

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	R454b (30.8 Lbs / 15.4 Lbs per circuit)	R454b (61.7 Lbs / 15.4 Lbs per circuit)	R454b (30.8 Lbs / 15.4 Lbs per circuit)	R454b (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)	336,400	672,800	341,700	683,500	
	Wet Bulb Temperature (59°F)		Input Power (kW)	22.9	45.9	22.3	44.5
	Inlet Water Temperature (59°F)			COP	4.3	4.3	4.5
	Outlet Water Temperature (140°F)		Dry Bulb Temperature (45°F)		271,700	543,400	275,900
		Wet Bulb Temperature (43°F)	Input Power (kW)	23.4	46.8	22.8	45.3
		Inlet Water Temperature (48°F)		COP	3.4	3.4	3.55
		Outlet Water Temperature (140°F)	Dry Bulb Temperature (10°F)		176,100	352,100	178,800
		Wet Bulb Temperature (7°F)	Input Power (kW)	24.0	48.0	23.3	46.4
		Inlet Water Temperature (43°F)		COP	2.15	2.15	2.25
		Outlet Water Temperature (140°F)	FLA (A)		105.3	210.7	105.3
		MCA (A)	125.9	251.8	125.9	251.8	
		MOCP (A)	150	300	150	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)	24.3	24.5	24.3	24.5		
	Rated Water Flow (GPM) (DB/WB:45°F/43°F, Inlet/outlet: 104°F/113°F)	78.3	145.2	78.3	145.2		
	Single pass delta-T (F) (OA_temp=68°F, LWT=131°F)	11.10	11.10	11.20	11.20		
	Piping Position	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		