



	WCAC	

CHW	Slope or Flat Top Console Units
HHW	Horizontal Units
VCHW	Vertical Closet Units
VSHW	Vertical Stack Units

Hybrid Water-Cooled Air Conditioner Unit Product Line



Contents

Overview	3
Slope or Flat Top Console	4
Vertical Stack	5
Horizontal	6
Vertical Closet	7
Customizing Solutions	8
Other Products	10

About ICE AIR

ICE AIR has over 45 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 AIRs state-of-the-art units come 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.





CHW Flat Top, Page 4



VSHW Vertical Stack, Page 5



HHW Horizontal, Page 6



VCHW Vertical Closet, Page 7



Overview

Quiet Comfort...Efficient Control...Flexible Design ICE AIR Hydronic Hybrid Water-Cooled Air Conditioners (HWCAC) provide reliable performance, high-efficiency cooling operation with an advanced hot water coil that provides hydronic heat for an entire room without using the unit's compressor.

ICE AIR HWCACs utilize the highest quality materials and manufacturing practices. The high capacity heating coil operates at low Entering Water Temperatures (EWT), between 95°-125°F. An optional EC motor meets green energy requirements.

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 hybrid 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.



R-410A REFRIGERANT

CHW

Console



ICE AIRs Console Hybrid Water-Cooled Air Conditioners (CHW) independently provide 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.

MODEL			5CHW09	5CHW13	8CHW09	8CHW13	8CHW16	8CHW19
	Total Cooling	BTU/h	9400	12400	9400	12400	16300	19600
Cooling 2GPM/Ton @ 86F EWT	Sensible Cooling	BTU/h	7200	10600	7200	10600	12700	15300
	Airflow	CFM	320	460	320	460	500	630
COUTING 2011/1011 @ OUT EWT	Water Flow	GPM	1.5	2.0	1.5	2.0	2.5	3.1
	EER w/ECM		14.6	14.9	14.6	14.9	14.0	13.7
	EER w/PSC		14.1	14.4	14.1	14.4	16300 12700 500 2.5	13.2
	Total Cooling	BTU/h	9900	13000	9900	13000	17100	20600
	Sensible Cooling	BTU/h	6900	9100	6900	9100	13300	16100
Capling 20DM/Tap @ 26E EWT	Airflow	CFM	400	560	400	560	590	630
Cooling 3GPM/Ton @ 86F EWT	Water Flow	GPM	2.3	2.3	2.3	2.3	2.3	2.3
	EER w/ECM	15.3	15.6	15.3	15.6	14.7	14.4	
	EER w/PSC		14.8	15.1	14.8	15.1	16300 12700 500 2.5 14.0 13.5 17100 13300 590 2.3 14.7 13800 14.2 13800 14500 15300	13.9
	EWT 95F		8800	12500	8800	12500	13800	17300
Heating @ 2GPM/Ton	EWT 105F		9300	13100	9300	12400 16300 1960 10600 12700 1530 460 500 630 2.0 2.5 3.1 14.9 14.0 13.7 14.4 13.5 13.2 13000 17100 2060 9100 13300 1610 560 590 630 2.3 2.3 2.3 15.6 14.7 14.4 15.1 14.2 13.9 12500 13800 1730 13100 14500 1820 13800 15300 1910 13100 14500 1810 13800 15300 1910	18200	
	EWT 110F		9700	13800	9700	13800	15300	19100
	EWT 95F		9200	13100	9200	13100	14500	18100
Heating @ 3GPM/Ton	EWT 105F	9700	13800	9700	13800	15300	19100	
	EWT 110F		10200	14500	10200	14500	16000	20000



Vertical Stack

When space is an issue, ICE AIRs Vertical Stack Hybrid Water-Cooled Air Conditioner (VSHW) provides an ideal solution for whisper quiet cooling and heating within a tight footprint. With the lowest sound levels and smallest footprints available, our VSHWs 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.



