

Cold Climate Heat Pump Water Heater

ccHPWH Series

Ice Air's cold climate heat pump water heaters capture the free energy in the environment and convert it to hot water. These commercial water heaters are designed to provide domestic hot water to large buildings on the coldest days.

- Industry leading performance
 - Lower cost of operation and maintenance compared to condensing gas-fired water heaters
 - 4x more efficient compared to electric resistance heaters
- Multiple independent circuits provide built-in redundancy
- Double wall heat exchangers ensure occupant safety
- Optional single wall heat exchangers (for glycol applications)
- Freeze protection standard
- Optional heat-trace powered by building emergency power
- Clean out ports to remove sediment or lime deposits



Model Numbers		ccHPWH275-S	ccHPWH275-D	ccHPWH550-S	ccHPWH550-D	
Heat Exchanger Type		Single Wall Brazed Plate HXR	Double Wall Brazed Plate HXR	Single Wall Brazed Plate HXR	Double Wall Brazed Plate HXR	
Input Power		208-230V/3PH/60Hz	208-230V/3PH/60Hz	208-230V/3PH/60Hz	208-230V/3PH/60Hz	
Refrigerant Circuits		2	2	4	4	
Refrigerant / Quantity		R410A (30.8 Lbs / 15.4 Lbs per circuit)	R410A (30.8 Lbs / 15.4 Lbs per circuit)	R410A (70.8 Lbs / 17.7 Lbs per circuit)	R410A (70.8 Lbs / 17.7 Lbs per circuit)	
Max H/W Temperature		140°F	140°F	140°F	140°F	
Performance Specifications	Dry Bulb Temperature (68°F) Wet Bulb Temperature (59°F) Inlet Water Temperature (59°F) Outlet Water Temperature (131°F)	Heating Capacity (Btu/H)	341,263	327,246	563,003	532,287
		Input Power (kW)	22.2	22.7	37	37.3
		COP	4.41	4.23	4.42	4.18
	Dry Bulb Temperature (45°F) Wet Bulb Temperature (43°F) Inlet Water Temperature (48°F) Outlet Water Temperature (131°F)	Heating Capacity (Btu/H)	270,645	262,360	495,600	470,820
		Input Power (kW)	18.6	21.7	39.2	44.8
		COP	3.70	3.54	3.71	3.48
	Dry Bulb Temperature (10°F) Wet Bulb Temperature (7°F) Inlet Water Temperature (43°F) Outlet Water Temperature (131°F)	Heating Capacity (Btu/H)	175,396	170,027	304,500	289,275
		Input Power (kW)	17.3	20.3	37.8	43.2
		COP	2.57	2.46	2.36	2.22
	Minimum Ambient Operating Temperature (°F)		-13	-13	-13	-13
	Max. Input Power (kW)		29.8	29.8	62	62
	FLA (A)		85.1	85.1	170.2	170.2
MCA (A)		93.7	93.7	187.2	187.2	
MOCP (A)		127.7	127.7	255.4	255.4	
Sound Level (dBA)		≤71	≤71	≤76	≤76	
Water Data	Water Side Pressure Loss (psig)	8.1	16.51	7.25	13.0	
	Rated Water Flow (GPM)	73.4	58.9	129.6	122.5	
	Single pass delta-T (F) (average)	9.30	10.60	9.36	9.36	
	Max Working Pressure (psig)	230	230	230	230	
	Piping Position (Refer to the electric box as front)	Rear	Rear	Right Hand	Right Hand	
	Piping Sizes	2"	2"	3"	3"	
Overall Dimensions [L x W x H] (inches)		81 x 39 x 89	81 x 39 x 89	95 x 51 x 89	95 x 51 x 89	
Net Weight (Lbs)		1,500	1,555	2,850	2,950	