

SE046

SUPER EFFICIENCY

BLOWER PERFORMANCE

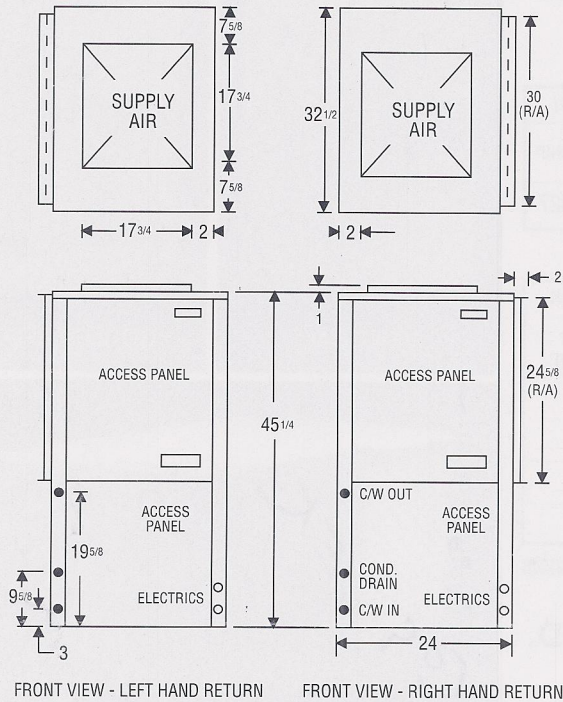
Note: 575 Volt models available in high speed only.
Models blower performance (CFM) x1.05

AVAILABLE EXTERNAL STATIC PRESSURE (In. H2O including allowance for wet coil and filter)												
FAN SPEED	.10	.20	.30	.40	.50	.60	.70	.80	.90	1.0	1.1	1.2
HIGH	1740	1670	1600	1520	1430	1330	1265	1200	-	-	-	-
MED.	1690	1620	1550	1480	1390	1290	-	-	-	-	-	-
LOW	1560	1390	1300	-	-	-	-	-	-	-	-	-

