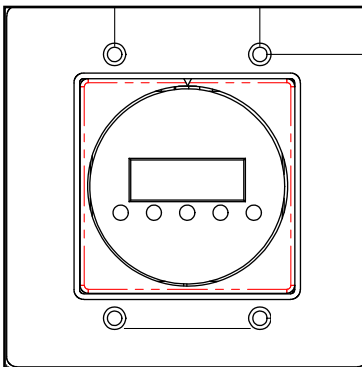


STC7D SERIES DIGITAL TIME CLOCK

Supplemental Installation Manual for Accessories

STC7D-W (Wall Mount)



STC7D-W Wall mount

⚠ WARNING

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

Use the unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.

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.

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.

When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.

NEVER place a switch where it can be reached from a tub or shower.

Intended for use with 24VAC Class 2 power supplies only.

Do not connect loads that exceed the timer's switch rating.

Confirm sufficient 24VAC power is available to operate the timer and the connected loads.

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1.0 OVERVIEW

1.1 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 CR2032 lithium battery back up for the timer-battery needs to be replaced approximately 2–3years
Switch rating:	16 Amps at 131°F
Operating Temperature Range:	32°F–140°F
Connections:	(3) 16 GA pigtails (wire nuts not provided)

Functional description of buttons on panel:

- **TIMER:** Programs review & setting programs
- **MANUAL ON AUTO OFF:** To select “ , or ”
- **CLOCK:** To adjust current DAY and TIME
- **DAY:** To adjust day of week
- **HOUR:** To adjust Hour
- **MIN:** To adjust minute
- **ⓧ:** Reset Timer’s setting
- **LED:** To indicate ON/OFF status

Press **ⓧ** button to reset Timer before programming.

Setting Options:

- 16 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;
 Monday–Wednesday; Thursday–Saturday; Monday/Wednesday/Friday; Tuesday/
 Thursday/Saturday.
- Manual Over-ride provided by “On/Auto/Off” switch.
- Program Reset button clears all settings. First, using a small pointed object push the reset button to clear all settings. The reset button is just above the “MIN” dark gray button.

Enclosure (STC7D-W): Requires a 4" x 4" electrical box by others.

- Box must accommodate (4) mounting screws (see drawing page 5).
- Minimum box depth 1.5". White wall plate and mounting screws provided.

1.2 DIMENSION DRAWINGS

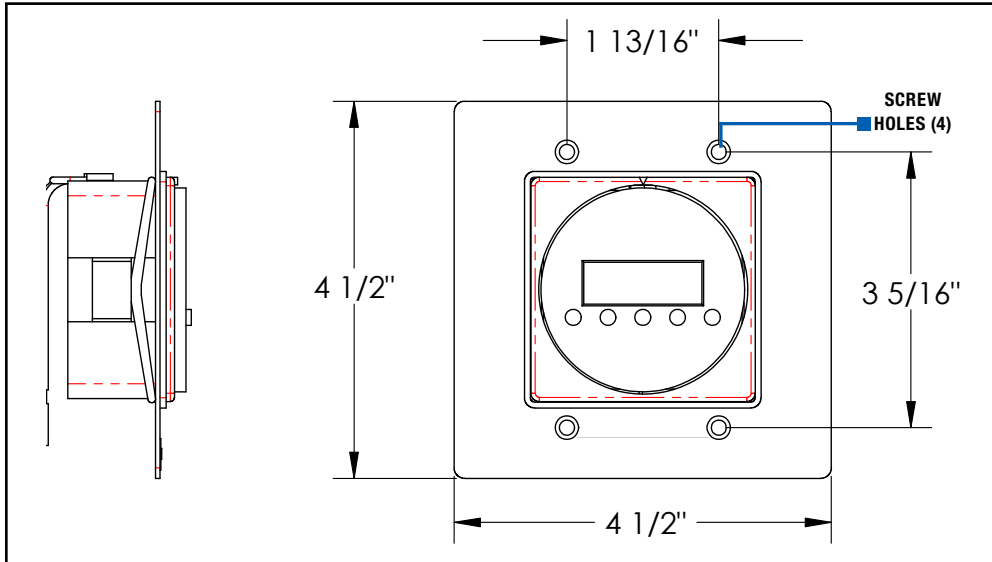


FIGURE 1.2.0 STC7D-W DIMENSIONS

2.0 SETTINGS

2.1 SETTING INSTRUCTIONS

SETTING THE CLOCK:

