

Installation Instructions

Duct Pressure Powered, Wall-Mounted Thermostat for use with
System-Powered 35BB,BC; 37AG,AH,AJ; 37CL,CM,CN and 37HS Air Terminals

GENERAL

Thermostat Type — Wall thermostats are designated as direct acting (DA) and reverse acting (RA). A DA thermostat will output an increasing pressure to the volume control as the sensed temperature rises. An RA thermostat will output a decreasing pressure to the volume control as the sensed temperature rises.

Thermostat Packages — There are 3 wall thermostat packages available, each complete with decorative cover. The dual thermostat has both an RA and a DA thermostat mechanism in a single case with cover. Refer to Fig. 1 for location of identification label. Wall thermostats can be applied as shown in Table 1.

Interconnecting tubing must be ordered separately. The maximum amount of tubing allowed between volume controller and thermostat is 100 ft of 1/4-in. OD FR (fire retardant) tubing. This tubing is available in 250-ft rolls (Carrier Package No. 35BB900172).

The dual RA/DA thermostat is designed for use in air systems which deliver both cooling air and heating air (37CL,C-M,CN and 37HS). A special changeover valve must be used in this application. Package No. 37CM900152, containing the changeover valve and installation instructions, must be ordered separately.

LOCATION

The wall thermostat must be located properly for satisfactory control. The thermostat must be installed where it will be exposed to free air circulation but will not be exposed to drafts. Do not install thermostat on exterior walls, in direct sunlight, or where it will be affected by lamps, computers or other heat producing appliances, or people. Locate the thermostat 4 to 5 ft above the floor. Ensure there are no hot or cold water pipes or ducts behind the thermostat.

INSTALLATION

1. The thermostat mounts into a standard, field-supplied 2-in. x 4-in. electrical junction box. Two #6-32 screws are provided with the thermostat. A 10-in. long piece of 5/32-in. ID Tygon tubing with an adaptor fitting to 1/4-in. OD FR tubing is also provided. (Two tube/adaptors are supplied with the dual RA/DA thermostat.)
2. Remove the cover of the thermostat by carefully depressing the wire clip on each side of the case. See Fig. 1.

Table 1 — Wall Thermostat Applications

UNIT	MODE	THERMOSTAT TYPE	PART NO.	PACKAGE NO.
35BB,BC*	Cooling	RA	HL08TE005	37CM901002
37AG,AH,AJ*				
37CL,CM,CN	Cooling	DA	HL08TE006	37CM901012
	Heating	RA	HL08TE005	37CM901002
	Cooling/Heating	Dual RA/DA	HL08TE004	37CM900992
37HS	Cooling	DA	HL08TE006	37CM901012
	Heating	RA	HL08TE005	37CM901002
	Cooling/Heating	Dual RA/DA	HL08TE004	37CM900992

*35BB,BC and 37AG,AH,AJ applications must be used with an amplifying regulator or amplifier tee. Consult Carrier dealer for package number.
NOTE: These thermostats will only modulate the system-powered air valve in the controlled unit and interconnected slave units. A separate control will be needed for any auxiliary equipment.

