

INSTALLATION AND OPERATION MANUAL

See back page for setting instructions.

DIGITAL TIME CLOCK TC7D



WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING RULES:

1. Use the unit only in the manner intended by the manufacturer.
If you have questions, contact the manufacturer.
2. Before installing, servicing or troubleshooting the transformer/relay package, switch power off at service panel and lock service panel to prevent power from being switched on accidentally. **CAUTION:** more than one disconnect switch may be required to de-energize the equipment for servicing.
3. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
4. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
5. **NEVER** place a switch where it can be reached from a tub or shower.
6. Intended for use with 24VAC Class 2 power supplies only.
7. Do not connect loads that exceed the timer's switch rating.
8. Confirm sufficient 24VAC power is available to operate the timer and the connected loads.

Due to continuing product development, specifications are subject to change without notice.

Specifications

- Operating Voltage: 24VAC 50/60Hz
- Switching: Single Pole, Single Throw [SPST]
(can be field-modified to Single Pole, Double Throw [SPDT])
- Power consumption: 3.5VA
- Switch rating: 10 Amps at 131°F
- Operating Temperature Range: 14°F – 131°F
- Connections (TC7D-W): (3) 16 GA pigtails (wire nuts not provided)
- Connections (TC7D-E): (3) copper screw terminals
- Backup power: Lithium battery with minimum 5-year reserve, 10-year projected life, not field-replaceable
- Setting Options:

8 pairs of on-off time of day cycles can be programmed.

Each on-off cycle can be assigned to any one day of the week, or to the following groups of days:

Monday – Friday; Monday – Saturday; Monday – Sunday; Saturday and Sunday.

Manual Over-ride provided by “On/Auto/Off” switch.

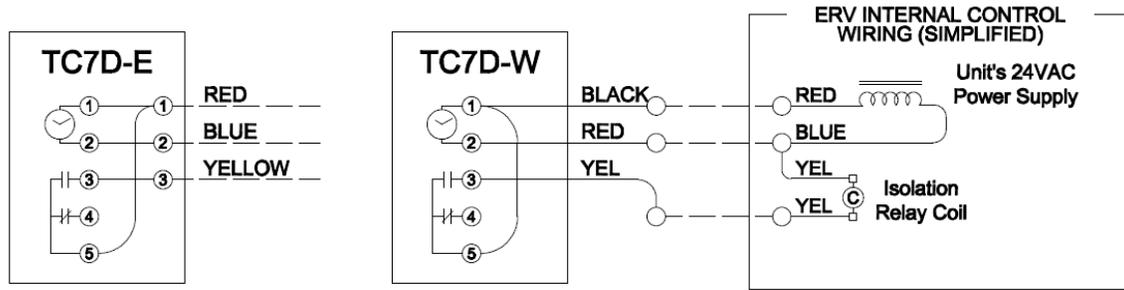
Program Reset button clears all settings.

- Enclosure (TC7D-W): Requires a 4” x 4” electrical box by others.
Box must accommodate (4) mounting screws (see drawing).
Minimum box depth 1.5”. White wall plate and mounting screws provided.

- Enclosure (TC7D-E): NEMA 3R. (see drawing)

CONNECTION DIAGRAM

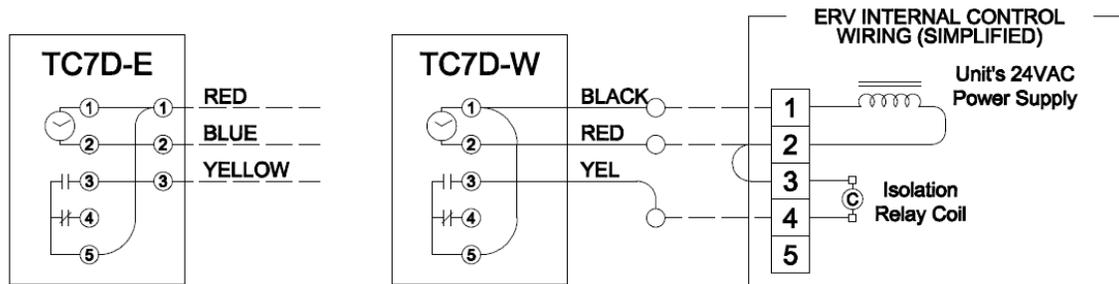
Applicable to EV450 and HE1XIN models built after Jan 1 2011. For earlier models call customer support.



