

<http://waterheatertimer.org/How-to-wire-WH40.html>

<http://waterheatertimer.org/How-to-wire-T104-Intermatic-timer.html>

## T104-20 & WH40

The Mechanical Water Heater Series Time Switches regulate electric water heaters. Daily operation can be set with trippers from 1 to 23 hours.

### Features

- Convenient external override switch (WH40 only)
- Includes 3 sets of ON/OFF trippers

### Ratings

Enclosure:	Type 1 steel 7 ¾" (19.7 cm) H x 5" (12.7 cm) W x 3" (7.62 cm) D in gray finish
Knockouts:	Combination ½"- ¾" nominal knockouts, one on back and on each side, and two on bottom
Switch Type:	Double Pole Single Throw
Switch Rating:	Each Pole: Resistive 40 Amp Inductive or Tungsten; 120-277 VAC 1000 VA Pilot Duty, 120-277 VAC 2 HP (24 FLA), 125 VAC 5 HP (28 FLA), 240 VAC
Power Input	3 Watts Maximum
Operating Temperature:	-40°F to 130°F (-40°C to 54°C)
Shipping Weight:	3 lbs. (1.4kg)
Warranty:	Limited 1 year



T104-20



WH40

Model in Type 1 Enclosure	Clock Motor Volts 60 Hz	Watts	External Switch	Amps/Pole
T104-20	208-277	10000	No	40
WH40	208-277	10000	Yes	40

## Specification

The time switch shall be a 24-Hour dial type, capable of permitting up to 12 ON/OFF operations each day. The time switch shall provide a minimum ON/OFF time of 1 hour. The time switch to be powered by 208-277 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 ring-type connectors and shall not require more than 3 Watts to operate time switch. The time switch mechanism shall be a snap-in design to provide ease of mechanism removal from the enclosure. The time switch enclosure shall be a Type 1 steel lockable enclosure. 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 see-through 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 DPST, with a switch rating each pole:

- 40 Amp Resistive, 120-277 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

The time switch shall be Agency Listed under Clock Operated Switches and shall be Intermatic model \_\_\_\_\_ (T104-20)(WH40).

## Diagrams

