

# THP SERIES FAN COIL UNIT

## INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS

### GENERAL

The manufacturer assumes no responsibility for equipment installed in violation of any code requirement.

These instructions give information relative to the installation of these fan coil units only. For other related equipment refer to the proper instructions.

Material in this shipment has been inspected at the factory and released to the transportation agency in good condition. When received, a visual inspection of all cartons should be made immediately. Any evidence of rough handling or apparent damage should be noted on the delivery receipt and the material inspected in the presence of the carrier's representative. If damage is found, a claim should be filed against the carrier immediately.

### FAN COIL UNIT

The installer must adhere strictly to all local and national code requirements pertaining to the installation of this equipment.

These units are designed to be installed in an upflow position.

**WARNING:** *Extreme caution must be taken that no internal damage will result if screws or holes are drilled into the cabinet.*

All fan coil units are U.L. Listed for installation with zero inches clearance to combustible materials. This includes the fan coil cabinet, discharge plenum and connecting ducts. Sufficient clearance must be provided at the front of the fan coil to allow access to electrical controls and removal of

the motor / blower assembly for servicing. This clearance distance should be approximately the same as the depth dimension of the fan coil unit.

### AIR DISTRIBUTION DUCTS

All duct work must adhere strictly to local and national code requirements. Provision for connecting the return air duct is located on either side of the unit. The installer must cut out the center section and bend the 3/4 inch flanges to the outside. It will also be necessary to cut out the cabinet insulation to provide free flow of air to the fan coil unit blower. The return air duct is attached by screws to the 3/4 inch flanges and routed to a filter grill. If there is no ducted return, applicable installation codes may limit the unit to installation only in a single story residence.

### ELECTRICAL

All wiring must comply with local and national code requirements. Units are provided with wiring diagrams and nameplate data to provide information required for necessary field wiring. Knockouts are provided on the cabinet for connection of power supply.

These fan coil units are provided with a Class 2 transformer for 24-volt control circuits. Should any add-on equipment also have a Class 2 transformer furnished, care must be taken to prevent interconnecting outputs of the two transformers by using a thermostat with isolating contacts.

### REFRIGERANT COIL / PIPING

The refrigerant coil for this unit is shipped in a separate package and can be installed in the unit on either the right or left side as the installation requirements dictate. Follow the instructions furnished with the coil when installing in the unit cabinet.

The suction and liquid lines must be sized in accordance with the outdoor unit manufacturer's recommendations. Connections at the fan coil unit are sweat.

Condensate drain lines must be installed with adequate slope away from the unit to assure positive drainage. Since the drain pan is located on the suction side of the blower, a negative pressure exists at the drain pan and a minimum trap of 1-1/2 inches must be provided in the drain line to assure proper drainage.

### OPERATING AND MAINTENANCE

Prior to start-up, inspect the blower to assure the wheel turns freely without rubbing on the housing. See that the air filter is properly positioned in the unit, then replace access panel.

The air filter should be cleaned or replaced as often as necessary to prevent restriction of air flow. Always replace the filter with the same type as originally furnished.

The blower motor should be cleaned and oiled with a good grade of SAE 20 oil annually. Normally a few drops of oil in each bearing is sufficient.