The Normally Closed contacts of one or more additional Low Voltage Controls may be connected to ERV unit in parallel with the TC7D-E/W.

CONNECTION DIAGRAM

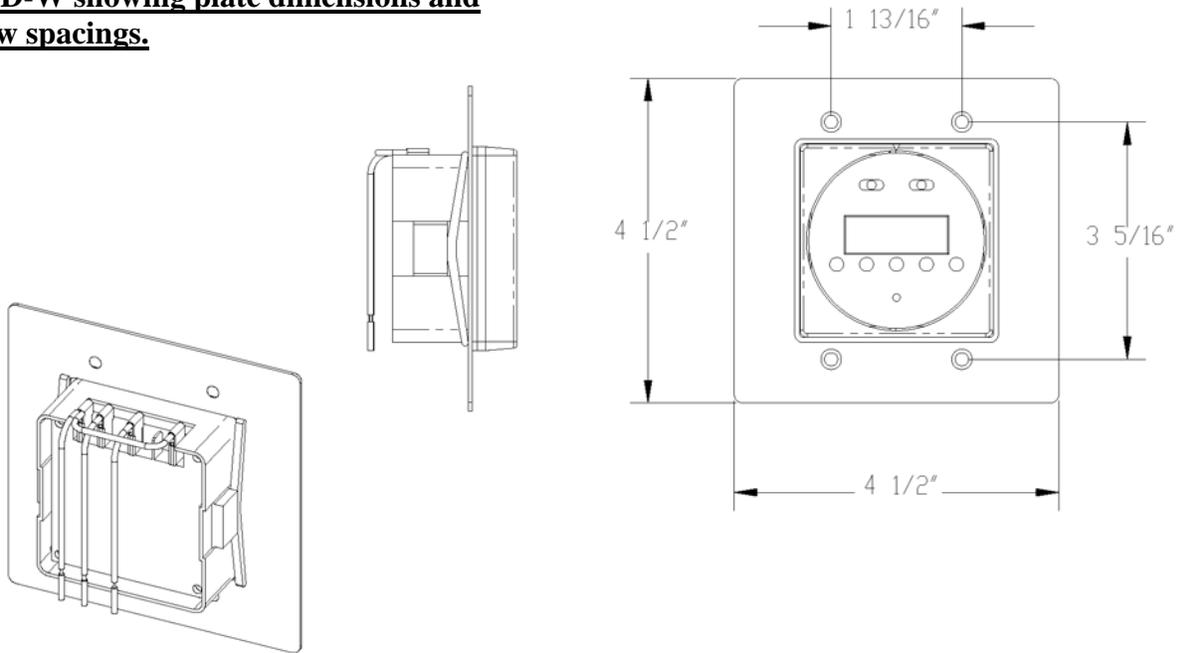
Applicable to HE1XRT models and all HE2X through HE8X models built after Jan 23 2011. For earlier models call customer support.



