



7160.1
March 2000
Replaces 7170



BELT DRIVE AIR COOLED CONDENSERS

Model BVF

**45-228 Nominal Tons
Vertical Discharge**

DESIGN FEATURES

- Wide range of sizes, all with quiet, efficient 4 pole motors
- Multicirculating at no extra cost
- Control paner with disconnect interlock
- Zinc plated, iridite dipped corrosion proof fan guards
- Access paners on each fan section for ease of maintenance
- Each fan has pillow block ball bearings with lubrication fittings

AVAILABLE OPTIONS

- Connection manifold kits
- Limitizer[®] head pressure control
- Fan cycling control packages
- Optional coils, including Heresite[®] and Bohnguard[™] coatings, all copper coil
- Extended lube lines to fan bearings
- Sealtite wiring

SPECIFICATIONS - BELT DRIVE UNITS

Model BVF	THR @ 30° TD R-22*	Circuits Available	Refrig. Charge R-22†	Motor HP	Full Load Amps		
					208	230	460
045	693	(2) 19	32	1.5	11	10	5
050	776	(2) 19	32	2	13.4	12	6
054	822	(2) 19	32	2	13.4	12	6
057	868	(2) 19	32	5	29.2	26.4	13.2
059	899	(2) 26	42.8	2	13.4	12	6
062	944	(2) 19	32	5	29.2	26.4	13.2
065	990	(2) 19	32	5	29.2	26.4	13.2
069	1055	(2) 19	48.1	1.5	16.5	15	7.5
073	1112	(2) 26	42.8	5	29.2	26.4	13.2
081	1234	(2) 19	48.1	2	20.1	18	9
086	1309	(2) 19	48.1	5	43.8	39.6	19.8
088	1340	(2) 26	63.5	2	20.1	18	9
096	1462	(2) 26	63.5	3	27.9	25.2	12.6
097	1477	(2) 19	48.1	5	43.8	39.6	19.8
101	1538	(2) 32	78.4	3	27.9	25.2	12.6
106	1614	(2) 26	63.5	5	43.8	39.6	19.8
111	1697	(2) 26	84.5	2	26.8	24	12
114	1736	(2) 32	78.4	5	43.8	39.6	19.8
121	1849	(2) 26	84.5	3	37.2	33.6	16.8
136	2071	(2) 32	103.3	3	37.2	33.6	16.8
139	2117	(2) 26	84.5	5	58.4	52.8	26.4
145	2209	(2) 26	105.6	2	33.5	30	15
151	2300	(2) 32	103.3	5	58.4	52.8	26.4
159	2416	(2) 26	105.6	3	46.5	42	21
167	2545	(2) 26	126.7	2	40.2	36	18
179	2726	(2) 26	105.6	5	73	66	33
182	2773	(2) 26	126.7	3	55.8	50.4	25.2
200	3044	(2) 32	155	3	55.8	50.4	25.2
209	3183	(2) 26	126.7	5	-	79.2	39.6
228	3471	(2) 32	155	5	-	79.2	39.6

* MBH x 1000 = BTUH

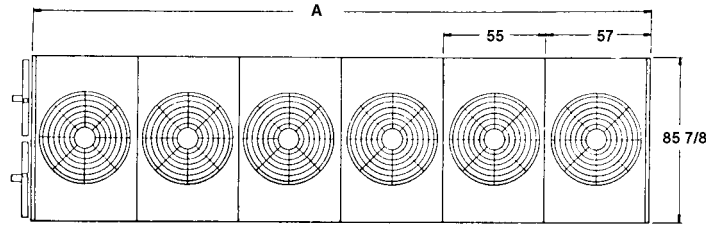
† For summer operation above 60°F without Limitizer

