ICE AIR®
World Class Comfort®



WSHP

VSHPGE Vertical Stack Geothermal Units
VSHPW Vertical Stack Units
CHPW Console Units
HHPW Horizontal Units
VCHPW Vertical Closet Units

Water Source Heat Pump Units

Contents

AHRI CERTIFIED® www.ahridirectory.org

Globally Recognized. Industry Respected.

All units are AHRI Certified®

AHRI Certified® is the trusted mark of performance for heating, air conditioning, water heating, and commercial refrigeration equipment. To find AHRI Certified products, go to www.ahridirectory.org.

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About Ice Air

Ice Air has over 50 years of industry experience in developing and manufacturing a wide variety of HVAC units to provide superior heating and cooling systems for new construction, retrofit and replacement installations. Ice Air offers advanced green technologies and provides world-class comfort at high efficiency levels, meeting environmental standards and promoting a healthy environment.

Ice Air's state-of-the-art units can be equipped with digital controls designed to optimize user comfort and ease of operation. Ice Air products are designed to provide years of trouble-free operation and reliable performance in multi-family housing, hotels/motels, dormitories, commercial buildings and similar projects. Units are ideal for new construction, retrofit and replacement applications.

VSHPGE Vertical Stack Geothermal, Page 4

VSHPW Vertical Stack, Page 5

CHPW Console, Page 6

HHPW Horizontal, Page 7

VCHPW Vertical Closet, Page 8

Overview

Quiet Comfort…Efficient Control…Flexible Design

Ice Air Water Source Heat Pump (WSHP) units combine reliable performance with high-efficiency cooling and heating operation.

Ice Air WSHPs utilize the highest quality materials and manufacturing practices in order to provide quiet comfort operation. Thermal and sound insulation, paired with precisely-sized air handling components deliver low sound levels while achieving optimum comfort. Work without distraction. Sleep without noise. Ice Air units create a comfortable environment so quiet it's almost undetectable.

Maintaining the highest quality product means Ice Air products meet all UL standards and conform to ASHRAE 90.1, local building codes and energy standards. All Ice Air products are ETL-listed for safety in the U.S. and Canada.

Every project is different with distinctive needs outside of providing comfort to the space. Ice Air WSHP units are available in a multitude of piping configurations with a wide variety of options and accessories to create a custom design tailored to the needs of the project.

Vertical Stack Geothermal Water Source Heat Pump

VSHPGE Series

Ice Air's Vertical Stack Geothermal WSHP is a versatile geothermal heat pump that's available in a range of sizes and configurations for convenient installation. Fully compatible with geothermal conditions, Ice Air's Vertical Stack Geothermal WSHP offer high efficiencies — up to 21 EER in cooling on select models – and provide an ideal solution for whisper quiet cooling and heating within a tight footprint.

Features:

- R410A "green" refrigerant
- Highest efficiency in market
- 17+ EER
- 3.6+ COP
- Advanced controls on every unit
- Industry best sound levels

SERIES MODEL #	8VSHPGE09	8VSHPGE12	8VSHPGE15	8VSHPGE18	8VSHPGE24	8VSHPGE30
Cooling Capacity (Btu/h)	11,000	13,800	15,000	19,500	24,800	30,000
Sensible Capacity (Btu/h)	9,500	10,800	12,100	15,400	18,600	24,000
EER	21.3	20.1	17.5	18.7	18.4	17.3
Heating Capacity (Btu/h)	6,500	9,000	10,500	13,400	17,000	21,900
COP	3.64	3.7	3.7	3.63	3.66	3.6
Flow Rate (GPM)	2.3	3	3.8	4.5	6	7.5
Air Flow (CFM)	460	500	560	620	800	1000
Voltage/Hz/Ph	208-230/60/1					
Compressor RLA	3.25	4.1	5.5	6.1	9.15	11.25
Compressor LRA	20	27	28.5	35.6	43	62
Fan Motor FLA	2					3.98
MCA	6.6	7.6	9.4	10.1	13.9	19
MOP	9.3	11.2	14.4	15.7	22.6	29.3
Fuse Size	15				20	25

SPECIFICATION NOTES:
COOLING CAPACITY BTUH RATED AT @ 80.6°F, 66.2°F WB EAT 77°F EWT @ 3 GPM/TON
HEATING CAPACITY BTUH RATED AT @ 68°F DB, 59°F WB EAT, 32°F EWT @ 3 GPM/TON
The performance data shown above is based on standard equipment under the provided design conditions. Performance may vary depending on equipment configuration and project site conditions.