MODEL			8VSHW09	8VSHW12	8VSHW15	8VSHW18	8VSHW20	8VSHW24	8VSHW30	8VSHW36
	Total Cooling	BTU/h	9900	12200	14100	16800	20000	24300	29200	36300
	Sensible Cooling	BTU/h	8600	9600	11500	13600	15200	18400	24100	30500
Cooling 2GPM/Ton@	EER w/ECM		14.8	14.0	14.1	14.2	13.2	13.4	13.4	14.5
86F EWT	EER w/PSC		14.3	13.5	13.6	13.7	12.7	12.9	12.9	14.0
	Water Flow	GPM	1.5	2.0	2.5	3.0	3.5	4.0	5.0	6.0
	Fan Data	CFM	410	450	530	620	710	800	1090	1300
	Total Cooling	BTU/h	10400	13800	14800	17600	21000	25500	30700	38100
	Sensible Cooling	BTU/h	9000	11800	12100	14300	15900	19300	25300	32100
Cooling 3GPM/Ton@	EER w/ECM		15.5	14.8	14.8	14.9	13.9	14.1	14.1	14.9
86F EWT	EER w/PSC		15.0	14.3	14.3	14.4	13.4	13.6	13.6	14.4
	Water Flow	GPM	2.3	3.0	3.8	4.5	5.0	6.0	7.5	9.0
	Fan Data	CFM	410	450	530	620	710	20000 24300 29200 3 15200 18400 24100 3 13.2 13.4 13.4 3 12.7 12.9 12.9 7 3.5 4.0 5.0 7 710 800 1090 1 21000 25500 30700 3 15900 19300 25300 3 13.9 14.1 14.1 7 13.4 13.6 13.6 7 5.0 6.0 7.5 7 710 800 1090 1 13.4 13.6 13.6 7 710 800 1090 1 22200 27600 28800 2 21200 22100 27400 2 20100 21000 26000 2 23300 29000 30200 3 22200 23200 28800 2	1300	
	120F Total	BTU/h	11900	12800	15700	17400	22200	27600	28800	29200
•	105F Total	BTU/h	8500	12200	13900	14900	21200	22100	27400	27800
	95F Total	BTU/h	6200	11600	10400	14200	20100	21000	26000	26400
86F EWT Cooling 3GPM/Ton@	120F Total	BTU/h	12500	13400	18200	16500	23300	29000	30200	37900
	105F Total	BTU/h	8900	12800	14600	15700	22200	23200	28800	29200
	95F Total	BTU/h	6500	12200	10900	14900	21100	22100	27300	27800

Horizontal

HHW



Conserve floor space with ICE AIRs Horizontal Hybrid Water-Cooled Air Conditioners (HHW). 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.

MODEL			8HHW09	8HHW12	8HHW15	8HHW18	8HHW24	8HHW30	8HHW36	8HHW42	8HHW48	8HHW60	8HHW70
Cooling	Total	BTU/h	9400	12500	15600	16900	25000	31200	37400	43700	49900	62400	72800
	Sensible	BTU/h	6800	10300	12000	14300	21600	25700	30200	35300	40300	50400	58800
2GPM/Ton	Airflow	CFM	350	440	540	630	850	1060	1200	1400	1600	2000	2400
@ 86F	Flow Rate	GPM	1.5	2.0	2.5	3.0	4.0	5.0	6.0	7.0	8.0	10.0	11.7
EWT	EER w/ECM		15.0	15.3	15.1	15.2	14.9	15.1	15.8	16.3	15.8	15.8	15.8
	EER w/PSC		14.5	14.8	14.6	14.7	14.4	14.6	15.3	15.8	15.3	15.3	15.3
	Total	BTU/h	9500	13600	16800	19100	29300	34400	42300	47200	56400	70500	82300
Cooling	Sensible	BTU/h	6900	9900	12300	13900	21400	25100	30900	34800	41200	51500	60100
3GPM/Ton	Airflow	CFM	350	440	540	630	850	1060	1200	1400	1600	2000	2400
@ 86F	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
EWT	EER w/ECM		15.5	16.2	15.9	15.9	15.7	15.9	16.7	16.5	16.7	16.7	16.7
	EER w/PSC		15.0	15.7	15.4	15.4	15.2	15.4	16.2	16.0	16.2	16.2	16.2
Heating	EWT@120 Total	BTU/h	9400	12500	15600	18700	25000	31200	37400	43700	49900	62400	72800
@ 2GPM/	EWT@105 Total	BTU/h	7000	8700	11000	13400	17500	21900	26300	30600	35100	43800	51500
Ton	EWT@95 Total	BTU/h	5300	7100	8900	10700	14200	17800	21300	24900	28500	35600	41500
Heating	EWT@120 Total	BTU/h	10500	16900	13600	25500	21700	27000	32500	37800	43300	54100	63700
@ 3GPM/	EWT@105 Total	BTU/h	8500	12300	11000	18600	17600	22000	26400	30800	35200	50800	51300
Ton	EWT@95 Total	BTU/h	6300	9200	10400	17700	16700	20900	25100	29200	33400	48300	48700

