

ModulAIR Heat Recovery Series

Simultaneous heating and cooling machines

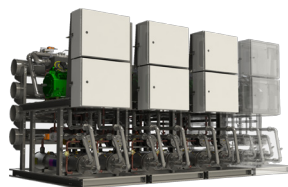
The ModulAIR Heat Recovery Series delivers significant energy savings by recovering energy for applications where heating and cooling are required. Condenser heat that would otherwise be wasted can now be used for space heating, domestic hot water, or any other heating process. Because of its advanced controls, the ModulAIR can perform as a conventional chiller when cooling is required and switch into heat recovery mode when heating and cooling are both required. For ultimate flexibility, the unit is available with a dual condenser option. This allows users to recover heat when needed or reject the heat through the second condenser when there is no heat load.

Heat Recovery Performance

For other design conditions, capacities or requirements please contact engineering at info@air-eng.com

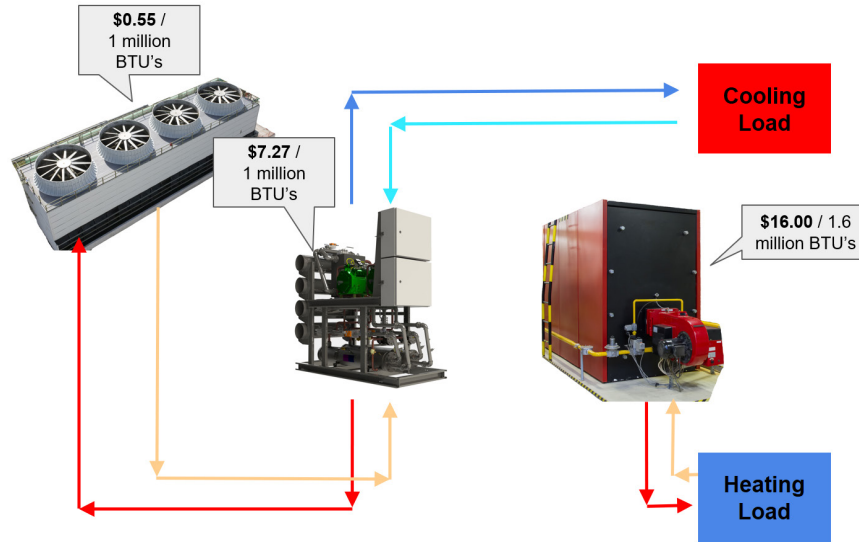
WATER COOLED MODELS									
Model	CPW-08	CPW-10	CPW-12	CPW-15	CPW-21	CPW-25	CPW-41	CPW-48	CPW-55
Cooling Capacity (Tons)	3.92	5.38	6.53	7.83	10.77	13.13	22.42	25.87	30.30
Evap. Water Flow (GPM)	9.37	12.9	15.7	18.8	25.8	31.44	53.66	61.91	72.47
Evap. Pressure Drop (PSI)	0.4	0.4	0.5	0.3	0.3	0.4	0.6	0.6	0.7
Heating Capacity (BTU/Hr)	73,600	100,200	121,900	146,200	200,800	244,800	416,000	484,000	578,000
Cond. Water Flow (GPM)	19	25.4	30.1	36.6	51.2	62.4	106.8	125.8	147.8
Cond. Pressure Drop (PSI)	1.6	1.4	1.9	1.2	1.4	2.0	3.2	4.4	6.0
Cooling Efficiency (kW/ton)	1.96	1.94	1.95	1.96	1.94	1.94	1.92	1.96	2.02
Heating Efficiency (COP)	2.82	2.80	2.80	2.80	2.81	2.81	2.84	2.79	2.77
Combined Efficiency (COP)	4.61	4.61	4.60	4.60	4.62	4.62	4.67	4.58	4.51

Rated Conditions: 54°F EFT / 44°F - entering/leaving evaporator and 160°F hot water supply for domestic hot water heating.
Advance Industrial Refrigeration Inc. reserves the right to make changes in designs, features, and options without notice or obligation.



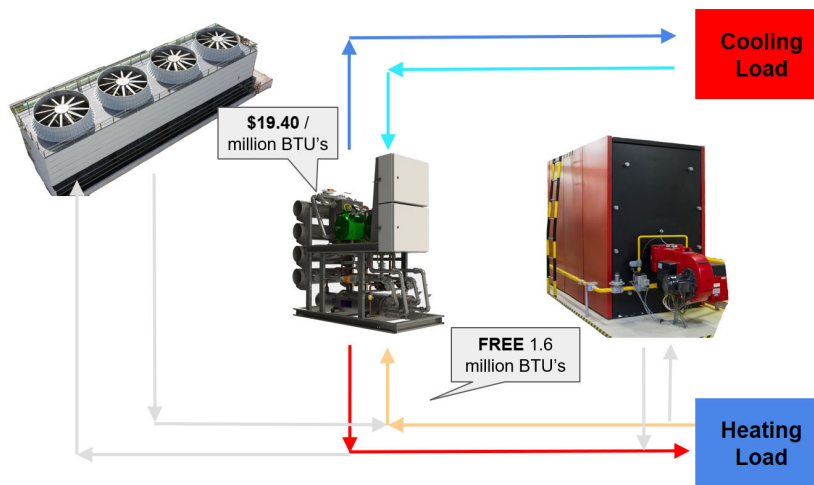
In this example, ModulAIR reduces operating costs by 23% and eliminates fossil fuels while delivering 160 F domestic hot water.

CONVENTIONAL SYSTEM



A total of \$23.82 for 1 million BTU's of chilled water and 1.6 million BTU's of hot water.

HEAT RECOVERY SYSTEM



A total of \$19.40 for 1 million BTU's of chilled water and 1.6 million BTU's of hot water.

*Utilities based on \$0.12 per kw-hr electricity, \$0.30 per m3 natural gas. Efficiencies based on 85% efficient boiler, 40.2 GPM / HP cooling tower.