- Press and hold the CLOCK button.
- Press the DAY key until the correct day is displayed.
- Do the same with the HOUR and MIN. Now the clock is set!

SETTING THE TIMER:

Press the “DAY” key to scroll through these settings.

	MON	TUE	WED	THU	FRI	SAT	SUN
1.	X	X	X	X	X	X	X
2.	X						
3.		X					
4.			X				
5.				X			
6.					X		
7.						X	
8.							X
9.	X	X	X	X	X		
10.						X	X
11.	X	X	X	X	X	X	
12.	X	X	X				
13.				X	X	X	
14.	X		X		X		
15.		X		X		X	

These can be used to simplify programming. All times must be the same for the days chosen! Let us say you want to run a device Monday through Friday at the same time. Scroll down to #9 and you will have the days set!

Press the “TIMER” key and the display will show “1^{ON}--:--” set the time you want the unit to turn on by pressing the “HOUR” and “MIN” buttons respectively. To set the turn off time, press the “TIMER” key again and “1^{OFF}--:--” will show in the display. Again, set the “HOUR” and “MIN” time. If you want more than 1 on/off per day, press the “TIMER” key again and set “2^{ON}--:--”, “2^{OFF}--:--” until you reach the maximum of 8 on/off’s per day.

The timer is now set, but you need to push the “MANUAL” button until the line is under “AUTO.” If you only want 1 on/off per day or if you have more on/off’s per day, when you are done programming them in, press the “CLOCK” key again and you are almost done. The timer is now set, but you need to push the “MANUAL” button until the line is under “AUTO.”

Reset the setting: If you wish to change any or all on/off times, you must reset the timer. You cannot change just one setting.

Clear all: To erase all settings, Press the  button.

Operation Modes:

There are three operation modes: "ON," "AUTO," and "OFF"; selected through the "MANUAL" key. When the "MANUAL" key is pressed, observe that the indicator (line) on the screen moves upon the words.

- **MODE ON:** When the indicator is on "ON," the output turns on immediately and keeps this status while in "ON" mode.
- **MODE OFF:** When the indicator is on "OFF," the output turns off immediately and keeps this status while in "OFF" mode.
- **MODE AUTO:** When the indicator is on "AUTO," the output turn on and turn off based on the programs.

When the timer is not powered, it turns off the output permanently.

