

OMEGA VF SERIES Singer/McQuay VF Replacement Chassis



Omega VF replacement units is an ideal replacement and upgrade for the old Singer/McQuay VF unit. The chassis is a direct-drop in for a fast, simple and easy installation.

The Omega replacement chassis features modern components and advanced microprocessor control providing the user with silent, energy efficient, and reliable year-round operation.

A matching harness connector, and factory tested and fully charged with R-410A, makes Omega the preferred replacement option.

STANDARD FEATURES

- · Factory charged and tested
- · High efficiency compressors
- Advanced microprocessor controller
- 3-Speed fan control on all models
- Unit mounted power disconnect switch
- High and Low-Pressure safety switches
- Freeze Protection sensor
- Entering & Leaving Water Temperature sensors
- Chassis drain pan Condensate Overflow Switch
- Thermal Expansion Valve (TXV) & Filter Drier
- R-410A Environmentally friendly refrigerant
- Stainless Steel Drain Pan
- Refrigerant service access ports

QUICK & EASY

Omega VF chassis is dimensionally identical to old Singer/McQuay VF unit for a quick and easy installation. Simply remove old chassis and slide in new Omega unit. Unit connects directly with existing control box wiring. Water connections match existing cabinet connections for a complete turn-key installation.

SAFETY

Replacement chassis comes with a host of safety features to protect unit from unwanted operating conditions: high-pressure and low-pressure safety switches, water temperature sensing for preemptive detection of water flow issues, and condensate overflow switch to protect against water leaks into occupant suite.

COMFORT & RELIABILITY

Quiet and reliable operation from the use of quality components and construction. High-efficiency compressor ensures silent and reliable unit operation. Advanced microprocessor controller continuously monitors operation of the unit for fault-free start-ups and optimal operation. All new Omega units comes with our standard 1 year parts and 5 year compressor warranty.

- Heavy gauge galvanized sheet metal
- 1 Year Parts and 5 Year Compressor Warranty

OPTIONS & ACCESSORIES

- Remote mounted thermostat
- Auto-Flow Balancing valve
- Auto Shut-Off Control valve
- Geothermal Option
- Coated Air Coil for Formicary Corrosion Protection
- Air Filters
- Return Air Panel to match original Singer/McQuay panel

Check <u>www.omega-heatpump.com</u> for latest information.

Customer Support Ph. 905.670.2269 Fax: 905.670.3822



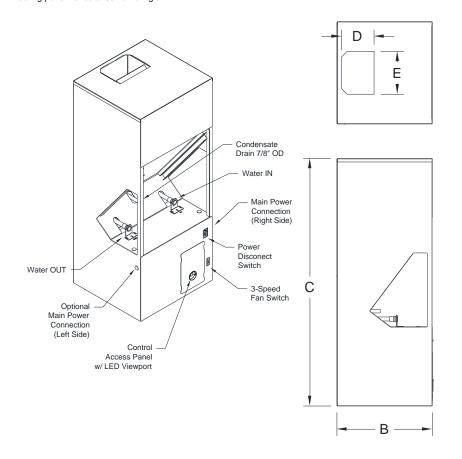
OMEGA VF SERIES HEAT PUMPS Singer/McQuay VF Replacement Chassis

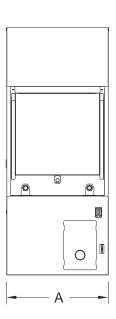
Performance Data

Omega Model	Refrig.	Size (Tons)	СЕМ	Cooling*		Heating*		GPM	Water Pressure Drop	
				BTUH ¹	EER ¹	BTUH ²	COP ²		PSI	FT
RPC-MC-VF-030	R-410	3/4	350	9400	12.5	11300	4.3	2.5	4.8	11
RPC-MC-VF-040	R-410	1	420	11500	12.2	13800	4.3	3.0	4.8	11
RPC-MC-VF-060	R-410	1 1/2	600	17000	12.2	21200	4.3	4.5	7.8	18
RPC-MC-VF-070	R-410	1 3/4	700	20200	12.2	25500	4.3	5.0	8.2	19
RPC-MC-VF-080	R-410	2	820	23500	12.3	29800	4.3	6.0	4.4	10
RPC-MC-VF-100	R-410	2 1/2	1020	29300	12.2	37700	4.3	7.0	5.6	13

^{*} Nominal capacity performance based on 86F EWT Cooling, 68F EWT Heating and rated CFM. Includes fan power 0.365W/CFM

² Heating performance at 68F entering air.





Dimension Data

Difficusion Data										
Omega Model	Frame Size		Dime	nsions (in	Water Connection (in)		Chassis Weight			
		Α	В	С	D	E	Inlet	Outlet	(lbs.)	
RPC-MC-VF-030	Small	18 1/8	15	46 1/2	7	8 1/4	1/2 FPT	1/2 FPT	135	
RPC-MC-VF-040	Small	18 1/8	15	46 1/2	7	8 1/4	1/2 FPT	1/2 FPT	140	
RPC-MC-VF-060	Small	18 1/8	15	46 1/2	7	8 1/4	1/2 FPT	1/2 FPT	160	
RPC-MC-VF-070	Small	18 1/8	15	46 1/2	7	8 1/4	1/2 FPT	1/2 FPT	180	
RPC-MC-VF-080	Large	22	20 5/8	53 1/2	7	12	3/4 FPT	3/4 FPT	205	
RPC-MC-VF-100	Large	22	20 5/8	53 1/2	7	12	3/4 FPT	3/4 FPT	205	

Due to a continuous product improvement policy, dimensions and performance data are subject to change without notice. Check www.omega-heatpump.com for latest information.

