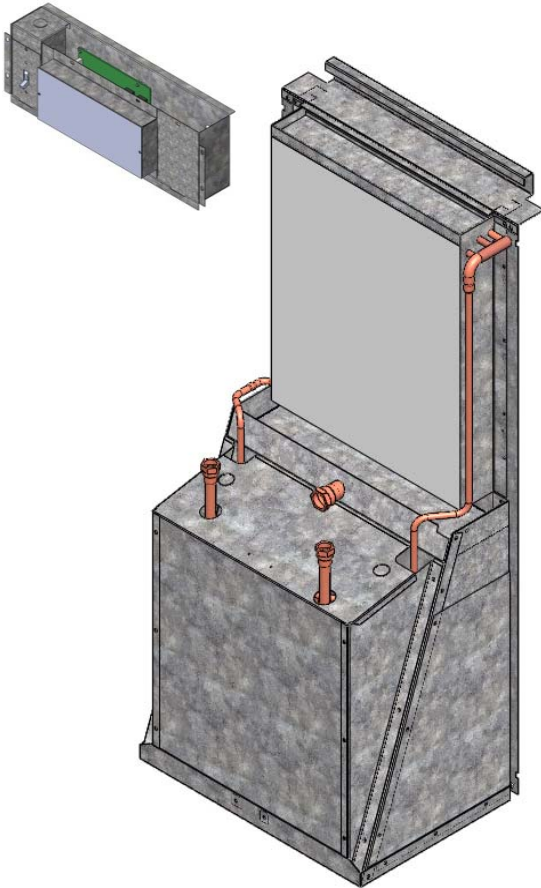


**Omega HCA Series** are a direct replacement for McQuay HCA units. The Omega HCA units feature state of the art components such as microprocessor based controls, R410a refrigerant and dimensions that match the original McQuay units. This provides contractors with a simple “drop-in” replacement unit with the added feature of modern microprocessor control capabilities.



## FEATURES

- Omega HCA unit is a modern heat pump. Each unit comes with R410A refrigerant and is fully factory tested before shipment. Omega is pleased to offer a 1 year parts warranty on all units, from time of shipment.
- Omega HCA units come standard with a microelectronic control box (electrical retrofit kit) that easily replaces the existing fan cabinet control panel. Controls and relays are mounted on a single printed circuit board with factory wiring to connection plugs. This direct digital control board is designed to provide control of the entire unit as well as outputs for unit status and fault detection as well as a thermostat inputs.
- The electrical retrofit control box comes standard with a 36” thermostat whip (thermostat is extra).
- Each Omega HCA unit also comes complete with low pressure and high pressure sensors. Factory installed logic makes sure the unit operates safely and will take the unit offline in case of malfunction or dangerous operation. Intelligent microprocessor based control continuously monitors operation of the HCA unit and attempts to keep the unit online during difficult start-ups (i.e. lower temperature start-ups).

## STANDARD FEATURES

- Quiet, high efficiency R410A compressors are available for all units. Units up to 2 Ton use a rotary compressor. Units above 2 Tons utilize scroll compressors. All compressors come with overload protection.
- Thermal Expansion Valve (TEV) for refrigerant metering is used on all units to ensure accurate refrigerant flow through the unit.
- Water coil freeze protection is offered on all units through direct refrigeration control. A DDC control board monitors and ensures units are turned off before any damage to the unit occurs. Internal logic of the board also minimizes nuisance trip outs.
- Casing is manufactured from heavy gauge galvanized steel.