3.0 ELECTRICAL

3.1 ELECTRICAL SCHEMATICS

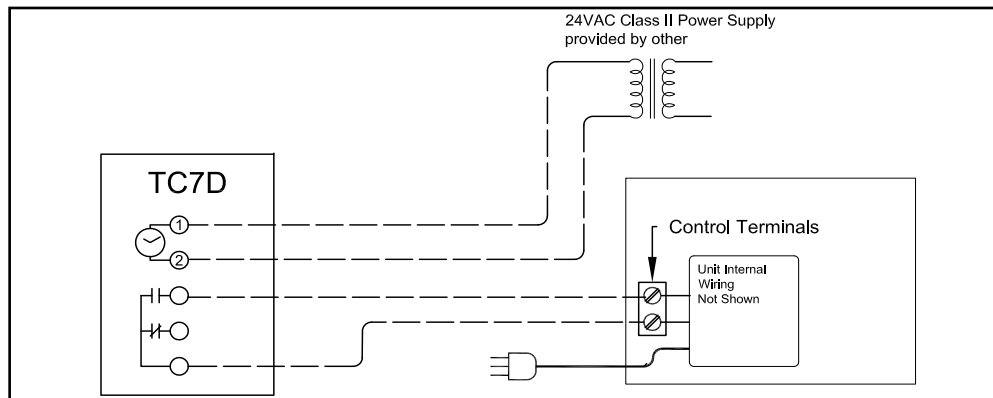


FIGURE 3.1.0 TR90, TR90G, TR130, TR200, AND TR300 SCHEMATIC

NOTE: There is a wire on the ST-C7D that connects Terminal 1 to the relay common of the timer. You must cut this wire to eliminate voltage to relay common.

In this example, the timer turns the Energy Recovery Ventilator (ERV) on at High speed when the timer dictates it is an occupied time.

