

# **HPWH-SC Series**

# **Technology for a Sustainable Future**

New advances in heat pump chiller/heater technology allow air-source equipment to extract the environment's energy down to very low ambient temperatures. By capturing energy in the environment and converting it to hot water using the refrigeration cycle, the Ice Air HPWH-SC Series provides a renewable, all-electric option that requires minimal energy consumption.

lce Air's proven engineering enables the HPWH-SC Series units to operate at temperatures as low as -13°F, providing code compliant supply temperatures even when outside temperatures drop. The combination of efficiency and low energy consumption makes the HPWH-SC Series a valuable addition to high-rise buildings in cold weather climates.



The HPWH-SC 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-SC 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<sup>®</sup>.



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

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









Ice Air's HPWH-SC Series are tested to -13°F providing hot water even when it is extremely cold outside. Ice Air's heat pump water chiller/heaters convert free energy from the environment into hot water. These units are designed to provide hot water to large commercial buildings, even on cold days (-13°F).

- Industry leading performance:
  - Lower operating/maintenance costs compared to condensing gasfired water heaters
  - 4x more efficient than electric resistance heaters
- Multiple independent circuits provide built-in redundancy
- Built-in heat exchangers
- Freeze protection standard
- Optional heat-trace powered by building emergency power
- Clean out ports to remove sediment or lime deposits

SERIES MODEL #			ccHPWH275-SC	ccHPWH550-SC
Heat Exchanger Type			Single Wall Brazed Plate HXR	Single Wall Brazed Plate HXR
Performance Specifications	Input Power		208-230V/3Ph/60Hz	208-230V/3Ph/60Hz
	Refrigerant Circuits		2	4
	Refrigerant / Quantity		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
	Dry Bulb Temperature (95°F) Inlet Water Temperature (55°F) Outlet Water Temperature (45°F)	Cooling Capacity (Btu/h)	216,516	396,480
		Input Power (kW)	18.3	34.5
		СОР	3.46	3.37
	Dry Bulb Temperature (45°F) Wet Bulb Temperature (43°F) Inlet Water Temperature (105°F) Outlet Water Temperature (115°F)	Heating Capacity (Btu/h)	270,645	495,600
		Input Power (kW)	21.7	40.6
		СОР	3.66	3.58
	Minimum Ambient Operating Temperature (°F)		-13	-13
	Max. Input Power (kW)		29.8	62
	FLA (A)		120.6	240.4
	MCA (A)		134.6	254.4
	MOCP (A)		175	300
	Sound Level (dBA)		≤71	≤76
Water Data	Water Side Pressure Loss (psig)		8.1	7.25
	Rated Water Flow (GPM)		73.4	129.6
	Max Working Pressure (psig)		230	230
	Piping Position (Refer to the electric box as front)		Rear	Rear
	Piping Sizes		2"	3"
Overall Dimensions [L x W x H] (inches)		81 x 39 x 89	95 x 51 x 89	
Net Weight (Lbs)			1,500	2,850



# **Electrified Product Family**



\* By making energy-saving upgrades today, you can give vour 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.



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.



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.



Wall Mounted









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.

**VSHPGE Geothermal** 

# Other Products



#### **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 highefficiency cooling with a hot water coil.



#### 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.iceairceu.com.



80 Hartford Avenue. Mount Vernon, NY 10553 Tel: 877-ICE-AIR-1 (877-423-2471) Main: 914-668-4700

Fax: 914-668-5643 email: sales@ice-air.com www.ice-air.com

© 2024 by Ice Air, LLC

ICE6140 03/24