

Source Water Entering Temp = 90°F	HEATING MODE										COOLING MODE				
	Units	R-410A					R-134a					R-410A	R-134a	Units	
	Building Water Entering Temp	°F					100	110	120	130	140	55	55	°F	Building Water Entering Temp
Building Water Leaving Temp	°F					110	120	130	140	150	45	45	°F	Building Water Leaving Temp	
Heating Capacity	MBTUH					296.4	283.8	193.2	186.6	179.9	179.9	120.7	MBTUH	Cooling Capacity	
Condenser Water Flow	GPM					59.3	56.8	38.6	37.3	36.0	36.0	24.1	GPM	Evaporator Water Flow	
Evaporator Load	MBTUH					246.0	227.3	152.6	141.2	129.3	224.6	149.4	MBTUH	Condenser Load	
Evaporator Water Flow	GPM					49.2	45.5	30.5	28.2	25.9	44.9	29.9	GPM	Condenser Water Flow	
Power Input	kW					14.8	16.5	11.9	13.3	14.8	13.1	8.4	kW	Power Input	
COP	-					5.88	5.03	4.77	4.12	3.55	13.74	14.40	-	EER	
Source Water Leaving Temp	°F					80	80	80	80	80	100	100	°F	Source Water Leaving Temp	

Source Water Entering Temp = 90°F	HEATING MODE										COOLING MODE				
	Units	R-410A					R-134a					R-410A	R-134a	Units	
	Building Water Entering Temp	°F					90	100	110	120	130	140	55	55	°F
Building Water Leaving Temp	°F					100	110	120	130	140	150	45	45	°F	Building Water Leaving Temp
Heating Capacity	MBTUH					308.8	296.4	283.8	193.2	186.6	179.9	192.7	127.2	MBTUH	Cooling Capacity
Condenser Water Flow	GPM					61.8	59.3	56.8	38.6	37.3	36.0	38.5	25.4	GPM	Evaporator Water Flow
Evaporator Load	MBTUH					263.8	246.0	227.3	152.6	141.2	129.3	232.4	153.0	MBTUH	Condenser Load
Evaporator Water Flow	GPM					52.8	49.2	45.5	30.5	28.2	25.9	46.5	30.6	GPM	Condenser Water Flow
Power Input	kW					13.2	14.8	16.5	11.9	13.3	14.8	11.6	7.5	kW	Power Input
COP	-					6.87	5.88	5.03	4.77	4.12	3.55	16.54	16.87	-	EER
Source Water Leaving Temp	°F					70	70	70	70	70	70	90	90	°F	Source Water Leaving Temp

Source Water Entering Temp = 70°F	HEATING MODE										COOLING MODE					
	Units	R-410A					R-134a					R-410A	R-134a	Units		
	Building Water Entering Temp	°F					80	90	100	110	120	130	140	55	55	°F
Building Water Leaving Temp	°F					90	100	110	120	130	140	150	45	45	°F	Building Water Leaving Temp
Heating Capacity	MBTUH					296.3	285.4	274.2	262.9	177.9	172.2	166.4	205.2	132.6	MBTUH	Cooling Capacity
Condenser Water Flow	GPM					59.3	57.1	54.8	52.6	35.6	34.4	33.3	41.0	26.5	GPM	Evaporator Water Flow
Evaporator Load	MBTUH					256.5	240.5	223.9	206.6	137.5	127.0	116.0	240.0	156.1	MBTUH	Condenser Load
Evaporator Water Flow	GPM					51.3	48.1	44.8	41.3	27.5	25.4	23.2	48.0	31.2	GPM	Condenser Water Flow
Power Input	kW					11.7	13.1	14.7	16.5	11.8	13.2	14.8	10.2	6.9	kW	Power Input
COP	-					7.44	6.36	5.46	4.67	4.41	3.81	3.30	20.08	19.30	-	EER
Source Water Leaving Temp	°F					60	60	60	60	60	60	60	80	80	°F	Source Water Leaving Temp