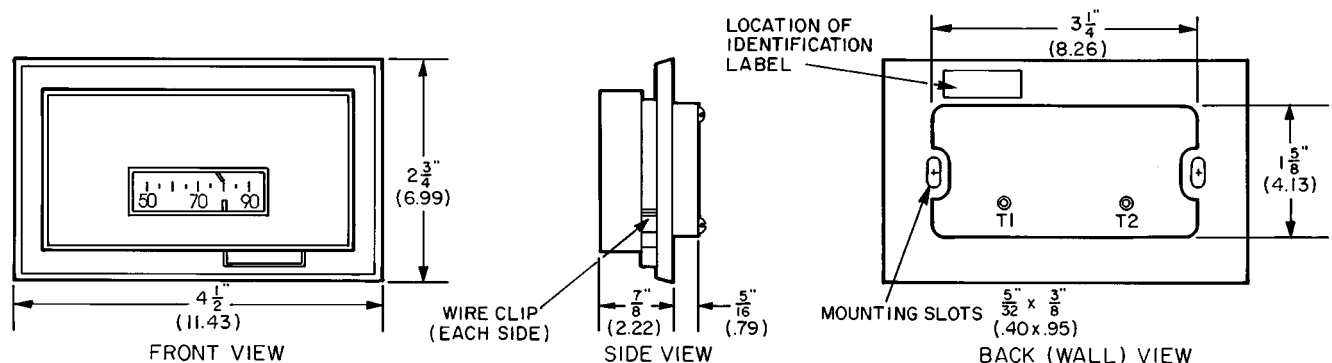
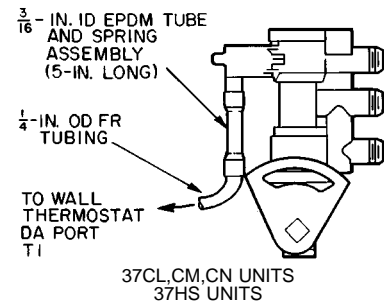
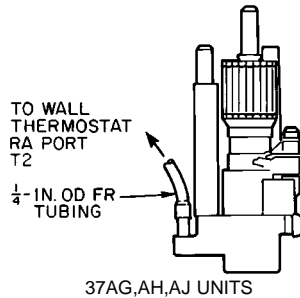
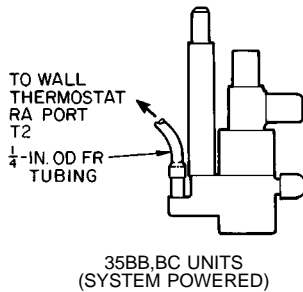
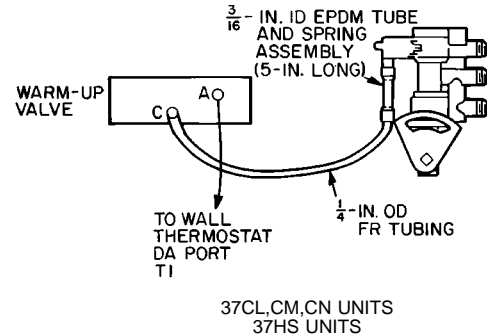
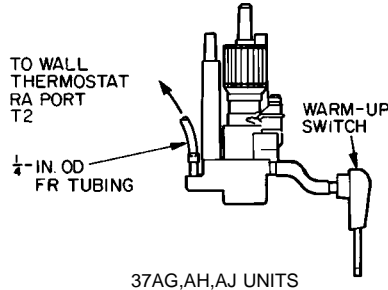
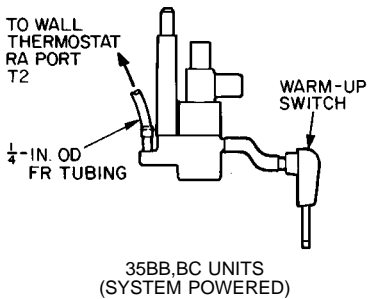


Fig. 1 — Wall Thermostat Dimensions (RA Thermostat Shown)

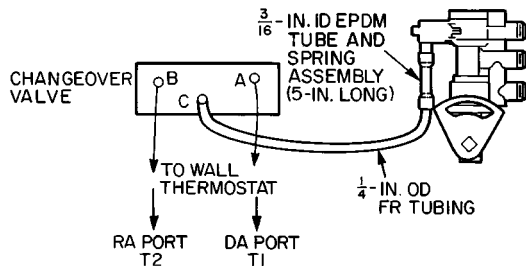
(A) VAV COOLING ONLY



(B) VAV COOLING WITH WARM-UP



(C) VAV COOLING/VAV HEATING - 37CL,CM,CN, 37HS UNITS ONLY (NOTE: MAX DUCT TEMPERATURE 120 F)



NOTE: Control components shown above must be purchased separately. Consult Carrier dealer for package numbers. Refer to specific package installation instructions for mounting details.

The 3/16-in. ID EPDM tubing with spring is supplied with the wall thermostat.

Fig. 2 — Connecting Tubing to Unit Volume Control

- Attach the 5/32-in. ID Tygon tubing to the appropriate port, T1 or T2, as shown in Fig. 2. Attach the adaptor to the 1/4-in. OD FR tubing. Connect the other end of the tubing to the unit volume control (purchased separately).

NOTE: A 5-in. long, 3/16-in. ID EPDM tube and spring assembly is included in the thermostat package for connecting the 1/4-in. FR tubing to the 37C or 37HS volume control.

- Mount the thermostat onto the junction box, being careful not to allow tubing to kink. Attach the thermostat to the junction box using the screws provided. Replace cover.
- For mounting applications without a junction box, use toggle bolt assembly as shown in Fig. 3. Package 37HS900019 contains this toggle bolt assembly.

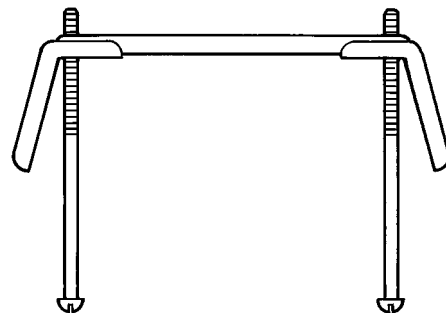


Fig. 3 — Toggle Bolt Assembly for Mounting Applications Without Junction Box