FC-1T-1F user manual

The FC-1T-1F automatically controls the temperature in a room by switching fans, lamps, or heaters on or off as the temperature drops below or exceeds the temperature set point.

When the SSC-1D is in cooling mode, it switches on the fans when the temperature exceeds the set point. When the control is in heating mode, it switches on the lamps or heaters when the temperature drops below the set point.

Features

- One solid-state relay
- Heat and cool modes
- Adjustable temperature set point, 32 to 99°F (0 to 37°C)
- Fahrenheit and Celsius display
- Six-foot temperature sensor (extendable)

- Error code display for troubleshooting
- Overload protection fuse
- Rugged, NEMA 4X enclosure (corrosion resistant, water resistant, and fire retardant)
- CSA approval
- Two-year limited warranty

Installation
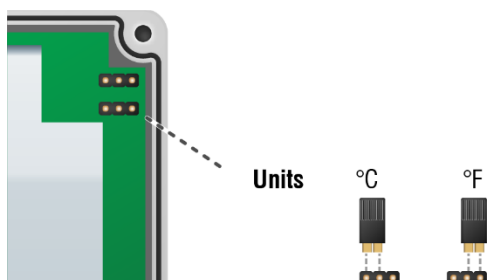
◇ Switch OFF the power at the source before connecting the incoming power wires.

◇ DO NOT switch on the power until you have finished all wiring and verified all equipment is properly connected and free of obstructions.
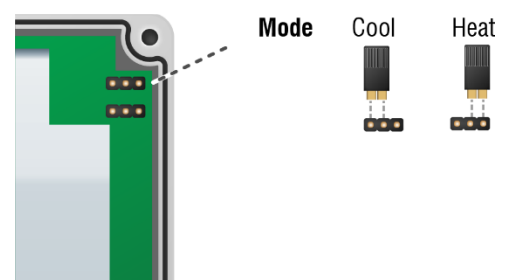
Electrical ratings

- Input: 120/230 VAC, 50/60 Hz
- Relay: 10 A at 120/230 VAC, general-purpose (resistive)
  1/3 HP at 120 VAC, 1/2 HP at 230 VAC
  360 W tungsten at 120 VAC
- Fuse: 15 A, 250 VAC ABC-type ceramic

Temperature display units

Mode of operation

1. Set the **voltage switch** to the correct position for the line voltage used, 120 or 230 VAC.

2. Connect the wires as shown in the diagram.

Startup

When the control powers up:

1. *88* will display for 0.25 seconds (start-up).

2. *00* will display for 1 second (self-test).

3. *60* will display for 1 second. The 60 means that the frequency is 60 Hz.

4. The display will flash between the temperature and *PF* (power failure). Click the switch to the right to clear the message.

Display alerts

P5	The temperature sensor cable has short circuited.
P0	The temperature sensor is damaged or the connecting wire is broken.
t5	The Temperature knob has been turned. The display will alternately flash t5 and the ambient temperature. The control will not accept the new setting until the switch is clicked to the set position. *OR* The voltage switch is set to 230 but the incoming power is 120 volts. Make sure the voltage switch is in the correct position.
PF	There has been a power failure. The display will flash between the temperature and PF. Click the switch to the right to clear the message.

Programming

Switch position		Function
CENTER		◇ Displays the ambient temperature
RIGHT		◇ Allows you to view and adjust the temperature set point ◇ Clears alarms
LEFT		◇ Allows you to verify if the control is in heating or cooling mode ◇ Allows you to verify if the control is displaying Fahrenheit or Celsius

Temperature set point

The FC-1T-1F controls the temperature in a room by switching fans, lamps, or heaters on or off as the temperature drops below or exceeds the temperature set point. The set point is the desired room temperature and can be set between 32 and 98°F (0 and 38°C).

- In **cooling mode**, the control switches on the load when the temperature exceeds the set point.
- In **heating mode**, the control switches on the load when the temperature drops below the set point.

To adjust the setpoint

1. Click the switch to the right and hold.
2. Adjust the TEMPERATURE knob to the desired setting.

NOTE You must hold the switch in the set position while turning the TEMPERATURE knob. If this is not done correctly, the display will flash between t5 and the temperature display, indicating the knob has accidentally been turned. The control will not accept the new setting until the switch is clicked to the right.

FC Series model	Replaced models	Interface	Fixed stages	Variable stages	Control
FC-1VAC	MSC-4	Dial	0	1	Manual
FC-1T-1VAC	MTC-4C	Dial	0	1	Temperature
FC-1T-1VDC	SSV-DC	3-digit LED, dial	0	1 (DC)	Temperature
FC-1T-1F	SSC-1D	2-digit LED, dial	1 - heat or cool	0	Temperature
FC-1T-1VAC-1F	FHC-1D	2-digit LED, dial	1 - heat only	1	Temperature
FC-1T-2VAC-3F	SEC-HD, PEC, TVS	4-digit LED, button	3	2	Temperature