Vertical Stack Water Source Heat Pump

VSHPW Series

Ice Air's Vertical Stack WSHP units provide an ideal solution for whisper quiet cooling and heating within a tight footprint. With the lowest sound levels and smallest footprints available, our VS WSHPs offer superior value – efficiently heating and cooling with full thermal and acoustical insulation, advanced electronic control interface, high and low pressure protection, and condensate overflow sensors.

Features:

- R410A "green" refrigerant
- High levels of energy efficiency
- 13+ EER
- Smallest footprint in the market
- Advanced controls on every unit
- Industry best sound levels

SERIES MODEL #	8VSHPW09	8VSHPW12	8VSHPW15	8VSHPW18	8VSHPW24	8VSHPW30	8VSHPW36
Cooling Capacity (Btu/h)	9,000	12,500	13,000	18,000	23,000	27,000	36,000
Sensible Capacity (Btu/h)	7,100	9,700	10,600	12,800	17,100	22,200	26,200
Cooling EER	13.3	14.1	14.4	14.1	13.3	13.7	13
Heating Capacity (Btu/h)	12,000	14,000	15,000	19,000	27,000	32,000	41,000
Heating COP	4.4	4.3	4.5	4.4	4.3	4.4	4.3
Flow Rate (GPM)	2.3	3.0	3.8	4.5	6.0	7.5	9.0
Air Flow (CFM)	420	500	540	630	770	1000	1150

SPECIFICATION NOTES:
COOLING CAPACITY BTUH RATED @ 80.6°F, 66.2°F WB EAT 86°F EWT @ 3 GPM/TON
HEATING CAPACITY BTUH RATED 68°F DB, 59°F WB EAT; 68°F EWT @ 3 GPM/TON

Console Water Source Heat Pump - Flat Top

CHPW Series

Ice Air's Console Water Source Heat Pumps provide independent comfort cooling and heating within a room and are often located against walls or beneath windows of a room to accommodate maximum load requirements. These floor console units offer superior performance and are piped to a central water loop.

Features:

- R410A "green" refrigerant
- 13+ EER
- High efficiency
- Digital controls designed to optimize user comfort and ease of operation
- Available for new construction and replacement applications
- Available with flat or slope top

SERIES MODEL #	5CHPW09	5CHPW13	8CHPW09	8CHPW13	8CHPW16	8CHPW19	7CHPW09	7CHPW13	7CHPW16	7CHPW19
Cooling Capacity	9,500	12,500	9,500	12,500	15,500	17,500	9,500	12,500	15,500	17,500
Sensible Capacity	8,500	10,800	8,500	10,800	13,300	16,000	8,500	10,800	13,300	16,000
Cooling EER	13.9	13.8	13.9	13.8	13.9	13.3	13.9	13.8	13.9	13.3
Heating Capacity	12,000	16,000	12,000	16,000	20,000	23,000	12,000	16,000	20,000	23,000
Heating COP	4.8	4.8	4.8	4.8	4.7	4.3	4.8	4.8	4.7	4.3
Voltage	115	115	208	208	208	208	277	277	277	277
Flow Rate (GPM)	2.3	3.3	2.3	3.3	4.0	4.8	2.3	3.3	4.0	4.8
Air Flow (CFM)	400	450	400	450	500	550	400	450	500	550

SPECIFICATION NOTES:
COOLING CAPACITY BTUH RATED @ 80.6°F, 66.2°F WB EAT 86°F EWT @ 3 GPM/TON
HEATING CAPACITY BTUH RATED 68°F DB, 59°F WB EAT; 68°F EWT @ 3 GPM/TON

Horizontal Water Source Heat Pump

HHPW Series

Conserve floor space with Ice Air's Horizontal WSHPs. Its low profile design is unobtrusive with a seamless appearance on the ceiling – they are completely concealed with an access panel control box. Flexible control options, variable air discharge outlets, and easy service access provide superior design and installation options. High efficiency fan motors provide low operating costs and reduced energy consumption.