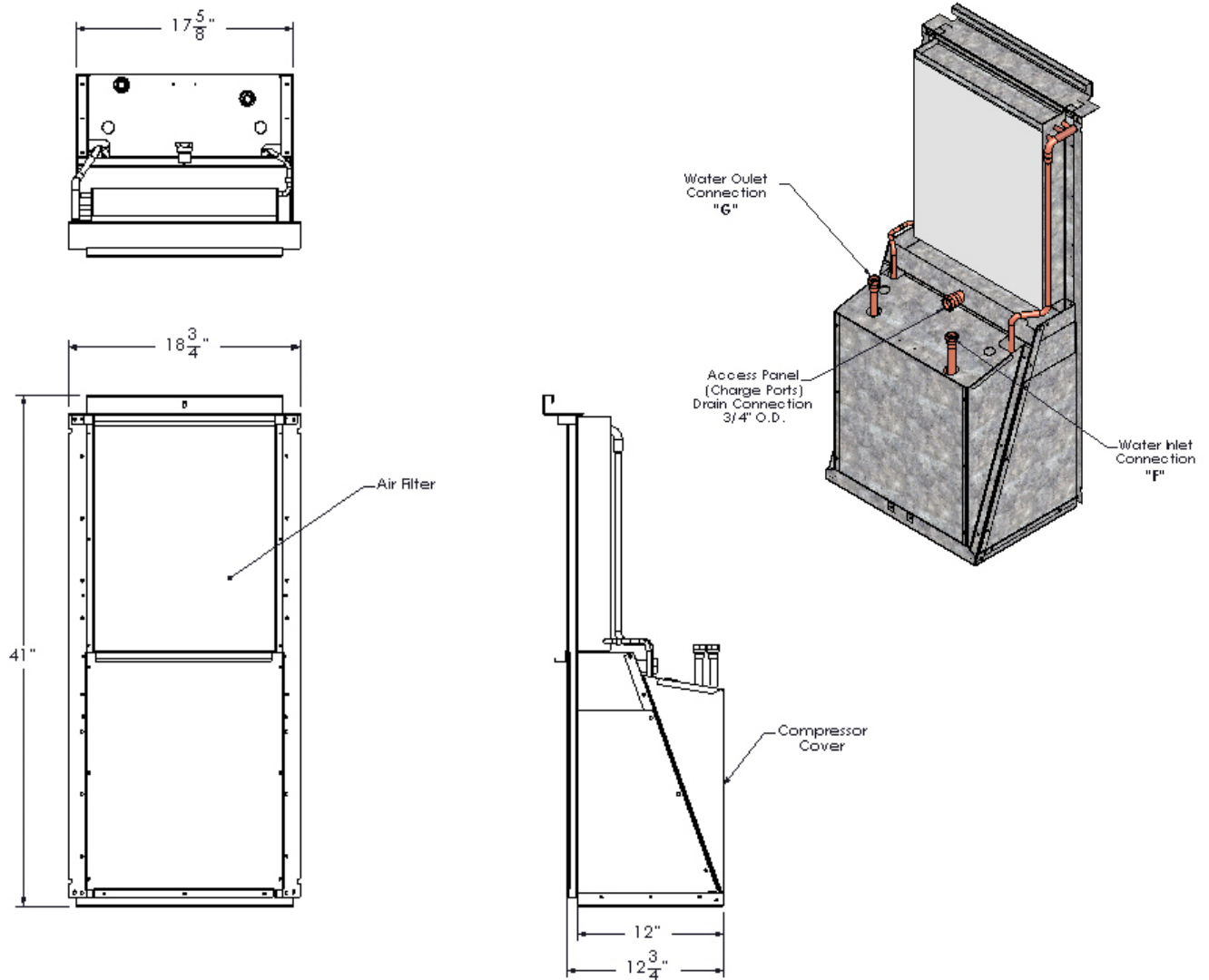
## OPTIONAL FEATURES

- Thermostats – both programmable and non programmable heat pump thermostats are available to replace the existing thermostat on site.
- Hose kits in 24” lengths are available for installation to existing units.
- Auto flow valves can be factory installed to ensure proper water flow to the unit is maintained. Auto flow valves require a differential pressure between 2 and 80psi to operate correctly and maintain the desired water flow.
- An auto shut off valve is available to disable water flow through the unit when there is no call for the compressor. This provides an opportunity to save system pump energy when the compressor unit is off.
- A geothermal option is available for low temperature applications. Contact your representative for details.
- Return air filters are available for installation.

## EASY INSTALLATION

Installations are made easy by simply removing the existing unit and replacing it with a new Omega HCA Unit. This allows for minimal installation time for contractors.

- Dimensionally the units are identical to existing units. Supply, return and condensate connections are designed to line up with the existing water connections.
- Electrical power is designed to be accepted into an electrical box to improve the safety of existing installations.
- Thermostat connections are done through the separate electrical box.
- The electrical control panel is a separate panel that simply replaces the existing panel for easy installation.



### Performance Data

#### Dimensional Data

MODEL	CAPACITY Nominal Tonnage	F	G
HP-HCA-09-30	3/4	1/2 FPT	1/2 FPT
HP-HCA-12-40	1	1/2 FPT	1/2 FPT
HP-HCA-18-60	1 1/2	1/2 FPT	1/2 FPT

MODEL	COOLING PERFORMANCE [BTUH]	SENSIBLE COOLING [BTUH]	EER	HEATING PERFORMANCE [BTUH]	COP	CFM (DESIGN)	GPM	COIL PRESSURE DROP
HP-HCA-09-30	9112	6901	12.09	10832	4.30	300	2.50	0.08
HP-HCA-12-40	11234	8697	12.00	14102	4.07	400	3.00	0.13
HP-HCA-18-60	17559	13840	12.17	21403	4.16	600	4.50	0.21

## HCA Retro Fit Wiring Diagram