PHYSICAL/DIMENSIONAL DATA

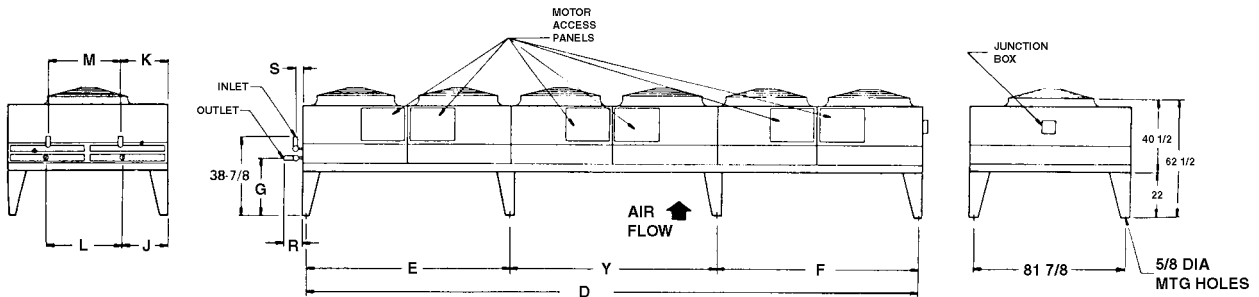
BVF 045-228

Optional Manifold Kit

Unit Size	Conn. O.D.	
	Inlet	Outlet
045-097	2 ¹ / ₈	2 ¹ / ₈
101-159	2 ⁵ / ₈	2 ⁵ / ₈
167-228	3 ¹ / ₈	3 ¹ / ₈



