



®

*INSTALLATION INSTRUCTIONS
MODEL CHX-A/CHP-A
SERIES 012, 018, 024, 030, 036*

Horizontal Fan Coil Units

GENERAL

This instruction should be used in conjunction with the appropriate condensing section instruction. The following reference instructions are available to help the installer as well as to serve as a reference source for the service technician. Installer should pay careful attention to the words: NOTE, CAUTION AND WARNING. Notes are intended to make installation easier. Cautions are given to prevent equipment damage. Warnings are given to alert the installer that personal injury and/or equipment damage may result if installation procedure is not followed.

INSTALLATION INTRODUCTION

This instruction covers the installation of cooling only and cooling/heating ceiling furr-in evaporator blowers. All units have sweat connections (see specification for sizes) and are sized to be matched with equal BTUH capacity air cooled condensing units. CAUTION: All units are leak checked with nitrogen before sealing. System should be evacuated in accordance with accepted procedures before condensing unit valves are opened or unit is put into operation. All heating and cooling models are equipped with a 40VA transformer. Use thermostat with isolating contacts to prevent interconnection of class 2 output.

LIMITATIONS

These units should be installed in accordance with all local and national safety, building and electrical codes.

MOUNTING

Mount unit with 4¹/₄ x 1¹/₂ lag screws.

WARNING: Ceiling structure must be capable of supporting the weight of the unit. Unit must be mounted level.

FILTERS

Filters are to be field supplied and located in the return air flow. Filters are supplied with all RAPR/B model return air plenums when shipped with unit. Filters listed below are nominal sizes for ceiling return panel.

Recommended field supplied filter sizes

018-CHX/P-A.....20 x 20 x 1
024-CHX/P-A20 x 20 x 1
030-CHX/P-A.....20 x 25 x 1
036-CHX/P-A.....20 x 25 x 1

DUCT CONNECTIONS

Duct connections should be sized no smaller than the duct flanges on the casing. Flexible collars of a non-flammable material should be used on the duct flanges to minimize the transmission of noise and/or vibration. When the units are installed above a dropped ceiling, they must be installed in an airtight enclosure to prevent ventilation of the unit into concealed spaces of the building structure.

CONDENSATE DRAIN

Connect drain line to either or both of the $\frac{3}{4}$ " MPT drain nipples. The inside $\frac{3}{4}$ " MPT drain nipple should be used as an auxiliary drain. If auxiliary is not used, it should be capped. When auxiliary is required, it should be piped as a separate drain to a location where water flow can be seen as a warning that the lower drain is blocked. The drainpan can be field selected to slope toward the right-hand or left-hand side of the unit. Remove each of the four mounting screws. Angle the drainpan in the other direction and replace the screws.

REFRIGERANT PIPING

For system charge and installation of refrigerant piping, see applicable condensing unit data.

ELECTRICAL CONNECTIONS

Refer to nameplate F.L.A., maximum fuse size and minimum circuit ampacity. Also see wiring diagram affixed to the unit to make control and power wiring connections.

THERMOSTAT SETTING

Heat anticipator setting on all units should be .20.

INSTALLATION RECOMMENDATIONS AND WARNINGS

1. Be careful not to hold the unit by its blower housing. The blower wheels and housings are very delicate and can be easily bent. Once bent, they are almost impossible to fix. "Out-of-round" blower wheels will cause excessive vibration and noise.
2. Magic Aire brazes the corners of the drain pans and the drain fittings on the drain pans. Violent bending or sideways pressure when installing the drain lines can tear the welds loose. This will cause leaking drain pans.
3. When soldering on the suction line, be sure not to pull the line away from the unit. This action could tear the small tubes leading into the coil. This kind of damage is usually **not** reparable and the coil must be replaced.
4. If a leak develops in the drain pan, it is usually best to remove the entire drain pan assembly and have a new one fabricated. This assembly is attached to the unit with only four screws, two on each side. Consult the factory or your local representative for replacement part pricing and availability.
5. Always replace parts with the original manufacturer's recommended replacement parts. This keeps your warranty, UL listing, and capacity ratings in effect.
6. The coil can be inspected and cleaned by lowering the heater, blower deck, and/or drain pan assembly from the unit, all of which can be removed with the unit installed.