VCHW

Vertical Closet

Designed to operate within an equipment closet, ICE AIRs Vertical Closet Hybrid Water-Cooled Air Conditioners (VCHW) provide 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.



MODEL			8VCHW09	8VCHW12	8VCHW15	8VCHW18	8VCHW24	8VCHW30	8VCHW36	8VCHW42	8VCHW48	8VCHW60	8VCHW70
	Total	BTU/h	10300	13500	16200	18900	28300	32600	35300	41200	47100	58900	70600
Cooling	Sensible	BTU/h	7200	10400	12500	14600	21700	23300	24700	28800	33000	41200	49500
2GPM/Ton	Airflow	CFM	350	440	540	630	850	1060	1200	1400	1600	2000	2400
@ 86F	Flow Rate	GPM	1.5	2.0	2.5	3.0	4.0	5.0	6.0	7.0	8.0	10.0	11.7
EWT	EER w/ECM		14.5	15.5	14.5	15.8	14.5	14.5	14.5	14.5	14.5	14.5	14.5
	EER w/PSC		14.0	15.0	14.0	15.3	14.0	14.0	14.0	14.0	14.0	14.0	14.0
	Total	BTU/h	10800	14300	17100	19900	29800	34300	37200	43400	49600	62000	74400
Cooling	Sensible	BTU/h	7600	10900	13200	15400	22900	24500	26000	30400	34700	43400	52100
3GPM/Ton	Airflow	CFM	350	440	540	630	850	1060	1200	1400	1600	2000	2400
@ 86F	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
EWT	EER w/ECM		14.8	16.3	14.8	16.6	15.2	14.8	14.8	14.8	14.8	14.8	14.8
	EER w/PSC		14.3	15.8	14.3	16.1	14.7	14.3	14.3	14.3	14.3	14.3	14.3
Heating	EWT@120 Total	BTU/h	9800	12600	16500	20500	27900	33600	39000	45500	52000	65000	75800
@ 2GPM/	EWT@105 Total	BTU/h	7000	8300	11900	14400	19900	24200	28100	32800	37400	46800	54600
Ton	EWT@95 Total	BTU/h	5900	5100	9900	8800	21200	20200	23400	27300	31200	39000	45500
Heating @ 3GPM/	EWT@120 Total	BTU/h	10000	12300	17000	21600	29000	34600	40200	46900	53600	67000	78100
	EWT@105 Total	BTU/h	7200	8900	12300	15600	20800	24900	28900	33700	38600	48200	56200
Ton	EWT@95 Total	BTU/h	6000	5400	10200	9500	12700	20800	24100	28100	32100	40200	46900

Customized Solutions

nest

nest





DOWN HEAT

re Control ICEAIR

Wireless

Model T9000

Made2Measure

ICE AIR Made2Measure customized HVAC solutions allow for customization of our units and accessories to meet your specific requirements.

Efficient Programmable Control Options

Optional wall-mounted remote controls are available for all ICE AIR HWCACs offering state-of-the-art controls that optimize user comfort and ease of

> operation while minimizing energy consumption. Wireless and WiFi controls are available as well.

