

and a temperature-measuring device (0-200°F thermometer).

Install the Amprobe to measure blower current, the slope gauge to measure static air pressure at the units and the temperature device to measure unit supply and return air temperature. Before taking measurements, be sure that all registers, grilles and dampers are open or set to their proper positions. Be sure that clean filters are in place. Temperature measuring device must be installed to obtain average temperature at both inlet and outlet. For outlet, measure temperature of each main trunk at a location far enough away to avoid heater radiation and read the average temperatures. Table 2 below shows the CFM that should be achieved at various external static pressures

BLOWER DATA									
MODEL	MOTOR SPEED	MOTOR HP	MOTOR AMPS	MOTOR VOLTAGE	CFM V. EXTERNAL STATIC*				
					0.10	0.20	0.30	0.40	0.50
AAM 18/19/24/25	LOW	1/5	2.8	240	835	800	790	750	695
	HIGH				915	880	875	825	770
AAM 30/31/36/37	LOW	1/3	5.4	240	1130	1100	1050	1000	960
	HIGH				1410	1350	1280	1200	1160
AAM 42/43/48/49/60/61	LOW	3/4	9.5	240	1520	1500	1485	1460	1440
	MID				1700	1675	1640	1620	1575
	HIGH				2060	2020	1980	1935	1885

*Wet Coil

Table 16-1. - CFM Delivered at Various External Statics

17. Checking Air Flow/Temperature Rise Method

Turn on power supply. Set thermostat fan switch to on. Set the cooling indicator to maximum, heating to minimum. System switch may be on heat or cool. Check slope gauge measurement against appropriate air flow chart. Make damper, register and motor speed adjustments to obtain required airflow.

Set thermostat fan switch to auto, system to heat and thermostat heating indicator to maximum heat. Blower should start and all heat be energized.

Check air flow using temperature rise method.

$$CFM = \frac{OUTPUT(BTUH)}{1.08 \cdot TEMP.RISE}$$

NOTE: BTUH output should be computed by VOLT x AMPS x 3.4 = BTUH OUTPUT. Since line volt can vary, do not use nameplate rating to determine output.

18. Operation and Maintenance

Below are brief descriptions of the key components of the unit and installation. This manual only provides general idea of the components and recommended practices. The installer should use best judgement to ensure safe installation and operation of the unit.

1. Room Thermostat- This is the device that controls that operation of your heating and/or cooling unit. It senses the indoor temperature and signals the equipment to start or stop maintaining the temperature you have selected for your comfort. The room thermostat should be in a central, draft free inside wall location for best operation. Do not place any heat producing apparatus such as lights, radio, etc., near the thermostat as this will cause erratic operation of the comfort system. The thermostat can accumulate dust or lint which can affect its accuracy. It should be cleaned annually.

2. Air Filter(s) - All central air moving comfort systems must include air filter(s). These filters will be located either in the equipment or in the return air duct system upstream of the equipment. The filter(s) removes dust and debris from the air thus helping to keep your air-conditioned space clean. More important, the filter keeps dust and debris from collecting on the heat transfer surfaces thus maintaining

optimum equipment efficiency and performance. Inspect and clean or replace filters every month. This routine maintenance procedure will pay big dividends in reduced operating cost and reduced service expense. Never operate comfort equipment without filter(s).

3. Fuses and/or Circuit Breakers- This comfort equipment should be connected to the building electric service in accordance with local and National Electric codes. This electrical connection will include over-current protection in the form of circuit breakers. Have your contractor identify the circuits and the location of over-current protection so that you will be in a position to make inspections or replacements in the event the equipment fails to operate.



WARNING

4. a) Do not store combustible materials or use gasoline or other flammable liquids or vapors in the vicinity of this appliance.

b) Do not operate the comfort equipment with panels removed.

c) Have your contractor point out and identify the various cut-off devices, switches, etc., that serve your comfort equipment. There is a main switch that will cut off energy to your heating system. Know where they are so that you may cut off the flow of energy in the event of overheating.

5. Periodic Checkup and Service- This product is designed to provide many years of dependable, trouble-free comfort when properly maintained. Proper maintenance will consist of annual check-ups and cleaning of the internal electrical and heat transfer components by a qualified service technician. Failure to provide periodic checkup and cleaning can result in excessive operating cost and/or equipment malfunction.

6. Lubrication- Direct drive blower motors are equipped with permanently lubricated bearings and do not require further lubrication.

7. Air filter replacement: An air filter can restrict the airflow of air to the fan coil if it is not cleaned or replaced periodically. When replacing the air filter, always replace with the same type and size as originally furnished with the unit.

19. Final System Checkout

1. Make certain all cabinet openings are properly sealed and any grommets moved during installation are moved into proper place.

2. With cooling system operating, check for condensate leakage.

3. Perform leak detection inspection of refrigerant circuit and connecting piping.

4. Secure all cabinet doors