**FOR NUMBER
OF FANS,
SEE CHART BELOW**



Unit Size	A	D	E	F	G	J	K	L	M	R	S	Y	48" Fans			Coil Conn.		Approx. Net Wt. (Lbs.)
													Qty.	RPM	CFM	In	Out	
045	114	110	-	-	31 ⁵ / ₈	21 ¹³ / ₁₆	23 ⁷ / ₁₆	41 ⁷ / ₁₆	41 ⁷ / ₁₆	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	2	415	32800	1 ³ / ₈	1 ³ / ₈	1280
050	114	110	-	-	31 ⁵ / ₈	21 ¹³ / ₁₆	23 ⁷ / ₁₆	41 ⁷ / ₁₆	41 ⁷ / ₁₆	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	2	470	35000	1 ³ / ₈	1 ³ / ₈	1340
054	114	110	-	-	31 ⁵ / ₈	21 ¹³ / ₁₆	23 ⁷ / ₁₆	41 ⁷ / ₁₆	41 ⁷ / ₁₆	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	2	470	34400	1 ³ / ₈	1 ³ / ₈	1380
057	114	110	-	-	31 ⁵ / ₈	21 ¹³ / ₁₆	23 ⁷ / ₁₆	41 ⁷ / ₁₆	41 ⁷ / ₁₆	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	2	600	51200	1 ³ / ₈	1 ³ / ₈	1370
059	114	110	-	-	30 ³ / ₄	22 ⁵ / ₈	23 ⁷ / ₁₆	39 ¹³ / ₁₆	35 ¹³ / ₁₆	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	2	470	31200	1 ⁵ / ₈	1 ⁵ / ₈	1540
062	114	110	-	-	31 ⁵ / ₈	21 ¹³ / ₁₆	23 ⁷ / ₁₆	41 ⁷ / ₁₆	41 ⁷ / ₁₆	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	2	600	50100	1 ³ / ₈	1 ³ / ₈	1420
065	114	110	-	-	31 ⁵ / ₈	21 ¹³ / ₁₆	23 ⁷ / ₁₆	41 ⁷ / ₁₆	41 ⁷ / ₁₆	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	2	600	48200	1 ³ / ₈	1 ³ / ₈	1450
069	169	165	82	83	31 ⁵ / ₈	21 ¹³ / ₁₆	23 ⁷ / ₁₆	41 ⁷ / ₁₆	39 ¹³ / ₁₆	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	3	415	44000	1 ⁵ / ₈	1 ⁵ / ₈	1960
073	114	110	-	-	30 ³ / ₄	22 ⁵ / ₈	23 ⁷ / ₁₆	39 ¹³ / ₁₆	35 ¹³ / ₁₆	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	2	600	49200	1 ⁵ / ₈	1 ⁵ / ₈	1610
081	169	165	82	83	31 ⁵ / ₈	21 ¹³ / ₁₆	23 ⁷ / ₁₆	41 ⁷ / ₁₆	39 ¹³ / ₁₆	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	3	470	51600	1 ⁵ / ₈	1 ⁵ / ₈	2110
086	169	165	82	83	31 ⁵ / ₈	21 ¹³ / ₁₆	23 ⁷ / ₁₆	41 ⁷ / ₁₆	39 ¹³ / ₁₆	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	3	600	76800	1 ⁵ / ₈	1 ⁵ / ₈	2095
088	169	165	82	83	30 ³ / ₄	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	3	470	46800	1 ⁵ / ₈	1 ⁵ / ₈	2335
096	169	165	82	83	30 ³ / ₄	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	3	545	54300	1 ⁵ / ₈	1 ⁵ / ₈	2380
097	169	165	82	83	31 ⁵ / ₈	21 ¹³ / ₁₆	23 ⁷ / ₁₆	41 ⁷ / ₁₆	39 ¹³ / ₁₆	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	3	600	72300	1 ⁵ / ₈	1 ⁵ / ₈	2395
101	169	165	82	83	28 ⁷ / ₈	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹⁵ / ₁₆	2 ⁷ / ₁₆	-	3	545	58800	2 ¹ / ₈	2 ¹ / ₈	2460
106	169	165	82	83	30 ³ / ₄	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹ / ₂	1 ¹⁵ / ₁₆	-	3	600	66000	1 ⁵ / ₈	1 ⁵ / ₈	2440
111	224	220	109 ¹ / ₂	110 ¹ / ₂	30 ³ / ₄	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹¹ / ₁₆	2 ³ / ₁₆	-	4	470	7200	2 ¹ / ₈	2 ¹ / ₈	2910
114	169	165	82	83	28 ⁷ / ₈	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹⁵ / ₁₆	2 ⁷ / ₁₆	-	3	600	67600	2 ¹ / ₈	2 ¹ / ₈	2580
121	224	220	109 ¹ / ₂	110 ¹ / ₂	30 ³ / ₄	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹¹ / ₁₆	2 ³ / ₁₆	-	4	545	78000	2 ¹ / ₈	2 ¹ / ₈	2970
136	224	220	109 ¹ / ₂	110 ¹ / ₂	28 ⁷ / ₈	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹⁵ / ₁₆	2 ⁷ / ₁₆	-	4	545	82400	2 ¹ / ₈	2 ¹ / ₈	3370
139	224	220	109 ¹ / ₂	110 ¹ / ₂	30 ³ / ₄	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹¹ / ₁₆	2 ³ / ₁₆	-	4	600	99200	2 ¹ / ₈	2 ¹ / ₈	3050
145	279	275	82 ¹ / ₂	110 ¹ / ₂	30 ³ / ₄	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹⁵ / ₁₆	2 ⁷ / ₁₆	82 ¹ / ₂	5	470	81500	2 ¹ / ₈	2 ¹ / ₈	3850
151	224	220	109 ¹ / ₂	110 ¹ / ₂	28 ⁷ / ₈	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹⁵ / ₁₆	2 ⁷ / ₁₆	-	4	600	100400	2 ¹ / ₈	2 ¹ / ₈	3450
159	279	275	82 ¹ / ₂	110 ¹ / ₂	30 ³ / ₄	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹⁵ / ₁₆	2 ⁷ / ₁₆	82 ¹ / ₂	5	545	94000	2 ¹ / ₈	2 ¹ / ₈	3900
167	334	330	109 ¹ / ₂	110 ¹ / ₂	30 ³ / ₄	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹⁵ / ₁₆	2 ⁷ / ₁₆	110	6	470	101400	2 ⁵ / ₈	2 ⁵ / ₈	4525
179	279	275	82 ¹ / ₂	110 ¹ / ₂	30 ³ / ₄	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹⁵ / ₁₆	2 ⁷ / ₁₆	82 ¹ / ₂	5	600	114500	2 ¹ / ₈	2 ¹ / ₈	3950
182	334	330	109 ¹ / ₂	110 ¹ / ₂	30 ³ / ₄	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹⁵ / ₁₆	2 ⁷ / ₁₆	110	6	545	117000	2 ⁵ / ₈	2 ⁵ / ₈	4575
200	334	330	109 ¹ / ₂	110 ¹ / ₂	29 ⁹ / ₁₆	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹⁵ / ₁₆	2 ⁷ / ₁₆	110	6	545	123600	2 ⁵ / ₈	2 ⁵ / ₈	4995
209	334	330	109 ¹ / ₂	110 ¹ / ₂	30 ³ / ₄	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹⁵ / ₁₆	2 ⁷ / ₁₆	110	6	600	142200	2 ⁵ / ₈	2 ⁵ / ₈	4695
228	334	330	109 ¹ / ₂	110 ¹ / ₂	29 ⁹ / ₁₆	21 ¹³ / ₁₆	21 ¹³ / ₁₆	42 ¹ / ₄	42 ¹ / ₄	6 ¹⁵ / ₁₆	2 ⁷ / ₁₆	110	6	600	150600	2 ⁵ / ₈	2 ⁵ / ₈	5115

