

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-D	ccHPWH550-D	ccHPWH275-S	ccHPWH550-S	
Input Power		208-230V/3Ph/60Hz	208-230V/3Ph/60Hz	208-230V/3Ph/60Hz	208-230V/3Ph/60Hz	
Refrigerant Circuits		2	4	2	4	
Refrigerant / Quantity		R410A (30.8 Lbs / 15.4 Lbs per circuit)	R410A (61.7 Lbs / 15.4 Lbs per circuit)	R410A (30.8 Lbs / 15.4 Lbs per circuit)	R410A (61.7 Lbs / 15.4 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)	322,072	670,834	327,189	681,492
		Input Power (kW)	22.31	47.04	21.74	45.19
		COP	4.23	4.18	4.41	4.42
	Dry Bulb Temperature (45°F) Wet Bulb Temperature (43°F) Inlet Water Temperature (48°F) Outlet Water Temperature (131°F)	Heating Capacity (Btu/H)	261,063	543,759	265,210	552,398
		Input Power (kW)	24.4	48.3	22.3	46.4
		COP	3.34	3.30	3.48	3.49
	Dry Bulb Temperature (10°F) Wet Bulb Temperature (7°F) Inlet Water Temperature (43°F) Outlet Water Temperature (131°F)	Heating Capacity (Btu/H)	168,698	351,376	171,378	356,958
		Input Power (kW)	23.2	45.92	22.6	46.9
		COP	2.13	2.13	2.22	2.23
	FLA (A)		106.4	212.8	103.7	204.4
	MCA (A)		134.6	254.4	134.6	254.4
	MOCP (A)		175	300	175	300
Sound Level (dBA)		≤73	≤75	≤73	≤75	
Water Data	Condenser Type	Double Wall BPX	Double Wall BPX	Single Wall BPX	Single Wall BPX	
	Water Side Pressure Loss (psig)	11.7	16.51	11.7	16.51	
	Rated Water Flow (GPM) (DB/WB:45°F/43°F, Inlet/outlet: 104°F/113°F)	59.4	118.9	59.4	118.9	
	Single pass delta-T (F) (OA_temp=68°F, LWT=131°F)	10.37	10.80	10.53	11.00	
	Piping Position (Refer to the electric box as front)	Rear	Rear	Rear	Rear	
	Piping Sizes	2" (DN50)	3" (DN80)	2" (DN50)	3" (DN80)	
Minimum Ambient Operating Temperature (°F)		-13	-13	-13	-13	
Overall Dimensions [L x W x H] (inches)		81 x 39 x 89	95 x 51 x 89	81 x 39 x 89	95 x 51 x 89	
Net Weight (Lbs)		1,555	2,950	1,555	2,950	