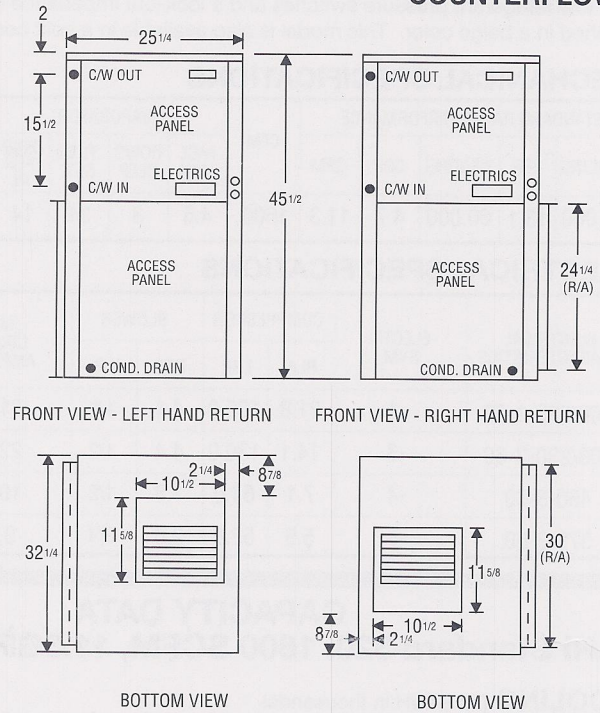
PHYSICAL CHARACTERISTICS

VERTICAL

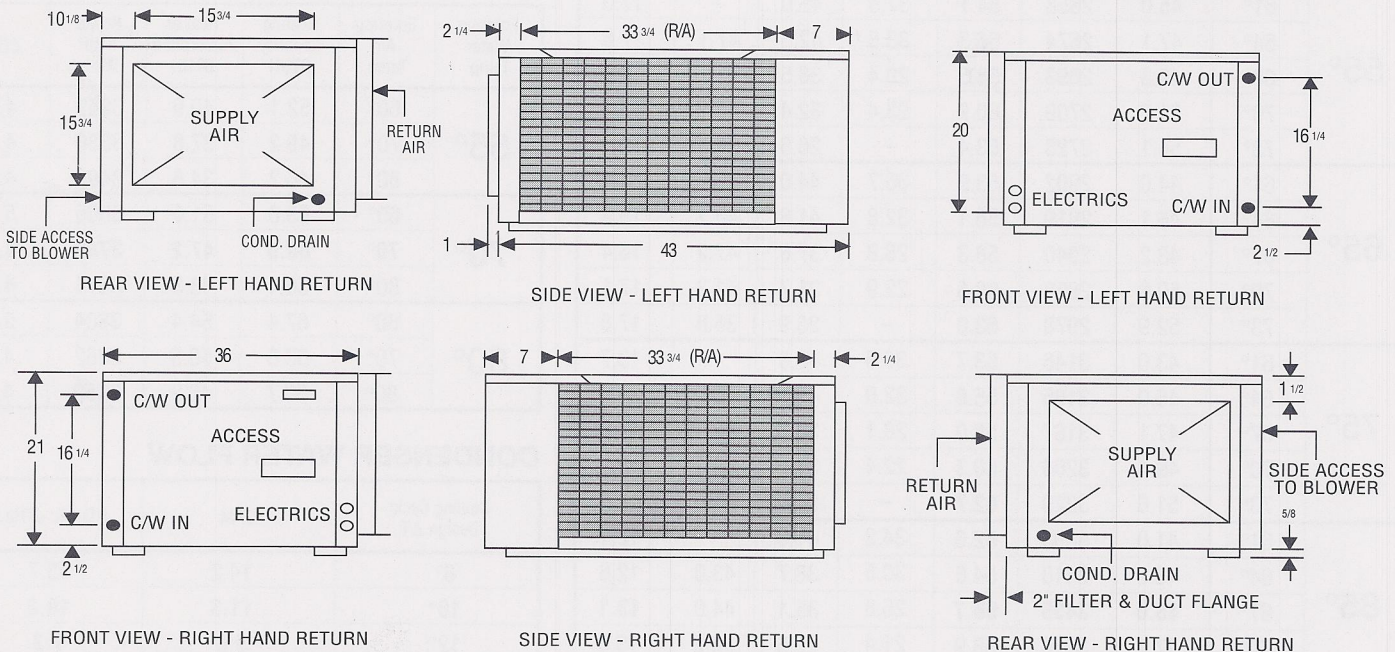
TOP VIEWS



COUNTERFLOW



HORIZONTAL



OPTIONAL STRAIGHT-THRU AIR CONFIGURATION AVAILABLE



a HARROW company

FHP MANUFACTURING
601 N.W. 65th COURT
FT. LAUDERDALE, FL 33309
PHONE: (305) 776-5471
FAX: (305) 776-5529

CONDENSER WATER CONNECTIONS: 1" F.P.T.
CONDENSATE DRAIN CONNECTION: 3/4" F.P.T.
FILTER SIZE: VT, CF 24" X 30" X 1" ; HZ 19 1/2" X 35" X 1"

As a result of continuing research and development, all ratings and specifications are subject to change without notice.

Rev. 12/94

FHP SPECIFICATION DATA SHEET

FLORIDA HEAT PUMP HIGH-EFFICIENCY WATER SOURCE HEAT PUMPS

SE046

SUPER EFFICIENCY

Units are complete packages containing all refrigeration components: compressor, reversing valve, capillary tube metering device and water-to-refrigerant condenser. Also included are safety controls: Overload protection for motors, high and low refrigerant pressure switches and a lock-out impedance relay. The units are finished in a beige color. This model is also available in a split configuration.

MECHANICAL SPECIFICATIONS

STANDARD RATED PERFORMANCE					CFM	EVAPORATOR				BLOWER	WEIGHT	
COOLING	EER	HEATING	COP	GPM		FACE AREA	ROWS DEEP	TUBE SIZE	FINS PER IN.		NET	SHIP
45,000	13.1	60,000	4.7	11.3	1600	4.5	3	3/8	14	10X8	307	327

ELECTRICAL SPECIFICATIONS

ELECTRICAL CHARACTERISTICS	ELECTR. SYM.	COMPRESSOR		BLOWER		MIN. CIRCUIT AMPACITY	FUSE (T/D) HACR CIRCUIT BREAKER
		RLA	LRA	NPA	H.P.		
208/230-1-60	-1	21.8	105.0	4.4	1/2	31.7	50
208/230-3-60	-3	14.1	130.0	4.4	1/2	22.1	35
460-3-60	-4	7.1	64.0	1.8	1/2	10.7	15
575-3-60	-5	5.9	52.0	2.6	3/4	9.9	15

CAPACITY DATA

ARI Standard 320: 1600 SCFM, 11.3GPM/10.2' P.D.