Features:

- Perfect for new construction or replacement projects
- Side or end-discharge can be field changed
- Rotary or scroll compressors
- R-410A Green refrigerant
- 13.0+ EERs
- Advanced programmable controls
- Ultra-quiet

SERIES MODEL #	8HHPW09	8HHPW12	8HHPW15	8HHPW18	8HHPW24	8HHPW30	8HHPW36	8HHPW42	8HHPW48	8HHPW60	8HHPW70
Cooling Capacity (Btu/h)	9,300	12,200	14,300	18,800	23,500	28,900	34,400	38,500	48,300	60,000	67,000
Sensible Capacity (Btu/h)	7,000	9,100	10,600	13,900	17,400	21,300	25,200	28,100	35,100	43,400	48,500
Cooling EER w/PSC	14.0	13.5	15.9	14.3	14.4	14.9	14.8	14.2	13.8	14.2	14.0
Cooling EER w/ECM	14.5	14.1	16.4	14.9	14.9	15.4	15.5	14.9	14.5	14.9	14.7
Heating Capacity (Btu/h)	11,000	14,500	16,700	22,300	29,500	33,600	38,400	48,500	55,000	71,500	77,000
Heating COP	4.8	4.5	5.7	5.2	4.8	4.7	4.5	4.3	4.4	4.6	4.5
Flow Rate (GPM)	2.3	3.0	3.8	4.5	6.0	7.5	9.0	10.5	12.0	15.0	17.5
Air Flow (CFM)	300	400	500	600	800	1,000	1,200	1,400	1,600	2,000	2,400
WPD (PSI)	3.1	2.8	4.4	3.9	6.4	6.5	4.6	6.3	8.3	7.7	10.3

SPECIFICATION NOTES:
COOLING CAPACITY BTUH RATED @ 80.6°F, 66.2°F WB EAT 86°F EWT @ 3 GPM/TON
HEATING CAPACITY BTUH RATED @ 68°F DB, 62°F WB EAT @ 3 GPM/TON

Vertical “Closet” Water Source Heat Pump

VCHPW Series

Designed to operate within an equipment closet, Ice Air’s Vertical Closet WSHP provides a clean look within rooms as well as optimal installation and maintenance conditions. These quiet units feature high EERs, efficient motors and low-speed fan operation for low operating costs and reduced energy consumption.

Features:

- R410A “green” refrigerant
- 13+ EER
- High efficiency
- Digital controls designed to optimize user comfort and ease of operation
- Available for new construction and replacement applications

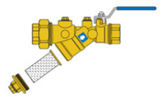
SERIES MODEL #	8VCHPW09	8VCHPW12	8VCHPW15	8VCHPW18	8VCHPW24	8VCHPW30	8VCHPW36	8VCHPW42	8VCHPW48	8VCHPW60	8VCHPW70
Cooling Capacity (Btu/h)	9,300	12,200	14,300	18,800	23,500	28,900	34,400	38,500	48,300	60,000	67,000
Sensible Capacity (Btu/h)	7,000	9,100	10,600	13,900	17,400	21,300	25,200	28,100	35,100	43,400	48,500
Cooling EER w/PSC	14.0	13.5	15.9	14.3	14.4	14.9	14.8	14.2	13.8	14.2	14.0
Cooling EER w/ECM	14.5	14.1	16.4	14.9	14.9	15.4	15.5	14.9	14.5	14.9	14.7
Heating Capacity (Btu/h)	11,000	14,500	16,700	22,300	29,500	33,600	38,400	48,500	55,000	71,500	77,000
Heating COP	4.8	4.5	5.7	5.2	4.8	4.7	4.5	4.3	4.4	4.6	4.5
Flow rate (GPM)	2.3	3	3.8	4.5	6	7.5	9	10.5	12	15	17.5
Air Flow (CFM)	300	400	500	600	800	1,000	1,200	1,400	1,600	2,000	2,400
WPD (PSI)	3.1	2.8	4.4	3.9	6.4	6.5	4.6	6.3	8.3	7.7	10.3

SPECIFICATION NOTES:
COOLING CAPACITY BTUH RATED @ 80.6°F, 66.2°F WB EAT 86°F EWT @ 3 GPM/TON
HEATING CAPACITY BTUH RATED @ 68°F DB, 62°F WB EAT @ 3 GPM/TON

Optional Valve Accessories

Motororized Valve
The optional factory supplied motorized valve comes with a 2-way or 3-way valve body and a 2-position electric actuator. The actuator can be normally open or normally closed. When powered, the actuator moves to the desired position. When power is removed, the actuator returns to the normal position.

Autoflow Valve
The optional automatic balancing valve provides accurate flow control. Valves are factory set to a rated flow. Flow will automatically be controlled within a given tolerance of the set flow rate.



Strainer
The optional y-strainer collects and removes debris, extending coil lifetime and preventing damage to controls and heat transfer components. Optional blowdown valve allows for clean-out without removing mesh screen.

