

# **SC710V**

Non-Programmable Fan Coil Thermostat



- 110-277 VAC
- Manual Changeover
- Controls Single Stage Heating/ Cooling Systems
- · 3-speed fan control
- Easy slide bar temperature adjustment
- Mercury-Free, Environmentally Safe

C UL US

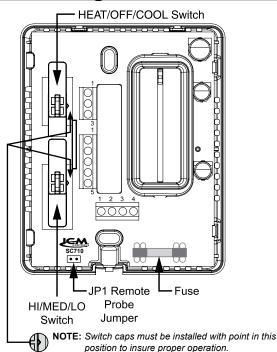
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#### Installation, Operation & Application Guide

For more information on our complete range of American-made products – plus wiring diagrams, troubleshooting tips and more, visit us at **www.icmcontrols.com** 

## Parts Diagrams (SC710)



#### Specifications

Input:

• Voltage: 110-277 VAC

Output:

| Fan and System Switches |           |      |        |           |
|-------------------------|-----------|------|--------|-----------|
| Voltage<br>Rating       | Inductive |      | Pilot  | Heat/Cool |
|                         | FLA       | LRA  | Duty   | Outputs   |
| 120 VAC                 | 5.8       | 34.8 | 125 VA | 20 VA     |
| 240 VAC                 | 2.9       | 17.4 | 125 VA | 20 VA     |
| 277 VAC                 | 2.4       | 14.4 | 125 VA | 20 VA     |

• Temperature control ranges: 50°F to 90°F Accuracy: ± 2°F

· Differential range: Fixed 2°F

• System configurations: Single-stage heat, single-stage cool

## **Specifications**

Package includes: SC710 non-programmable thermostat on base, thermostat cover, wiring labels, screws and wall anchors, Installation, Operation and Application Guide.

**Tools required for installation:** Drill with 3/16" bit, hammer, screwdriver and hex wrench (included in package)

## Important Safety Information

- Always turn off the thermostat before installing, removing, cleaning, or servicing; turn off the power at the main power source by unscrewing fuse or switching off circuit breaker
- Do not install on voltages lower than 110 VAC or higher than 277 VAC
- All wiring must conform to local and national building and electrical codes and ordinances
- While cleaning, do not get soap directly on thermostat switches or slide bar area; only use a damp cloth with a mild soap to wipe outside of thermostat cover

### To Remove Existing Thermostat



ELECTRICAL SHOCK HAZARD – Turn off power at the main service panel by removing the fuse or switching the appropriate circuit breaker to the OFF position before removing the existing thermostat

- 1. Turn off power to the heating system by removing the fuse or switching the appropriate circuit breaker off.
- Remove cover of old thermostat. This should expose the wires.
- Label the existing wires with the enclosed wire labels before removing wires.
- 4. After labeling wires, remove wires from wire terminals.
- 5. Remove existing thermostat base from junction box.
- Refer to the following section for instructions on how to install this thermostat.

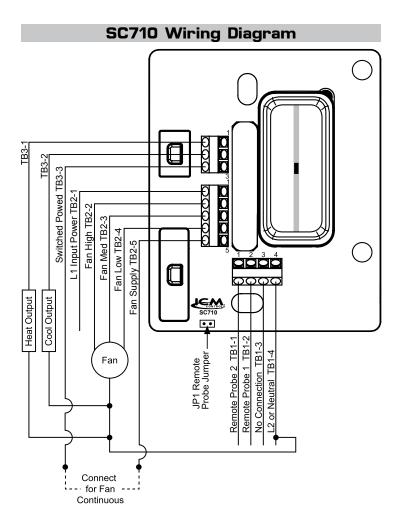
## To Install Thermostat



ELECTRICAL SHOCK HAZARD – Turn off power at the main service panel by removing the fuse or switching the appropriate circuit breaker to the OFF position before removing the existing thermostat.

<u>IMPORTANT</u>: Thermostat installation must conform to local and national building and electrical codes and ordinances.