Dimensions in inches
All units have two circuits

ENGINEERING SPECIFICATIONS - BELT DRIVE UNITS

UNIT CABINET - Casings shall be constructed of heavy gauge corrosion resistant aluminum, or galvanized steel, thoroughly reinforced with bolted gussets. Full width baffles shall divide the individual fan sections. Motor access panels shall be provided in each fan section. Cabinet mounting frames and mounting legs shall be constructed of heavy galvanized steel. The legs shall be shipped with the unit for field installation.

CONDENSER COIL- Coil shall be constructed of plate type, die formed, aluminum fins mechanically bonded to copper tubes; fins shall employ full height, self-spacing collars which completely cover tube surface. Coil shall be pressure and leak tested at 425 PSIG air under warm water, evacuated, dehydrated, and sealed with caps on connections.

FANS - Fans, each driven by its own motor, shall be selected to cover a large percentage of the coil face area. Fans shall be statistically and dynamically balanced before shipment. Low tip speeds shall provide quiet operation.

UL LISTING - All 60 Hz models (except 575V) shall be UL listed.

DRIVES & BEARINGS - Each fan shall be equipped with a heavy duty, weather protected, pillow block bearing with lubricating fitting accessible through the motor access panel. Fan shafts shall be polished steel, precision machined and coated with corrosion resistant dressing. V-belt and cast iron drive pulleys shall be matched for heavy duty continuous operation.

FAN MOTORS - Motors shall be NEMA type "T" frame, open drip-proof with grease lubricated ball bearings. They shall be thermally protected against burn-out (except 575 volt). Motors shall be factory wired with leads marked and terminated in a weather-proof junction box located on the outside of the unit. They shall be positioned within unit casing for weather protection. Adjustable motor mount bases and large, easy access motor compartment panels. Available in 208V, 230V, 460V, and 575V, three phase 60 Hz models; and 200V, 380V, and 415V three phase 50 Hz models.

FAN GUARDS - Guards shall be constructed of heavy gauge, close meshed steel wire that is zinc plated and iridite dipped to prevent corrosion.



Bohn is a product line of
Heatcraft Refrigeration Products

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