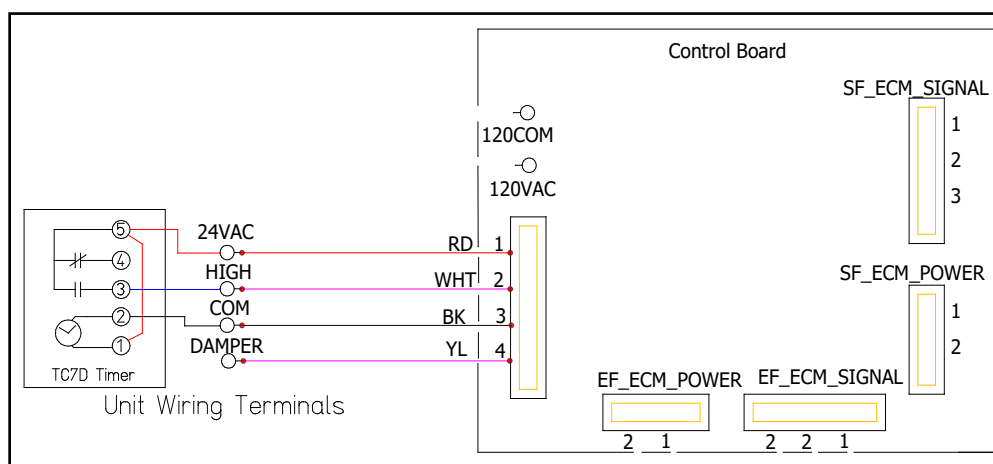


FIGURE 3.1.1 TRE-SERIES SCHEMATIC

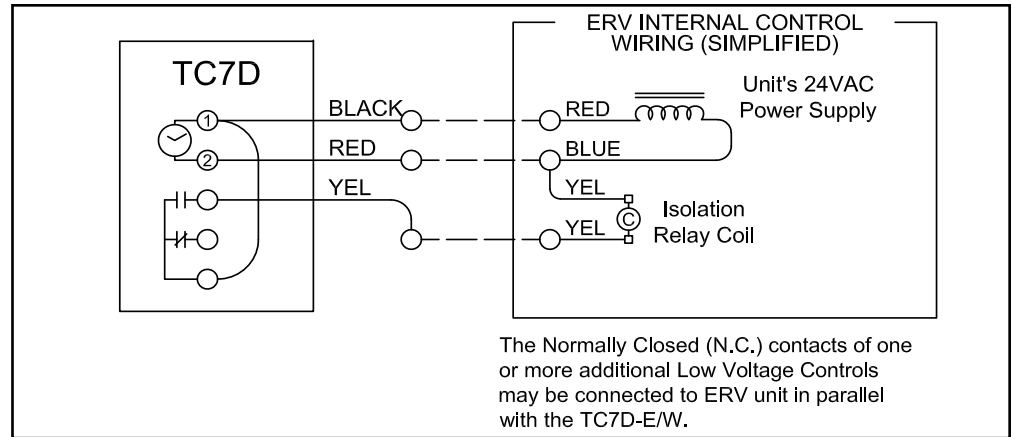


FIGURE 3.1.2 TRC1200 STANDARD WIRING SCHEMATIC

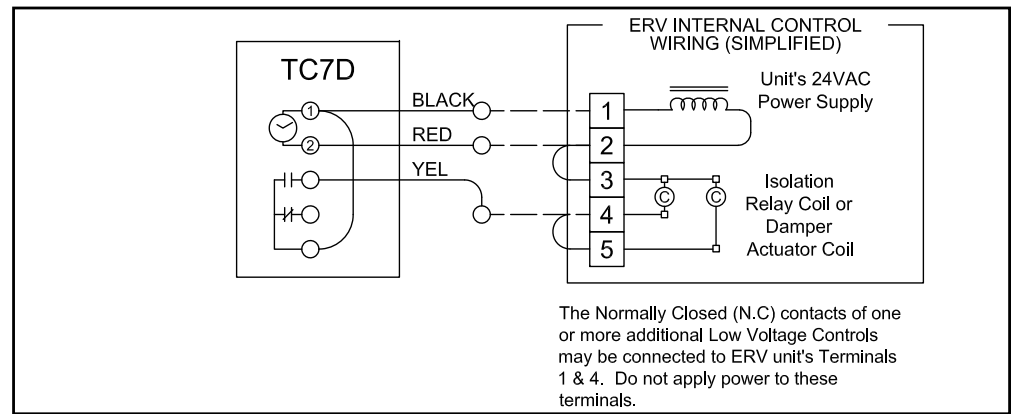


FIGURE 3.1.3 TRC1600 SCHEMATIC

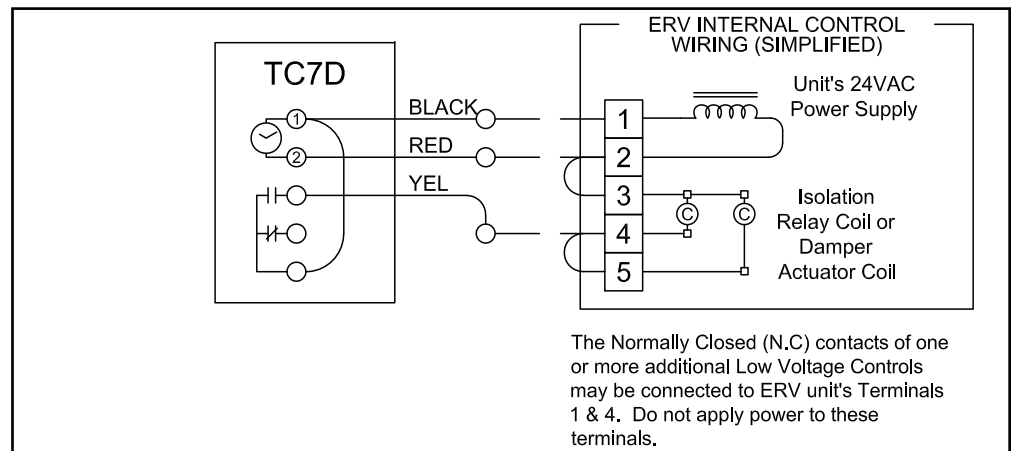


FIGURE 3.1.4 TRCE1200 ECM WITH TERMINAL BLOCK SCHEMATIC

In this example, the timer turns the ERV on at speed set by potentiometers when space is occupied.