- \*\* Note: Mount the thermostat in a junction box about five feet above the floor. Do not mount the thermostat on an outside wall, in direct sunlight, behind a door, or in an area affected by a vent or duct.
- 1. Turn off power to the heating and cooling system by removing the fuse or switching off the appropriate circuit breaker.
- 2. Move the ON/OFF switch to OFF.
- 3. Move Fan switch to either HI/MED/LO.
- 4. To remove cover, turn set screw on bottom of thermostat clockwise.
- 5. Set thermostat away from working area.
- Align thermostat base with junction box mounting holes and feed the control wires through hole.
- 7. Use supplied screws to mount the thermostat base to the junction box.
  - **CAUTION!**: Do not overtighten. May cause case to distort and risk exposure to high voltage. Be sure exposed portion of wires does not touch other wires.
- 8. Connect wires to terminal block using wiring diagram on reverse side of this guide.
- Tighten screws on terminal block. Gently tug wire to be sure of proper connection. Double check that each wire is connected to the proper terminal
- 10. Replace cover on thermostat by snapping it in place.
- 11. Turn set screw on side of cover counter-clockwise until cover can not be removed.
- 12. Turn on power to the system at the main service panel.



## Important Application Suggestions

#### **Remote Sensor Hints**

- 1. The remote temperature sensor to be with this thermostat is ACC-RT104.
- When using a remote temperature sensor, you must remove the JP1 jumper. If JP-1 jumper is left on, the temperature sensed will be incorrect.
- Remote temperature sensor wires should be installed away from power wires, florescent lighting, motors, etc to prevent electrical noise from affecting the temperature reading. Using shielded wire for the remote temperature sensor is recommended.

#### **Fan Wiring Hints**

- TB3-3 terminal will output the L1 voltage when the HEAT/OFF/COOL switch is NOT in the OFF position.
- Connect terminals TB2-5 to TB3-3 for Continuous Fan operation. The fan will run constantly when the HEAT/OFF/COOL switch is NOT in the OFF position
- 3. To power the fan during a call for heating or cooling, you must use a relay and wire it so the contacts make the connection between TB2-5 to TB3-3. The coil of the relay should be energized during the heat or cool call.

#### Thermostat Operation

The HEAT/OFF/COOL switch is used to turn the system on and off. In OFF position, the heating or cooling will never turn on. In HEAT position, the heating system will come on as needed. In COOL position, the cooling system will come on as needed. The fan can be wired to run continuously when the HEAT/OFF/COOL switch is NOT in the OFF position. The HIMED-LO fan switch is used to select the appropriate fan speed.

#### Operation

Setting the Room Temperature (Setpoint Temperature)

Step 1: Slide the temperature bar to your desired setting.

Step 2: Move the HEAT/OFF/COOL switch into the HEAT or COOL position.

Step 3: Move the Fan switch to HI/MED/LO, depending on the airflow needed

| Troubleshooting                                |  |  |  |
|--|--|--|--|
| Symptom  | Remedy   |  |  |
| The system isn't turning on                    | Check the wiring diagram   |  |  |
|  | Verify voltage at thermostat                                     |  |  |
| Thermostat is not properly controlling the fan | Check the wiring for continuous fan operation                    |  |  |
| Temperature setting does not appear accurate   | Verify no heat producing objects are located near the thermostat |  |  |
|  | Verify thermostat has adequate air flow to it                    |  |  |

## ONE-YEAR LIMITED WARRANTY

The Seller warrants its products against defects in material or workmanship for a period of one (1) year from the date of manufacture. The liability of the Seller is limited, at its option, to repair, replace or issue a non-case credit for the purchase prices of the goods which are provided to be defective. The warranty and remedies set forth herein do not apply to any goods or parts thereof which have been subjected to misuse including any use or application in violation of the Seller's instructions, neglect, tampering, improper storage, incorrect installation or servicing not performed by the Seller. In order to permit the Seller to properly administer the warranty, the Buyer shall: 1) Notify the Seller promptly of any claim, submitting date code information or any other pertinent data as requested by the Seller. 2) Permit the Seller to inspect and test the product claimed to be defective. Items claimed to be defective and are determined by Seller to be non-defective are subject to a \$30.00 per hour inspection fee. This warranty constitutes the Seller's sole liability hereunder and is in lieu of any other warranty expressed, implied or statutory. Unless otherwise stated in writing, Seller makes no warranty that the goods depicted or described herein are fit for any particular purpose



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