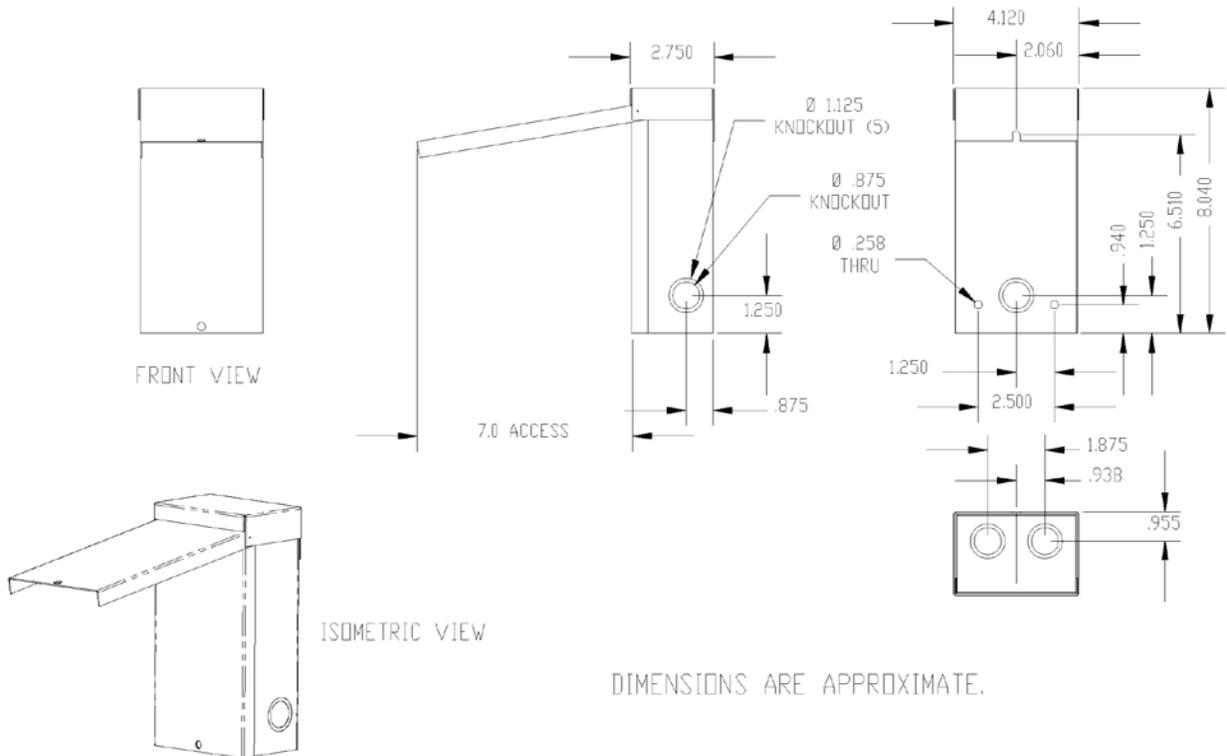
The Normally Closed contacts of one or more additional Low Voltage Controls may be connected to ERV unit's Terminals 1 & 4. Do not apply power to these terminals.

Due to continuing product development, specifications are subject to change without notice.

TC7D-W showing plate dimensions and screw spacings.



Box dimensions, clearances and knock-out size and dimensions.



DIMENSIONS ARE APPROXIMATE.

Due to continuing product development, specifications are subject to change without notice.

Setting Instructions

Set Time and Day

Slide Set switch to ☉ press 1...7 button until arrow points to the correct day (1=Monday). Press h then m buttons to set correct time. PM indicator shows noon to 11:59 PM. Slide Set switch to Run. Clock colon will blink.

Set Switch “On” Cycle

Slide Set switch to ☉. A “1” indicates the first switch cycle and a “Bulb” indicates a switch-on (circuit closes). Press 1...7 button until arrows point to selected day(s) for this cycle. Press h and m buttons to show switch-on time, noting PM indicator.

Set Switch “Off” Cycle

With Set switch at ☉, press ☉ button, note switch cycle number changes to “2” and bulb blanks, indicating switch-off (circuit opens). Press 1...7 button to match day(s) set for switch cycle “1.” Press h and m buttons to select switch-off time.

Autorun

Slide Set switch to Run and Mode switch to Auto, switching begins with next switch-on set time.

Override “On”

Slide Mode switch to I. Switch remains on indefinitely (circuit closed).

Override “Off”

Slide Mode switch to O. Switch remains on indefinitely (circuit open).

Skip Cycle

In automatic run mode, press x→button. The next calendar day is skipped.

Setting ERROR

If EEE appears, a setting error exists. The switch cycle number in error is shown. Slide set switch to ☉, press ☉ button until cycle is shown, review this and the following setting to correct error, slide set switch to Run.

Clear any setting

Setting slide set switch to ☉, press ☉ button to show switch cycle to clear. Press the ☉ button and the skip (x) button simultaneously, hold for several seconds.

Clear All

To erase all settings, Press R.