Isolation Valve
The optional isolation valve is a manual shutoff valve. Water flow is controlled by rotating the valve handle.

Stainless Steel Hoses
The optional stainless-steel hoses comes with swivel connections for union of chassis and risers. Two hoses are provided per unit for connection of supply and return lines.

Purge Valve
Purge valves facilitate the removal of excess or unwanted liquids/ gases within a piping system, storage tank, or other container.

Thermostat Options

Ice Air's thermostats for its lines of PTACs, WSHPs, Fan Coils, SPACs and Hybrid Water-Cooled ACs are designed for ease-of-use and efficiency. Unit-mounted controls are standard (accessible through an attractive brushed aluminum control door). Optional wall-mounted remote controls are available.

Habitat Wireless Thermostat

- Attractive, user-friendly design
- Wireless or wired connection
- Mobile app provides full control from anywhere, anytime
- Wi-Fi enabled for Smart App control options
- Works with Alexa or Google Assistant

Programmable Digital Touchscreen Thermostat

- Streamlined touchscreen display
- Intuitive design makes configuration fast and easy

Programmable Digital LCD Thermostat

- Easy-to-read digital display
- Compact, attractive design
- User-friendly for quick configuration

Non-Programmable LCD Digital Touch Pad Thermostat

- Touchpad interface controls basic functions
- Designed for simple operation

Non-Programmable LED Digital Touch Pad Thermostat

- Touchpad interface controls basic functions
- Designed for simple operation

Manual Temperature and Fan Speed Dial Thermostat

- Straightforward design for controlling basic functions
- Allows for easy thermostatic control

for FCVE/FCVC only

Manual Temperature and Mode Dial Thermostat

- Designed for Packaged Terminal Units
- Simple to operate
- Provides basic control functions

for PTAC/PTHP only

Get Electrified Using Building Electrification and Ice Air

Whether driven by corporate policy or local greenhouse gas emission legislation, the movement to reduce carbon dioxide emissions – also known as decarbonization – is gaining momentum. As building owners explore ways to reduce reliance on fossil fuels and meet increasingly stringent environmental requirements, **building electrification** has emerged as a proven strategy for reducing emissions while increasing efficiency and lowering operating costs. Building electrification is the process of replacing existing technologies that rely on fossil fuels – such as space heating systems – with newer technologies such as heat pumps that use electricity as the energy source for both heating and cooling.

Numerous states around the U.S. – including California, New York, Washington DC, and others – have adopted regulatory policies aimed at reducing greenhouse gas emissions. Such regulations stress the role of electrification in decarbonizing the built environment and have wide-ranging implications for utilities, building engineers and architects, OEMs and building owners.

As an established HVAC original equipment manufacturer, Ice Air has been ahead of the of building electrification and decarbonization movement for decades. We're proud to leading the way and usher in a better tomorrow with innovative, reliable and efficient systems – all designed to help building owners make the transition to a greener, efficient and sustainable future.

Electrified Product Family

RSXC

Packaged Terminal Heat Pump

SPXC

Central Air Conditioner

HPWH

Heat Pump Water Heater - Domestic HW

VSHPGE

Geothermal Vertical Stack Heat Pump

ICE AIR® VRF

ICE AIR®
World Class Comfort®

Electrified Product Family

NYC LOCAL LAW 97

* 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.

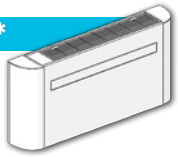
RSXC Series*

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.

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.

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).

SPXC Series*

Cold Climate SPHPs are self-contained, concealed, ducted systems. This line of vertical packaged heat pumps serves multiple spaces through concealed ductwork to efficiently provide space heating to -5°F and below.

HPWH Series*

Air-Source Cold Climate Heat Pump Water Heaters capture the free energy in the environment and convert it to hot water. These units are certified to operate down to –13°F.

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.

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.

ICE AIR® VRF

New technologies like Variable Refrigerant Flow (VRF) are on the move. There is no denying the benefits of VRF any longer, and with Ice Air VRF, these benefits are delivered simply and effectively.

Other Products

FCU — Fan Coil Units

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.

HWCAC — Hybrid Water-Cooled Air Conditioners

HWCACs provide hydronic heat without using the unit's compressor through an innovative system that combines high-efficiency 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.

PTAC — Packaged Terminal Air Conditioners

PTACs are designed for ultra-high efficiency and comply with LEED® criteria in a durable, user-friendly package. Available for new construction, retrofit and ExactFit™ replacement applications.

NEW! Ice Air CEU Webinar

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

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