



Installation and Maintenance

EHF-3 Fan Unit

Please read and save these instructions

These installation and maintenance guidelines should be used by experienced personnel as a guide to ensure that the Armstrong EHF-3 Fan Unit functions correctly. Selection or installation of equipment should always be accompanied by competent technical assistance. We encourage you to contact your local Armstrong Representative or Armstrong International if further information is required.

The Armstrong EHF-3 fan unit may be installed either directly on top of an Armstrong EHU-703 or remotely mounted if used with any of the other Armstrong EHUs or HumidiClean humidifiers. The EHF-3 should be mounted 6-8 feet from the floor. A minimum distance of two feet is required between the ceiling and the top of the cabinet. Avoid discharging into high human traffic areas if the unit's elevation is below 8 feet. A clear area of 2 feet wide by 10 feet long should be provided for vapor throw in front of the EHF-3. The EHF-3 weighs 33 lb. without stepdown transformer and 47 lb. with stepdown transformer.

Direct Mount (Figure 1-1)

A connection hose for direct mount is supplied with the unit. Removal of the top cover will allow access to the permanent mounting holes in the 1" flange around the bottom of the EHU cabinet. The ½" manifold drip must be connected to a "P" or "S" trap. See Figure 1-1. There are knockouts in the top, back, left side of the EHU-703 to allow drainage directly into the drain cup of the EHU. Do not return hot condensate to the fill cup, as it is only rated to withstand 170°F. The bottom panel of the EHF-3 may be removed for direct mount installations.

Note: For direct mount installations with less than 50 lb/hr, the ½" drain may be simply capped with a short piece of tygon tubing. The 2" pipe inlet to the manifold can be connected to the EHU-703 steam generator with the included hose cuff and hose clamp.

Remote Mount

There are two mounting holes provided in the back of the EHF-3 cabinet for wall mounting on 16" centers. Be sure these mounting holes are drilled into studs or some equally strong structure. Tighten mounting bolts after hanging cabinet.

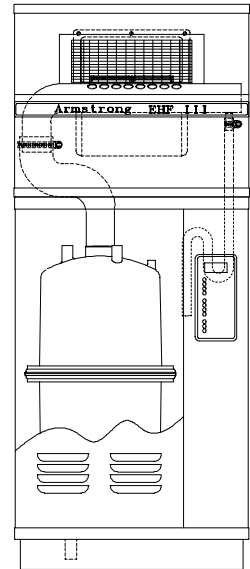


Figure 1-1

The manifold drip must be piped as in Figure 2-1. Connect the 2" rubber hose inlet to a 2" nominal insulated copper pipe. Pitch the pipe 1 inch per 1 foot back towards the humidifier, as shown in Figure 2-1. Maximum piping run is 20 feet. Avoid the use of 45° and 90° elbows in the vertical run immediately preceding the EHF-3 rubber hose inlet. Consult the factory if piping run is over 20 feet or EHF is to be mounted below the humidifier.

Figure 2-1
Remote EHU-3
Fan Unit
Installation

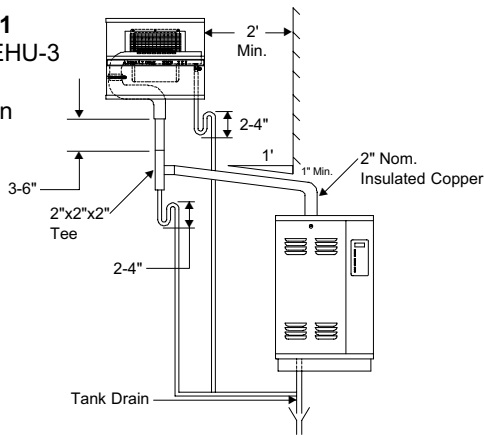
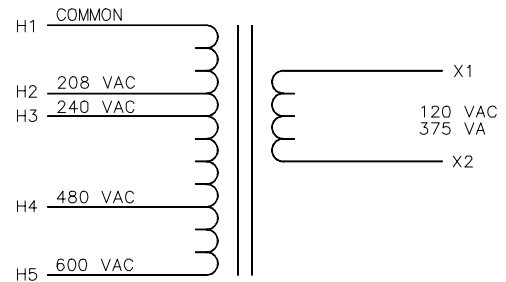


Figure 2-2
Transformer
Wiring Schematic



Wiring

The fan motor runs on 120 VAC 60 Hz. single phase power. The rated amperage draw is 2.9 amperes. The cabinet must be suitably grounded. A ground lug is located next to the power supply terminal strip for this purpose. A fused disconnect or magnetic breaker should be installed within sight of the unit. See Table 2-1. The EHF-3 may be supplied with an integral 208, 240, 480, 600 VAC to 120 VAC stepdown transformer. If so, the incoming power is wired directly to the stepdown transformer through the back, right hand 1/2" knockout hole in the bottom panel. Again the unit should be fused separately, see Figure 2-2 for transformer wiring schematic.

Table 2-1

Main Supply Voltage	Fuse Size
120 VAC	7 Amp
208 VAC	4 Amp
240 VAC	3.25 Amp
480 VAC	2 Amp
600 VAC	1.5 Amp

Operation

The EHF-3 Fan Unit is designed to run continuously during the humidification season. Output louvers are set to give slightly downward discharge airflow. Consult factory if other air discharge angles are needed.

Maintenance

Disconnect the power before servicing. The motor bearings should be lubricated every 6 months with SAE 10W or 20W non-detergent oil (ML-type) or with electric motor oil.

For additional information on Armstrong EHU-3 Fan Units, contact Armstrong International or your local Representative.

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