



# WATER SOURCE & GEOTHERMAL HEAT PUMPS SPECIFICATION DATA SHEET

Dade Broward (786) 766-6600 & Palm Beach - Treasure Coast (561) 285-2110

# BFX041

WATER SOURCE & GEOTHERMAL HEAT PUMPS  
R410A REFRIGERANT

WATER LOOP				GROUND WATER			
Cooling		Heating		Cooling		Heating	
Capacity	EER	Capacity	COP	Capacity	EER	Capacity	COP
41,000	16.0	47,000	4.8	47,000	21.4	37,500	4.1

GROUND LOOP				FLOW RATE	
Cooling		Heating		AIR	WATER
Capacity	EER	Capacity	COP	CFM	GPM
44,000	17.0	26,500	3.5	1,400	10.5

## ELECTRICAL SPECIFICATIONS

Electrical Characteristics	Elect. Symbol	Compressor		Min Circuit Ampacity	Max Fuse Size
		RLA	LRA		
208-230/1/60	A	17.9	112	28	45
208-230/3/60	C	13.2	88	23	35
460/3/60	D	5.9	44	10	15

## FLUID PRESSURE DROP

Fluid Flow (GPM)	Pressure drop	
	(FOH)	(PSIG)
5.3	5.1	2.2
7.0	9.1	4.0
9.2	15.7	6.8
<b>10.5</b>	<b>20.2</b>	<b>8.8</b>
13.1	31.6	13.8

	UNIT WEIGHT (lbs)		DIMENSION		
	Unit Weight	Shipping Weight	Length	Width	Height
Vertical	220	240	21.50	21.50	39.00
Horizontal	215	235	33.50	21.50	20.75

## COOLING

Entering Fluid Temp. (°F)	Entering Air Fluid (°F)	Total Capacity (MBtuH)	Sensible Capacity (MBtuH)	SHF	Power Input (kW)	Heat Rejection (MBtuH)	EER
50	70 db 61 wb	45.71	30.67	0.67	2.37	52.42	23.2
59		43.59	29.72	0.68	2.52	50.83	20.5
70		40.91	28.48	0.70	2.72	48.82	17.6
86		36.85	26.55	0.72	3.03	45.82	14.0
100		33.01	24.79	0.75	3.29	42.89	11.4
50	75 db 63 wb	47.38	34.81	0.73	2.36	54.07	24.1
59		45.18	33.81	0.75	2.52	52.41	21.3
70		42.40	32.58	0.77	2.72	50.32	18.2
86		38.18	30.60	0.80	3.04	47.18	14.5
100		34.22	28.93	0.85	3.31	44.16	11.7
50	<b>80.6 db 66.2 wb</b>	36.22	32.22	0.89	3.36	46.31	12.3
<b>59</b>		<b>47.00</b>	<b>36.48</b>	<b>0.78</b>	<b>2.60</b>	<b>54.49</b>	<b>21.4</b>
70		44.84	35.85	0.80	2.73	52.77	19.3
<b>86</b>		<b>41.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2.96</b>	<b>49.74</b>	<b>16.0</b>
100		50.12	38.06	0.76	2.35	56.77	25.7
50	85 db 71 wb	54.17	37.28	0.69	2.32	60.72	28.2
59		51.73	36.30	0.70	2.49	58.86	24.8
70		48.52	35.12	0.72	2.71	56.41	21.0
86		43.57	33.18	0.76	3.06	52.65	16.4
100		39.01	31.32	0.80	3.38	49.17	13.1

## HEATING

Entering Fluid Temp. (°F)	Entering Air Fluid (°F)	Total Capacity (MBtuH)	Power Input (kW)	Heat of Absorb. (MBtuH)	COP
50	60	38.86	2.96	30.14	4.5
60		44.52	3.08	35.38	4.9
68		48.98	3.14	39.64	5.2
80		55.39	3.17	45.94	5.9
<b>50</b>	<b>68</b>	<b>37.50</b>	<b>3.08</b>	<b>28.35</b>	<b>4.1</b>
60		42.90	3.21	33.30	4.5
<b>68</b>		<b>47.00</b>	<b>3.27</b>	<b>37.21</b>	<b>4.8</b>
80		53.52	3.35	43.45	5.3
50	80	0.00	0.40	0.00	3.6
60		40.61	3.41	30.33	4.0
68		44.83	3.52	34.19	4.2
80		0.00	0.40	0.00	4.6

## LOW TEMP HEATING

with Antifreeze by ARI-ISO 13256-1

Entering Fluid Temp. (°F)	Entering Air Fluid (°F)	Total Capacity (MBtuH)	Power Input (kW)	Heat of Absorb. (MBtuH)	COP
25	60	24.30	2.43	17.40	3.5
32		27.75	2.54	20.47	3.8
40		31.58	2.66	23.88	4.1
25	<b>68</b>	22.97	2.49	15.85	3.2
<b>32</b>		<b>26.50</b>	<b>2.62</b>	<b>18.93</b>	<b>3.5</b>
40		30.32	2.75	22.28	3.8
25	80	21.49	2.58	14.06	2.9
32		24.13	2.71	16.27	3.1
40		28.34	2.89	19.86	3.3

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

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