



**WATER SOURCE HEAT PUMP**

**Vertical Stacked Chassis- Replaces Singer/McQuay VF/VP/VG Series**

*Small/ Large Frame*

**NOMINAL CAPACITY:**

10,000, 15,000, 20,000, 24,000, 26,000, 33,000, 40,000 BTU/h

Cold Point Corp, Rome, New York 13440 • Phone (315) 339-2331 • Fax (315) 339-2358 • Web: www.adirondackaire.com



**Description:**

*Adirondack-Aire 'VF' Series* is a direct replacement for *Singer/McQuay 'small frame'*, (models 070, 090, 140, 200, & 240 and *'large frame'* (models 260, 330, & 400), *'VF/VP/VG'* series vertical stacked water source **chassis**. *VF & VP* models are heat pumps. The *'VG'* is cooling only. The chassis is a part of a complete system, which consists of the chassis with blower, control box, and furred-in room cabinet with risers. The chassis contains the compressor, blower, air heat exchanger, water heat exchanger, and refrigerant circuit control and safety components. Both chassis sizes are **dimensionally identical** to the original for a fast, easy, and trouble free installation. Proven technology, quality components, careful design and testing, and the latest in reliability and efficiency advances assure long life, user satisfaction, and lower energy cost! Consider the extensive list of standard features which includes: **powder painted drain pan**, refrigerant circuit **access ports**, **air filter**, **pull handle**, **thermostatic expansion valve**, high efficiency **'PSC' blower motor** & dynamically **balanced DWDI blower wheel**, evaporator **freeze protection**, water coil **freezestat**, **high-pressure** over protection, and **lockout circuit.....** and *Adirondack-Aire* is the replacement solution the competition can't match. *Cold Point Corp.* backs the *'VF'* with a customer friendly **one-year parts and labor** warranty and **five-year compressor** warranty, (see *Warranty* document for details).

**Application & Benefits:**

The *Adirondack-Aire 'VF'* series replacement chassis **fits the existing Singer/McQuay room cabinets** and works with the existing **control box** without modification. The chassis installs without the need for **water loop shut-down** or **draining**. Water, drain and electrical connections **line right up** to the original installation. The electrical connectors **plug directly** into the control box connectors. The standard high-pressure switch stops unit operation **before damage occurs** should airflow become reduced or obstructed due to dirty coils, obstructed airflow, or motor failures or lock-up. A freezestat protects the water coil from **freeze damage** due to water temperature or flow problems. The water coil is designed for low water-side pressure drop eliminating potential **pump sizing** and **water flow** problems. High efficiency compressors provide demonstrated **reliability** and **low sound** levels and cut **energy costs**...and because the chassis dimensions and construction details are like the original, replacement work is **fast and easy**. A chassis pull handle is provided to facilitate **easy removal** and **handling**. Using *Adirondack-Aire* replacements **eliminates** the need for **room renovation**, **redecorating**, and **pipng changes** and is *the solution* that gets your property back in service quickly and at the **lowest total cost**. Choose the replacement return air panel to give the unit a **new look** and improve **room aesthetics**.

**Options/Accessories:**

- 115V, 208/230V 3F, 265/277V, 460V 3Φ, (availability varies by model size)
- Control options
- Hose kits
- Return air panels
- Flow control valve
- 'VP' Option

**Standard Features**

- 1). Made in USA
- 2). Designed for easy installation & compatibility. Dimensionally identical to original *Singer/McQuay chassis*
- 3). UL recognized components and construction
- 4). Quiet, durable, and efficient compressor with built-in pressure & temperature protection
- 5). Heavy Gauge G90 galvanized steel construction
- 6). Powder painted drain pan
- 7). High efficiency copper tube-aluminum fin evaporator coil
- 8). High efficiency coaxial condenser coil with low water-side pressure drop
- 9). DWDI centrifugal blower w/high efficiency PSC motor
- 10). Lock-out circuit with reset at thermostat or circuit breaker
- 11). High Pressure switch
- 12). Water coil freeze protection
- 13). Refrigerant circuit access ports
- 14). Bi-flow thermostatic expansion valve
- 15). Positive shift reversing valve
- 16). Precision charged with R-22 refrigerant
- 17). ½" or ¾" FPT water connections
- 18) Chassis pull handle facilitates easy chassis removal & handling
- 19). 1" Fiberglass or natural fiber air filter



