

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



SERIES MODEL #		ccHPWH275-D	ccHPWH550-D	ccHPWH275-S	ccHPWH550-S			
Performance Specifications	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			
	Dry Bulb Temperature (68°F)	Heating Capacity (Btu/H)	306,000	637,300	310,800	647,400		
	Wet Bulb Temperature (59°F)		Input Power (kW)	21.4	45.0	20.7	43.1	
	Inlet Water Temperature (59°F)			COP	4.20	4.15	4.40	4.40
	Outlet Water Temperature (131°F)				Heating Capacity (Btu/H)	248,000	516,600	251,900
	Dry Bulb Temperature (45°F)	Input Power (kW)	22.0	45.9	21.4	44.6		
	Wet Bulb Temperature (43°F)		COP	3.30	3.30	3.45	3.45	
	Inlet Water Temperature (48°F)			Heating Capacity (Btu/H)	160,300	333,800	162,800	339,100
	Outlet Water Temperature (131°F)	Input Power (kW)	22.4	46.6	21.7	45.2		
	FLA (A)		COP	2.10	2.10	2.20	2.20	
	MCA (A)	106.4		212.8	103.7	204.4		
	MOCP (A)	134.6	254.4	134.6	254.4			
Sound Level (dBA)	175	300	175	300				
Water Data	Condenser Type	≤73	≤75	≤73	≤75			
	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				