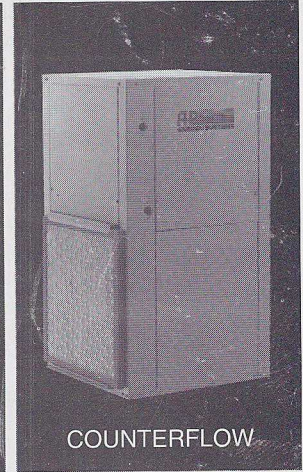
COOLING (All BTUH in thousands)

Entering Water Temp.	Ent. Air Wet Bulb Temp.	Total Capacity BTUH	Watts Input	Heat Rejection BTUH	Sensible Capacity BTUH Ent. Air Dry Bulb °F			EER
					75°	80°	85°	
55°	61°	45.0	2658	54.1	37.5	45.0	-	17.0
	64°	47.1	2674	56.3	33.5	42.5	47.1	17.6
	67°	49.3	2693	58.5	29.4	38.5	48.2	18.3
	70°	51.7	2709	60.9	23.4	32.4	42.2	19.1
	73°	54.1	2728	63.4	-	26.5	36.3	19.8
65°	61°	44.0	2902	53.9	36.7	44.0	-	15.2
	64°	46.1	2919	56.1	32.8	41.6	46.1	15.8
	67°	48.2	2940	58.3	28.8	37.6	47.2	16.4
	70°	50.6	2958	60.6	22.9	31.7	41.3	17.1
	73°	52.9	2978	63.0	-	25.9	35.5	17.8
75°	61°	43.0	3146	53.7	35.9	43.0	-	13.7
	64°	45.0	3165	55.8	32.0	40.6	45.0	14.2
	67°	47.1	3187	58.0	28.1	36.7	46.1	14.8
	70°	49.4	3206	60.3	22.4	31.0	40.3	15.4
	73°	51.6	3229	62.7	-	25.3	34.6	16.0
85°	61°	41.0	3390	52.6	34.2	41.0	-	12.1
	64°	43.0	3410	54.6	30.5	38.7	43.0	12.6
	67°	45.0	3435	56.7	26.8	35.1	44.0	13.1
	70°	47.1	3455	58.9	21.4	29.6	38.5	13.6
	73°	49.3	3479	61.1	-	24.1	33.0	14.2
95°	61°	37.4	3631	49.8	31.2	37.4	-	10.3
	64°	39.2	3653	51.7	27.8	35.3	39.2	10.7
	67°	41.0	3678	53.5	24.5	32.0	40.1	11.2
	70°	43.0	3700	55.6	19.5	27.0	35.1	11.6
	73°	44.9	3726	57.7	-	22.0	30.1	12.1

BOLD DATA ARE AT ARI STANDARD 320 RATING CONDITIONS.



VERTICAL



COUNTERFLOW



HORIZONTAL

HEATING

Entering Water Temp.	Entering Air Temp.	Heating Capacity BTUH	Heat of Absorption BTUH	Power Input Watts	COP
55°	60°	52.1	40.9	3269	4.7
	70°	49.2	37.8	3336	4.3
	80°	46.2	34.6	3402	4.0
70°	60°	63.6	51.0	3665	5.1
	70°	60.0	47.2	3740	4.7
	80°	56.4	43.3	3814	4.3
80°	60°	67.4	54.4	3804	5.2
	70°	63.6	50.3	3882	4.8
	80°	59.7	46.2	3959	4.4

CONDENSER WATER FLOW

Cooling Cycle Design ΔT	GPM	P.D. (Ft. of Hd.)
8°	14.2	15.7
10°	11.3	10.2
12°	9.6	7.3
14°	8.2	5.3
16°	7.2	4.1