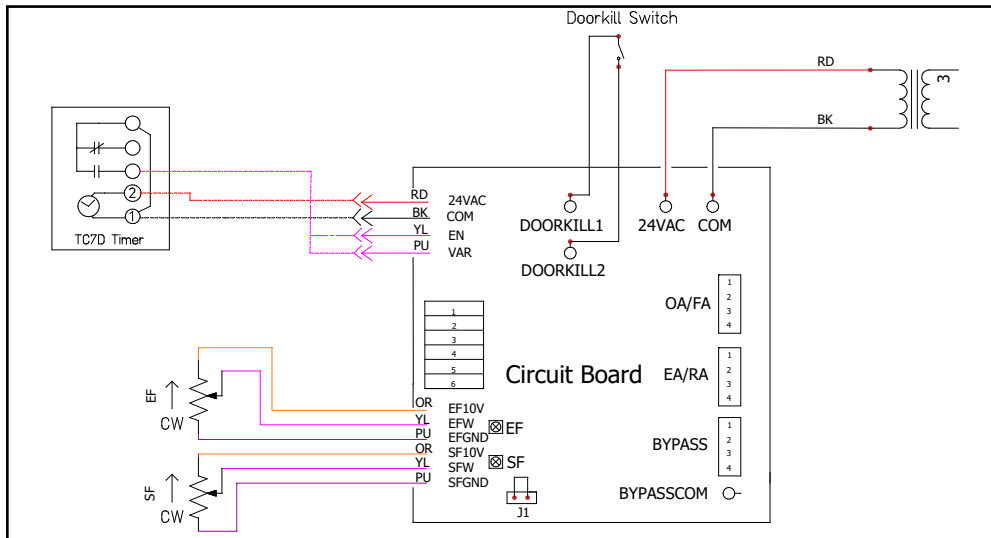


FIGURE 3.1.5 TRCEN500, TRCEN800, AND TRCE1200 ECM WITH CIRCUIT BOARD SCHEMATIC

In this example, the ERV does not run while unoccupied, set by timer. During occupancy, ERV runs at variable Speed. CO2 Controller sets speed based on CO2 levels. Remove the potentiometers by cutting the wires at the potentiometer. Cap the orange and purple wires from the potentiometer with wire nuts. HE07, HE10, and HE1.5 Circuit Boards have two potentiometers and the cut wires can be wired in parallel back to the CO2 Controller.

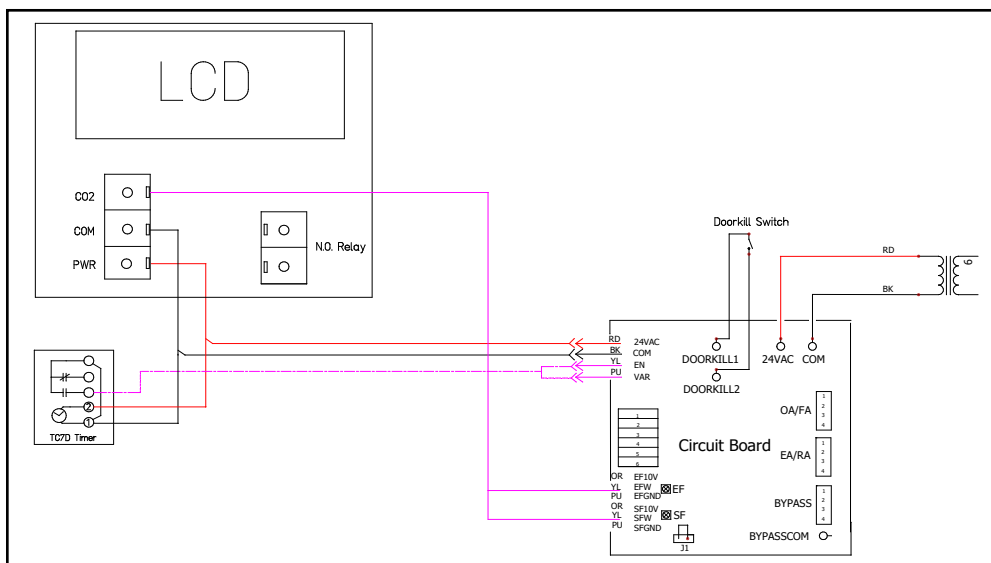


FIGURE 3.1.6 TRCEN500, TRCEN800, AND TRCE1200 ECM WITH CIRCUIT BOARD AND CO2 SCHEMATIC

NOTES:

NOTES:

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