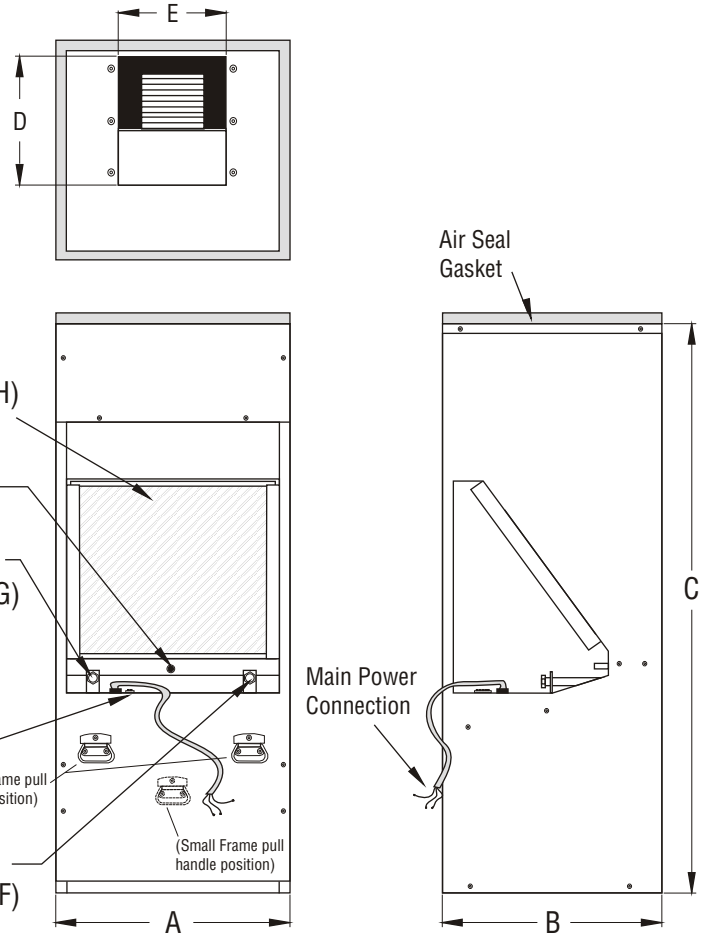
## VF Dimensions and Specifications

**Note:** Due to Cold Point Corporation's ongoing quality & product development programs, design and specifications may change. Always consult factory to verify the information provided here.

### DIMENSIONAL DETAIL 'VF'

**IMPORTANT!** Chassis must replace a unit of like capacity to assure proper **power supply**.

Frame Size	Model	A	B	C	D	E	F	G	H
Small	10	18 1/8	15	46 1/2	3 3/4	8 1/8	1/2 FPT	1/2 FPT	15 1/2" X 18" X 1"
Small	15	18 1/8	15	46 1/2	5	8 1/8	1/2 FPT	1/2 FPT	15 1/2" X 18" X 1"
Small	20,24	18 1/8	15	46 1/2	10 1/4	8 1/4	1/2 FPT	1/2 FPT	15 1/2" X 18" X 1"
Large	26,33,40	22	20 5/8	53 1/2	10 1/4	8 1/4	3/4 FPT	3/4 FPT	20" X 22" X 1"



#### VF ELECTRICAL DATA

Model	COMP	Voltage/ HZ/Ph	FAN HP	FAN AMPS	Comp RLA	Comp LRA	TOTAL AMPS	MIN CKT AMPACITY	MAX FUSE	MIN. Volts
VF-10	Rotary	208/230/60/1	1/10	0.6	3.7	21.0	4.3	5.3	15	197
VF-10	Rotary	265/60/1	1/10	0.6	3.1	15.0	3.7	4.5	15	239
VF-15	Rotary	208/230/60/1	1/10	0.6	5.4	29.0	6.0	7.4	15	197
VF-15	Rotary	265/60/1	1/10	0.6	4.6	27.0	5.2	6.4	15	239
VF-20	Rotary	208/230/60/1	1/5	1.2	7.8	41.0	8.7	10.6	15	197
VF-20	Rotary	265/60/1	1/5	1.2	6.6	35.0	7.8	11.0	15	239
VF-24	Recip.	208/230/60/1	1/5	1.2	9.6	60.0	10.8	13.2	20	197
VF-24	Recip.	265/60/1	1/5	1.2	8.2	58.0	9.4	11.5	20	239
VF-26	Recip.	208/230/60/1	1/3	2.7	9.6	60.0	12.3	14.7	20	197
VF-26	Recip.	265/60/1	1/3	1.9	8.2	58.0	10.1	12.2	20	239
VF-33	Recip.	208/230/60/1	1/3	2.7	12.4	82.0	15.1	18.2	30	197
VF-33	Recip.	265/60/1	1/3	1.9	11.5	80.0	13.4	16.3	25	239
VF-40	Recip.	208/230/60/1	1/2	3.4	14.4	86.0	17.8	21.4	35	197
VF-40	Recip.	265/60/1	1/2	2.6	13.0	90.0	15.6	18.9	30	239

#### VF PERFORMANCE TABLE

Model	COOL BTUH	SENS BTUH	EER	HEAT BTUH	COP	CFM (nominal)	GPM	COIL PD
VF-10	10,400	8,000	13.8	12,800	4.6	375	2.5	3.8'
VF-15	14,300	10,900	11.8	18,400	4.2	450	3.5	6.9'
VF-20	19,900	14,400	12.9	25,000	4.4	585	4.7	4.8'
VF-24	24,800	18,200	11.4	31,500	4.0	800	6.2	9.6'
VF-26	26,000	21,000	11.6	31,000	4.4	900	6.7	5.3'
VF-33	30,000	25,000	10.5	37,000	4.0	1,140	7.8	7.0'
VF-40	37,000	28,000	10.7	47,000	4.0	1,300	9.5	23.3'

Model No.	Chassis Weight (lbs)
10	120
15	151
20	161
24	200
26	200
33	220
40	255