

HPWH Series

Cold Climate Heat Pump Water Heaters

ICEAIR

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HPWH Series

Cold Weather and Your Water Heater

There's a better way to provide domestic hot water, and that's via cold climate heat pump water heaters (HPWH). This technology offers an energy-efficient means of heating water without the use of fossil fuels.

Ice Air's engineering enables HPWH units to operate at very high coefficients of performance in hot temperatures. Even in extreme cold, HPWH units provide a higher efficiency than natural gas boilers and electric resistance tanks.



The HPWH Series complies with the NEEP Cold Climate Air Source Heat Pump (ccASHP) efficiency requirements. The Northeast Energy Efficiency Partnerships (NEEP) product listing identifies products best suited to electrify heating in cold climates.



The HPWH Series produce superior energy savings, which is especially important to satisfy the NYC Law 97 and other laws throughout the U.S., as well as helping projects comply with green building rating systems such as LEED[®].

Rebates, incentives, and tax credits may be available through state, federal, and local utility programs.

For additional information scan the code \rightarrow or visit: **www.ice-air.com/rebates/**







Ice Air's HPWH Series are tested to -13°F providing hot water even when it is extremely cold outside.

SERIES MODEL #			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/60H
	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) Wet Bulb Temperature (59°F) Inlet Water Temperature (59°F) Outlet Water Temperature (131°F)	Heating Capacity (Btu/H)	306,000	637,300	310,800	647,400
Pe		Input Power (kW)	21.4	45.0	20.7	43.1
Performance Specifications		COP	4.20	4.15	4.40	4.40
	Dry Bulb Temperature (45°F) Wet Bulb Temperature (43°F) Inlet Water Temperature (48°F) Outlet Water Temperature (131°F)	Heating Capacity (Btu/H)	248,000	516,600	251,900	524,800
		Input Power (kW)	22.0	45.9	21.4	44.6
		COP	3.30	3.30	3.45	3.45
	Dry Bulb Temperature (10°F) Wet Bulb Temperature (7°F) Inlet Water Temperature (43°F) Outlet Water Temperature (131°F)	Heating Capacity (Btu/H)	160,300	333,800	162,800	339,100
		Input Power (kW)	22.4	46.6	21.7	45.2
		COP	2.10	2.10	2.20	2.20
	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

Ice Air HPWH Series Cold Climate Heat Pump Water Heaters are designed to provide domestic hot water to large buildings on the coldest days – allowing domestic hot water generation with zero emissions.

Defining Cold Climate

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- 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



Electrified Product Family

RSXC Series*

Cold Climate PTHPs give you the performance of a VRF system with the convenience of a PTAC.

Using breakthrough cold climate technology allows Ice Air PTHPs to efficiently provide space heating down to -5°F and below.

SPXC Series*

Cold Climate SPHPs are self-contained, concealed, ducted systems. This line of vertical packaged heat pumps serves multiple spaces through con



vertical packaged heat pumps serves multiple spaces through concealed ductwork to efficiently provide space heating to -5°F and below.

VSHPGE Geothermal

Ice Air's Geothermal WSHP is a versatile geothermal heat pump that is available in a range of sizes and configurations for convenient installation. Fully compatible with geothermal conditions, it provides an ideal solution for whisper quiet cooling and heating within a tight footprint.

Other Products



This simple and easy cooling and heating solution provides reliable performance, high efficiency, ease of operation, low cost, easy installation, quiet comfort and a variety of solution-based options.



Vertical Exposed

Packaged Terminal Air Conditioners

Vertical Concepted

PTACs are designed for ultra-high efficiency and comply with LEED[®] criteria in a durable, user-friendly package. Available for

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Hi Rise

new construction, retrofit and ExactFit™ replacement applications.

RSXC-S Series*

Ice Air's RSXC-S Series Cold Climate heat pumps offer a slim, sleek design and efficiently provide space heating to -5°F and below.

HPWH Series*

Air-Source Cold Climate

capture the free energy

in the environment and

ICFA

simply and effectively.

Heat Pump Water Heaters

convert it to hot water. These units are

New technologies like Variable Refrigerant

denying the benefits of VRF any longer, and

with Ice Air VRF, these benefits are delivered

Flow (VRF) are on the move. There is no

certified to operate down to -13°F.



* By making energy-saving upgrades today, you can give your building a head start on upcoming changes to city regulations such as NYC Law 97.

RSXC-DH Series

RSXC-DH air source heat pumps are compact, with advanced, two-stage dual heating capabilities(partial

cold climate operation down to 23°F then supplemental electric heat resistance for increased output).

HPWH-SC Series



Air-Source Cold Climate heat pump chiller heaters capture free energy in the environment to provide

both hot and chilled water. These units are certified to operate down to -13°F.



HWCAC Hybrid Water-Cooled Air Conditioners

HWCACs provide hydronic heat without using the unit's compressor through an innovative system that combines highefficiency cooling with a hot water coil.

WSHP Water Source Heat Pumps

WSHPs provide efficient room-by-room comfort. Units function independently and are piped to a central water loop.



Learn more about the role HVAC electrification plays in building decarbonization today at www.iceairceu.com.



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