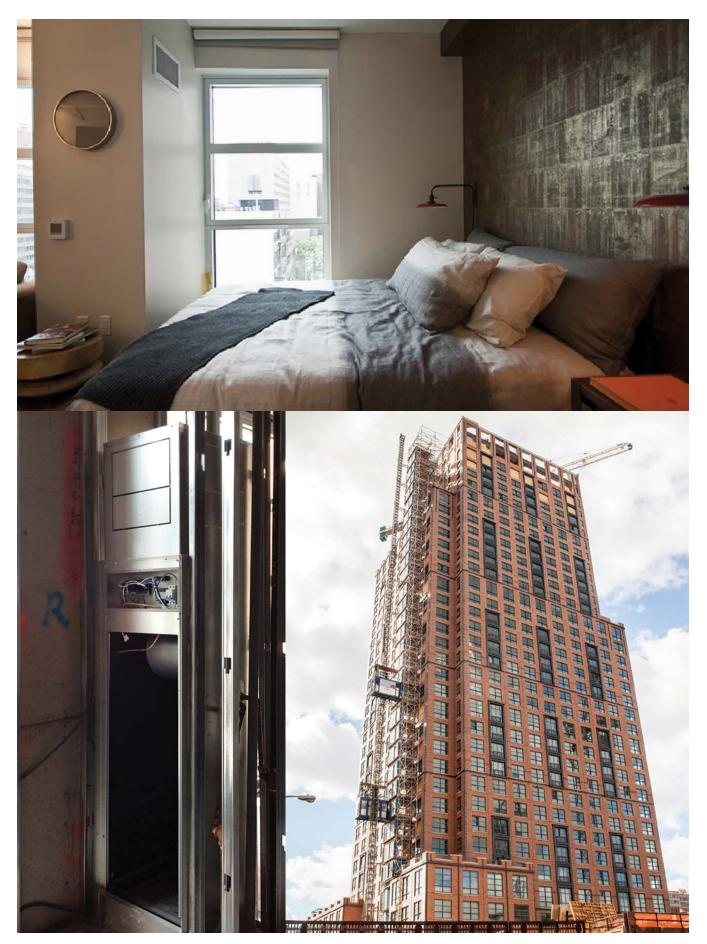
How can we work with you?

Put your next replacement/retrofit project into the hands of the HVAC equipment specialists at ICE AIR! Looking for World Class Comfort®? ICE AIR delivers breakthrough products, service and savings. We guarantee that we will deliver a winning program of product excellence, unbeatable savings, industry-leading services and superior know-how on your next project.

Ever since our inception, we have been dedicated to maintaining superior performance, quality manufacturing and customer value. With over 45 years of project management experience, you can trust our adherence to demanding architectural and engineering requirements. Plus, with our strong focus on high quality, technology and efficiency, we will exceed your expectations for reliability and product value. And, with ICE AIR, on-time delivery and cost savings are built into every order!

Call ICE AIR today at

877-ICE-AIR-1 (877-423-2471) or email us at **sales@ice-air.com**.



Due to ICE AIRs ongoing product development programs, the information in this document is subject to change without notice.

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.

The FCIW is a cost-effective in-wall, heat only, built-in system that offers whisper quiet fan operation that is an ideal solution for residential spaces trying to conserve floor space.

Options include:

- 2-pipe and 4-pipe systems
- Customized valve packages
- Customized sheet metal



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.

SPAC/HP



Single Packaged Air Conditioner/Heat Pumps

As a unique air-to-air system, SPAC/HPs that provides versatility with ultraquiet operation. The SPAC/HP is designed to cool and heat single or multiple spaces within multi-family, lodging, dormitory or light commercial buildings.

WSHP





Horizontal

Vertical Stack



Vertical Closet

Water Source Heat Pumps

WSHPs are combination heating and cooling units that provide efficient room-by-room comfort. Units function independently and are piped to a central water loop. These state-of-the-art units come with user friendly digital controls designed to optimize user comfort and ease of operation.





80 Hartford Avenue, Mount Vernon, NY 10553 Tel: 877-ICE-AIR-1 (877-423-2471) Fax: 914-668-5643 email: sales@ice-air.com **www.ice-air.com** © 2017 by ICE AIR, LLC ICE6032.1 10/17

Due to ICE AIRs ongoing product development programs, the information in this document is subject to change without notice.