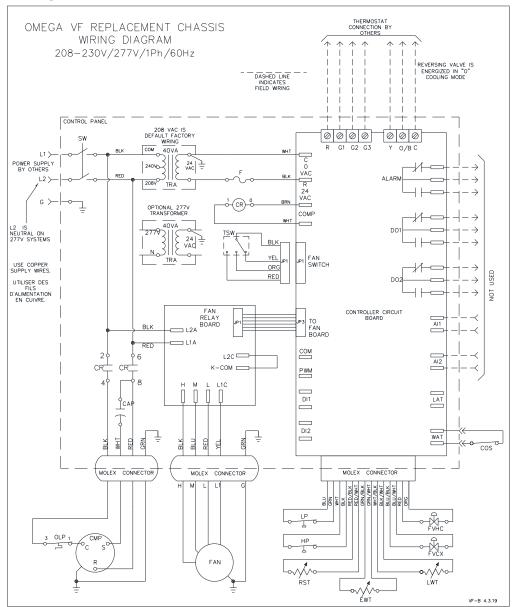
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¹ Cooling performance based on 80F DB and 67F WB entering air conditions.



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Wiring Schematic



CMP - Compressor COS - Condensate Overflow Switch CR - Contactor Relay EWT - Entering Water Temp. Sensor LWT - Leaving Water Temp. Sensor F - Fuse FVCX - Auto Shut-Off Valve FVHC - Reversing Valve HP - High Pressure Switch LP - Low Pressure Switch L1 - Power Line 1 L2 - Power Line 2 OLP - Thermal Overload Switch SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer TSW - Three Speed Fan Switch			
CR - Contactor Relay EWT - Entering Water Temp. Sensor LWT - Leaving Water Temp. Sensor F - Fuse FVCX - Auto Shut-Off Valve FVHC - Reversing Valve HP - High Pressure Switch LP - Low Pressure Switch L1 - Power Line 1 L2 - Power Line 1 L2 - Power Line 2 OLP - Thermal Overload Switch SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	CMP	-	Compressor
EWT - Entering Water Temp. Sensor LWT - Leaving Water Temp. Sensor F - Fuse FVCX - Auto Shut-Off Valve FVHC - Reversing Valve HP - High Pressure Switch LP - Low Pressure Switch L1 - Power Line 1 L2 - Power Line 2 OLP - Thermal Overload Switch SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	cos	-	Condensate Overflow Switch
LWT Leaving Water Temp. Sensor F - Fuse FVCX - Auto Shut-Off Valve FVHC - Reversing Valve HP - High Pressure Switch LP - Low Pressure Switch L1 - Power Line 1 L2 - Power Line 2 OLP - Thermal Overload Switch SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	CR	-	Contactor Relay
F - Fuse FVCX - Auto Shut-Off Valve FVHC - Reversing Valve HP - High Pressure Switch LP - Low Pressure Switch L1 - Power Line 1 L2 - Power Line 2 OLP - Thermal Overload Switch SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	EWT	-	Entering Water Temp. Sensor
FVCX - Auto Shut-Off Valve FVHC - Reversing Valve HP - High Pressure Switch LP - Low Pressure Switch L1 - Power Line 1 L2 - Power Line 2 OLP - Thermal Overload Switch SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	LWT	-	Leaving Water Temp. Sensor
FVHC - Reversing Valve HP - High Pressure Switch LP - Low Pressure Switch L1 - Power Line 1 L2 - Power Line 2 OLP - Thermal Overload Switch SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	F	-	Fuse
HP - High Pressure Switch LP - Low Pressure Switch L1 - Power Line 1 L2 - Power Line 2 OLP - Thermal Overload Switch SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	FVCX	-	Auto Shut-Off Valve
LP - Low Pressure Switch L1 - Power Line 1 L2 - Power Line 2 OLP - Thermal Overload Switch SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	FVHC	-	Reversing Valve
L1 - Power Line 1 L2 - Power Line 2 OLP - Thermal Overload Switch SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	HP	-	High Pressure Switch
L2 - Power Line 2 OLP - Thermal Overload Switch SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	LP	-	Low Pressure Switch
OLP - Thermal Overload Switch SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	L1	-	Power Line 1
SW - Power Disconnect RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	L2	-	Power Line 2
RST - Refrigerant Suction Temp. Sensor TB - Terminal Block TRA - Transformer	OLP	-	Thermal Overload Switch
TB - Terminal Block TRA - Transformer	SW	-	Power Disconnect
TRA - Transformer	RST	-	Refrigerant Suction Temp. Sensor
	TB	-	Terminal Block
TSW - Three Speed Fan Switch	TRA	-	Transformer
	TSW	-	Three Speed Fan Switch

Electrical Data

Omega Model	Compressor	Voltage	Compressor		Fan Motor (PSC)		Total Unit	Max Fuse/Circuit
_	Туре		RLA	LRA	HP	FLA	FLA	Breaker
RPC-MC-VF-030	Rotary	208-230/1/60	3.7	22.0	1/10	0.7	4.4	15
RPC-MC-VF-040	Rotary	208-230/1/60	4.7	25.0	1/10	0.7	5.4	15
RPC-MC-VF-060	Rotary	208-230/1/60	7.4	33.0	1/4	2.0	9.4	15
RPC-MC-VF-070	Rotary	208-230/1/60	8.3	44.0	1/4	2.0	10.3	20
RPC-MC-VF-080	Scroll	208-230/1/60	9.5	43.0	1/3	2.8	12.3	20
RPC-MC-VF-100	Scroll	208-230/1/60	13.5	72.5	1/3	2.8	16.3	30

VERIFY EXISTING ELECTRICAL SERVICE IS ADEQUATE FOR NEW REPLACEMENT CHASSIS

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