471BR***	4PST	No	125
-	T1472BR***	4PST	No	208-277
-	T1475BR***	4PST	No	480
-	T1871BR***	2N.O./2N.C.**	No	125
-	T171CR	SPST	Yes	125
-	T173CR	DPST	Yes	125
-	T174CR	DPST	Yes	208-277
-	T1471BCR***	4PST	Yes	125

\*Can be wired as SPDT

\*\*Can be wired as DPDT

\*\*\*Separate clock motor terminals for switching circuits not on line voltage

#### **Specification**

The time switch shall be a 24-Hour with a Skipper dial type, capable of permitting up to 10 ON/OFF operations each day. The time switch shall provide a minimum ON/OFF time of 1 hour. A skipper dial shall be provided to allow for omitting operation on any selected day(s) of the week. The time switch to be powered by (125)(208-277)(480) VAC, 60 Hz power supply. The time switch motor shall be a synchronous motor, which shall be designed to withstand a minimum of 6000 Volt transients. The time switch motor shall be connected to the supply terminals with (3)(5) Watts to operate. The time switch mechanism shall ring-type connectors and shall not require more than \_\_\_\_ be a snap-in design, or have two hex head screws for easy removal from the enclosure. The time switch enclosure shall be a (Type 1)(Type 3R) lockable steel enclosure, which shall be painted with an electrostatic process. The time switch enclosure shall provide a minimum of 31 cubic inches of wiring space and shall provide a non-removable cover, which shall swing open a full 180 degrees. The time switch shall provide clear terminal identification on a non-curling terminal insulator. A visual indicator shall be provided in the time switch for inspecting clock motor operation. The time switch contact blades shall be a one piece design with welded silver alloy contacts and shall be designed to provide wiping action on contacts during operation to ensure reliable load switching. Terminal connections shall be made using teeter-type terminal screws to provide secure connections for wire sizes up to #8 AWG. Switch configuration shall be (SPST)(DPST)(1N.O./1N.C.)(2N.O./2N.C.)(4PST) with an agency listed switch rating each pole:

- 40 Amp Resistive, 120-480 VAC
- 40 Amp Tungsten, Inductive or 1000 VA Pilot Duty, 120-277 VAC
- 2 HP, (24 FLA) 120 VAC
- 5 HP, (28 FLA) 240 VAC, single phase
- 7 1/2 HP, (28 FLA) 208 VAC
- 10 HP, (28 FLA) 240 VAC, three-phase

The time switch with a "C" suffix shall include a spring wound carryover and shall maintain time control on schedule during power failure for up to 16 hours. The time switch carryover shall automatically rewind upon power resumption. The time switch shall be agency listed under Clock Operated Switches and shall be Intermatic model

\_\_\_\_(See Model Numbers Listed).



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## Diagrams







# Notes
