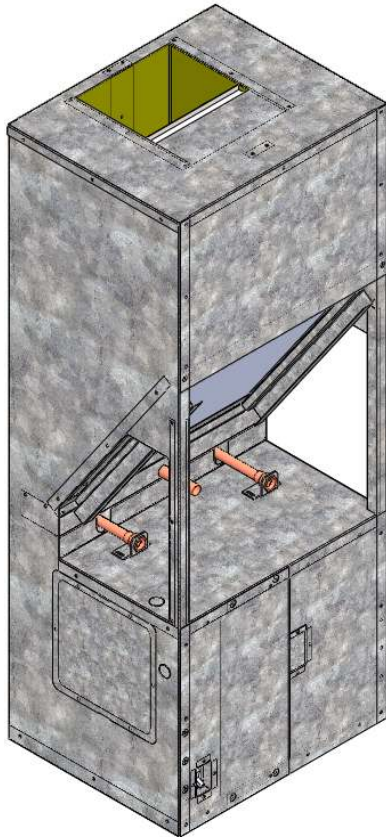


**Omega VF Series** is a replacement for the Singer/McQuay series VF/VP/VG units. The Omega VF features state of the art components such as microprocessor based controls, R410a refrigerant, and dimensions that match the original McQuay unit. This provides contractors with a simple “drop-in” replacement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



## FEATURES

- Omega VF 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 and an optional 5 year compressor warranty on all units, from time of shipment.
- Omega VF units offer standard microelectronic controls. Controls and relays are mounted on a single printed circuit board with factory wiring to connect plugs. The direct digital control board is designed to provide control of the entire unit as well as outputs for unit status and fault detection.
- Each Omega VF 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 VF 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.
- Two speed fan control is standard on all models.
- 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.
- Return air panels to match the original McQuay units can be painted to standard color chart available. Also available in primer coat for field painting of the cover.

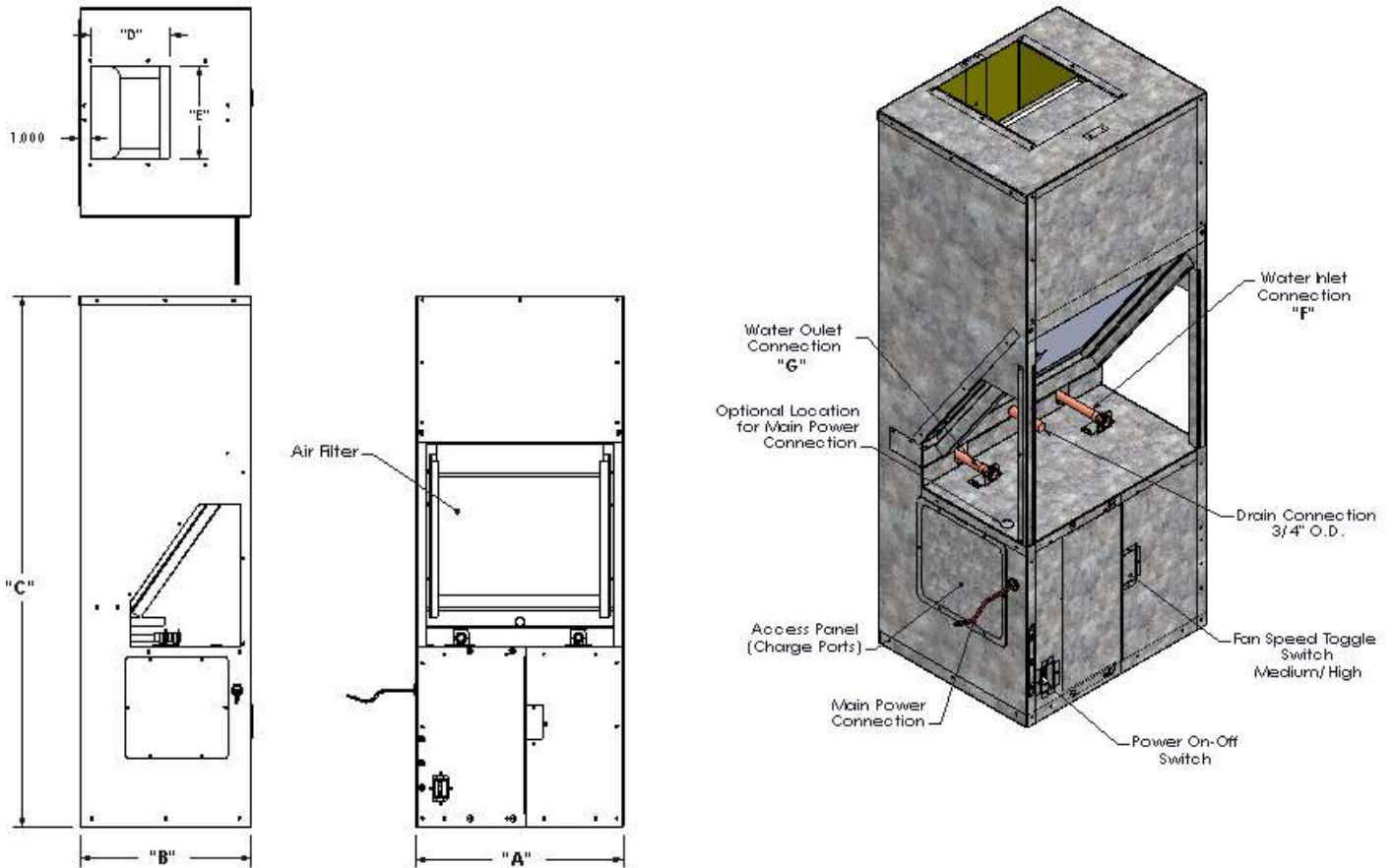
## EASY INSTALLATION

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

- 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.

## DIMENSIONAL DATA

FRAME SIZE	MODEL	CAPACITY Nominal Tonnage	A	B	C	D	E	F	G
			"in"	"in"	"in"	"in"	"in"	"in"	"in"
Small	VF-10-30	3/4	18 1/8	15.00	46 1/2	7.00	8 3/16	1/2 FPT	1/2 FPT
Small	VF-15-40	1	18 1/8	15.00	46 1/2	7.00	8 3/16	1/2 FPT	1/2 FPT
Small	VF-20-60	1 1/2	18 1/8	15.00	46 1/2	7.00	8 3/16	1/2 FPT	1/2 FPT
Small	VF-24-80	2	18 1/8	15.00	46 1/2	7.00	8 3/16	1/2 FPT	1/2 FPT
Large	VF-33-100	2 1/2	22.00	20 5/8	53 1/2	7.00	12.00	3/4 FPT	3/4 FPT
Large	VF-40-120	3	22.00	20 5/8	53 1/2	7.00	12.00	3/4 FPT	3/4 FPT



Unit Size	Compressor RLA	Compressor LRA	Fan Motor FLA	MOP	MCA	Circuit Breaker	Capacitor [MFD]
VF-10-30	3.7	22	1	15	5.625	15	25
VF-15-40	4.7	25	1	15	6.875	15	30
VF-20-60	7.4	33	1.5	20	10.75	15	35
VF-24-80	9.5	43	2.1	25	13.975	20	45
VF-33-100	14.1	73	2.6	35	20.225	30	40
VF-40-120	16.7	79	2.6	40	23.475	35	45