



CAC

Central Air Conditioners

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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 new construction heating and cooling systems and to replace old 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.

Overview

Quiet Comfort...Efficient Control...Flexible Design

Ice Air Central Air Conditioners (formerly known as Single Package Vertical Heat Pumps, or SHPHs) provide reliable performance, high-efficiency operation and allow ultimate design flexibility.

Ice Air CACs 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. All CACs are certified with the California Energy Commission.

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



SPXC Series



Central Air Conditioners (CACs) are as convenient to service as a PTAC while providing the benefits of concealed ducted systems. CACs can be hidden in a closet or behind a wall and serve multiple spaces via concealed ductwork. With the introduction of Ice Air's breakthrough cold climate technology our line of

SPXCs would allow for efficient heat pump operation on the coldest days.

Defining Cold Climate

- Heating performance laboratory tested and certified to -5°F
- The theoretical lower limit for heating operation is -25°F ambient
- Provides cooling operation down to 38°F

What You Would Expect

- Industry leading efficiency
- Sustainable R32 Refrigerant
- Standard dimension wall plenum, compliant with US DOE requirement (23-5/8" W x 32-5/8" H)



| SERIES MODEL # | 8SPXC12 | 8SPXC18 | 8SPXC24 |
|---|----------------|-----------------|-----------------|
| Cooling Capacity ² (BTU/h) | 12,900 | 18,100 | 28,400 |
| Sensible Capacity ² (BTU/h) | 10,000 | 15,000 | 21,900 |
| Cooling Capacity Range (BTU/h) | 8,900 - 14,500 | 12,400 - 20,300 | 18,900 - 32,600 |
| EER ² | 11.1 | 10.7 | 10.5 |
| SEER ² | 14.7 | 13.8 | 14.0 |
| Cooling Operating Range | 38°F TO 115°F | | |
| Cooling Mode Power (Watts) | 1,162 | 1,692 | 2,705 |
| Cooling Mode Current (A) | 5.6 | 8.1 | 13.0 |
| Heating Capacity ³ (BTU/h) | 11,800 | 16,500 | 23,100 |
| Heating Capacity Range (BTU/h) | 8,100 - 13,300 | 11,700 - 18,200 | 16,400 - 25,400 |
| COP ² | 3.5 | 3.5 | 3.2 |
| HSPF ² | 7.6 | 7.4 | 7.4 |
| Heating Outdoor Operating Range | -5°F TO 70°F | | |
| Heating Mode Power (Watts) | 988 | 1,382 | 2,116 |
| Heating Mode Current (A) | 4.8 | 6.6 | 10.2 |
| Voltage | 208 | 208 | 208 |
| Total Unit FLA (without Electric Heat) | 9.8 | 13.7 | 22.2 |
| MCA (without Electric Heat) | 11.5 | 16.0 | 26.2 |
| MOP (without Electric Heat) | 15 | 25 | 40 |
| Electric Heat ⁴ (kW) | 3.5 5 | 5 7.5 | 5 7.5 |
| Electric Heat (A) | 16.8 24 | 24 36.1 | 24 36.1 |
| Total Unit FLA (with Electric Heat) | 18.8 26 | 26 38.1 | 27.6 39.7 |
| MCA (with Electric Heat) | 23 32 | 32 47.1 | 33.6 48.7 |
| MOP (with Electric Heat) | 25 35 | 35 50 | 40 50 |
| Airflow (CFM) | 450 | 720 | 1,000 |
| Max External Static Pressure - ESP (in.wg.) | 0.3 | 0.3 | 0.3 |
| Weights (lbs) | 220 | 280 | 360 |
| LOW AMBIENT PERFORMANCE | | | |
| Heating Capacity @ 10°F | 8,500 | 13,000 | 19,800 |
| COP @ 10°F | 1.85 | 1.95 | 1.9 |
| Heating Capacity @ 5°F | 7,700 | 12,300 | 19,400 |
| COP @ 5°F | 1.7 | 1.85 | 1.85 |
| Heating Capacity @ -5°F | 6,100 | 10,900 | 18,400 |
| COP @ -5°F | 1.4 | 1.7 | 1.75 |

SPECIFICATION NOTES:

1. Performance data according to CAC/HP AHRI 210/240 standard.
2. Rated performances in cooling mode @ 80°F/67°F DB/WB Indoors and 95°F/75°F DB/WB Ambient
3. Rated performances in heating mode @ 70°F/60°F DB/WB Indoors and 47°F/43°F DB/WB Ambient
4. If the electric heat option is selected, the heat pump operation is disabled and electric heat enabled below -5°F (+/- 3°F)
5. Units without electric heat will operate below -5°F with derated performance. Performance below -5°F has not been certified.
6. Performance data based on R32



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

Electrified Product Family



* 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.



iCool XC*

iCool XC 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.



Habitat Smart Technologies



The Habitat Thermostat's unique wireless mesh technology allows smart temperature control over the space it is monitoring. Transform a Fan Coil Unit into a state-of-the-art heating and cooling unit without opening walls to run wires.

Compatible with Nexus Home Automation Products **nexus** Equipment Management System™

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 iceairceu.com