Source Water Entering Temp = 60°F	HEATING MODE										COOLING MODE						
	Units	R-410A					R-134a					R-410A	R-134a	Units			
	Building Water Entering Temp	°F					70	80	90	100	110	120	130	140			°F
Building Water Leaving Temp	°F					80	90	100	110	120	130	140	150			°F	Building Water Leaving Temp
Heating Capacity	MBTUH					260.6	252.1	243.3	234.4	225.7	150.6	146.4	142.3			MBTUH	Cooling Capacity
Condenser Water Flow	GPM					52.1	50.4	48.7	46.9	45.1	30.1	29.3	28.5			GPM	Evaporator Water Flow
Evaporator Load	MBTUH					225.8	212.4	198.6	184.4	169.5	110.6	101.7	92.4			MBTUH	Condenser Load
Evaporator Water Flow	GPM					45.2	42.5	39.7	36.9	33.9	22.1	20.3	18.5			GPM	Condenser Water Flow
Power Input	kW					10.2	11.7	13.1	14.7	16.5	11.7	13.1	14.6			kW	Power Input
COP	-					7.48	6.34	5.44	4.68	4.02	3.77	3.28	2.85			-	EER
Source Water Leaving Temp	°F					50	50	50	50	50	50	50	50			°F	Source Water Leaving Temp

Source Water Entering Temp = 50°F	HEATING MODE										COOLING MODE							
	Units	R-410A					R-134a					R-410A	R-134a	Units				
	Building Water Entering Temp	°F					60	70	80	90	100	110	120	130	140			°F
Building Water Leaving Temp	°F					70	80	90	100	110	120	130	140	150			°F	Building Water Leaving Temp
Heating Capacity	MBTUH					227.4	220.9	214.1	207.2	200.4	193.8	127.3	124.5	121.9			MBTUH	Cooling Capacity
Condenser Water Flow	GPM					45.5	44.2	42.8	41.4	40.1	38.8	25.5	24.9	24.4			GPM	Evaporator Water Flow
Evaporator Load	MBTUH					197.6	186.0	174.4	162.6	150.3	137.6	87.7	80.3	72.6			MBTUH	Condenser Load
Evaporator Water Flow	GPM					39.5	37.2	34.9	32.5	30.1	27.5	17.5	16.1	14.5			GPM	Condenser Water Flow
Power Input	kW					8.7	10.2	11.6	13.1	14.7	16.5	11.6	12.9	14.5			kW	Power Input
COP	-					7.63	6.33	5.39	4.64	4.00	3.45	3.22	2.82	2.47			-	EER
Source Water Leaving Temp	°F					40	40	40	40	40	40	40	40	40			°F	Source Water Leaving Temp

Source Water Entering Temp = 40°F	HEATING MODE										COOLING MODE						
	Units	R-410A					R-134a					R-410A	R-134a	Units			
	Building Water Entering Temp	°F					60	70	80	90	100	110	120	130			°F
Building Water Leaving Temp	°F					70	80	90	100	110	120	130	140			°F	Building Water Leaving Temp
Heating Capacity	MBTUH					192.0	186.9	181.6	176.3	171.3	166.7	107.5	106.0			MBTUH	Cooling Capacity
Condenser Water Flow	GPM					38.4	37.4	36.3	35.3	34.3	33.3	21.5	21.2			GPM	Evaporator Water Flow
Evaporator Load	MBTUH					162.1	152.0	141.9	131.6	121.2	110.3	68.4	62.3			MBTUH	Condenser Load
Evaporator Water Flow	GPM					32.4	30.4	28.4	26.3	24.2	22.1	13.7	12.5			GPM	Condenser Water Flow
Power Input	kW					8.8	10.2	11.6	13.1	14.7	16.5	11.4	12.8			kW	Power Input
COP	-					6.43	5.36	4.58	3.95	3.42	2.95	2.75	2.43			-	EER
Source Water Leaving Temp	°F					30	30	30	30	30	30	30	30			°F	Source Water Leaving Temp

Note: In View of Continuous Product Improvements, design and specification are subject to change without notice. EEE can accept no responsibility for possible errors in catalogues, brochures and other printed material.



ENVIRONMENTALLY ENGINEERED EQUIPMENT, INC.

Water-to-Water Heat Pumps SS 15 Data Sheet

