

Hydronic Air Handler

for 5100 Series Comfort Plus Furnaces

FEATURES:

- ◆ Heavy duty insulation provides maximum sound control for quiet operation
- ◆ Durable design with urethane exterior paint finish
- ◆ Built-in, automatic static heat recovery system
- ◆ 5-Year Limited Manufacturer's Warranty

GENERAL:

The Steffes Air Handler is an optional device designed to interface with the Comfort Plus Hydronic (5100 Series) furnace to allow it to provide forced air heating as a stand alone furnace or as a supplement to other ducted heating systems such as a heat pump. When used with a heat pump, it allows the Comfort Plus Hydronic furnace to serve as the back-up heat source and provide comfort modulation. Heat pumps

can be operated to much lower temperatures allowing for full utilization of their efficiency while optimizing system performance. A duct sensor constantly monitors outlet air temperature and modulates the precise amount of stored off-peak heat needed to eliminate uncomfortable discharge air temperatures typically associated with heat pump systems during cool outdoor temperatures. The air handler also directs the heat lost statically through the furnace's outer panels into the ductwork for delivery to the living space (automatic static heat recovery). The internal controls of the Comfort Plus Hydronic furnace automatically regulate the operation of the air handler.



OPERATION:

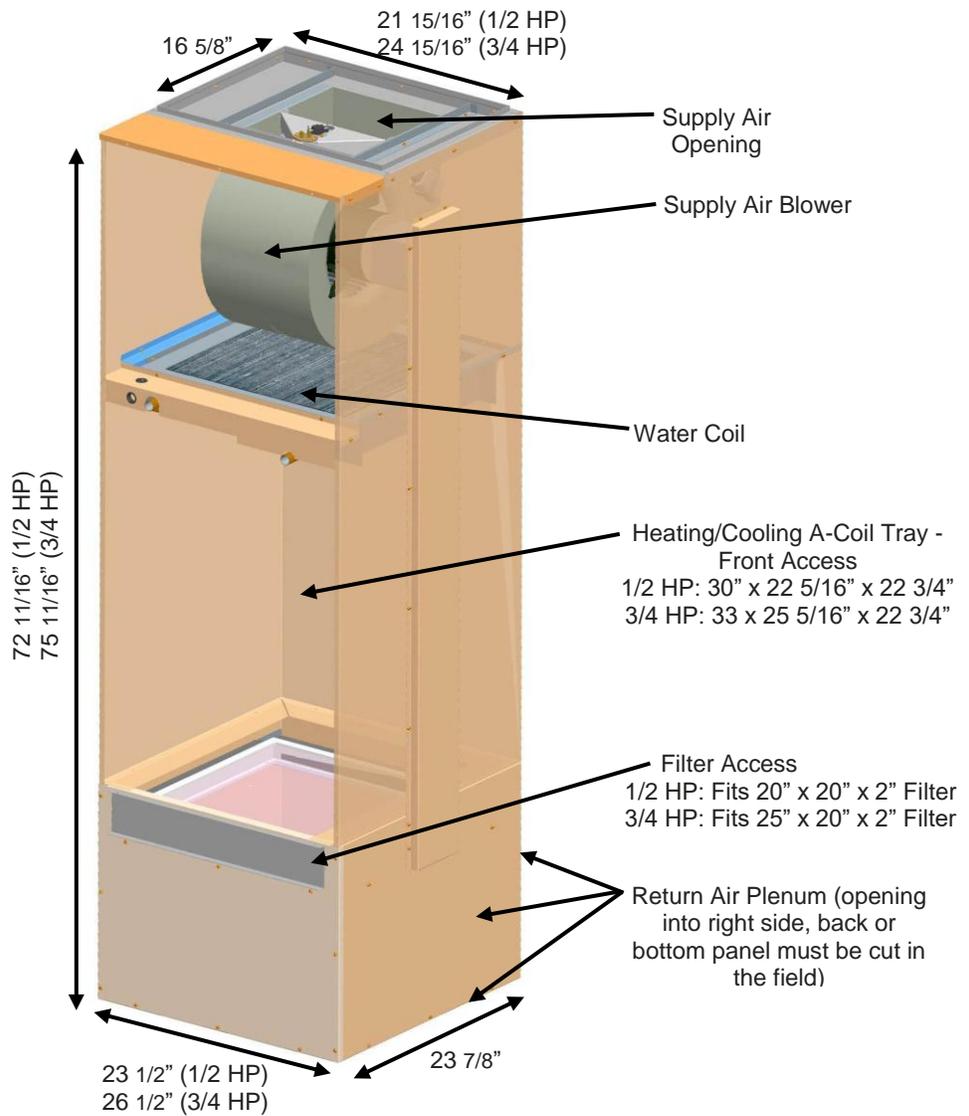
A heat call from the room thermostat will energize the pump to circulate a water/glycol solution through the Comfort Plus Hydronic's heat exchanger where it is heated to the appropriate temperature. This heated water solution is then circulated through the air handler's water coil. As it passes through the coil, the air handler's blower system extracts the heat and delivers it to the living space through the ductwork.

The Steffes Air Handler includes a return plenum, supply air blower, water coil, and air filter.

The air handler's variable speed blower incorporates an ECM motor that automatically adjusts its speed to achieve the appropriate CFM for the thermostat input received. Benefits include:

- ◆ Quiet operation
- ◆ Better dehumidification
- ◆ Offers greater operating efficiency by consuming 25% less energy during normal operating mode which provides operating cost savings to the consumer. In continuous fan mode, low speed energy savings can be greater than 70% in comparison to a standard fixed motor speed.
- ◆ Interfaces with single or multi-speed air conditioners or heat pumps. With multi-speed systems, it operates at a lower speed most of the time while higher speeds may occur but only on extremely hot or cold days. This staged heating and cooling eliminates temperature swings, enhances comfort and optimizes efficiency.
- ◆ Improved air filtration in continuous fan mode
- ◆ Constant air flow over a wide range of static conditions, even if filters are dirty or registers are closed.

DIMENSIONAL DIAGRAM:



SPECIFICATIONS:

	1/2 HP, 60 HZ Variable Speed (ECM) Air Handler	3/4 HP, 60 HZ Variable Speed (ECM) Air Handler
Order Item Number	1302132	1302134
Approximate Weight	200 lbs	225 lbs
Maximum Static Pressure (inches water column)	.75 inches H ₂ O	.75 inches H ₂ O
Maximum Water Coil Output	60,000 BTU/hr	90,000 BTU/hr
Maximum Outlet Temperature	120°F	120°F
A-Coil Tray Dimensions (H x W x D)	30" x 22 5/16" x 22 3/4"	33" x 25 5/16" x 22 3/4"
Voltage	240/208 VAC	240/208 VAC
Wattage	560W	1,050W
CFM ratings	1000, 1200, 1400, 1600	1200, 1400, 1600, 2000

- ◆ 1/2 HP variable speed accommodates most 1.5 to 4 ton heating/cooling systems
- ◆ 3/4 HP variable speed accommodates most 3 to 5 ton heating/cooling systems