



WATER SOURCE HEAT PUMP

WSHP





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WATER SOURCE HEAT PUMPS

Water Source Heat Pumps (WSHP) are combination cooling and heating units which 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 digital controls designed to optimize user comfort and ease of operation. ICE AIR WSHPs 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.



GREEN FEATURES:

- R-410A Green refrigerant
- High EERs
- Advanced programmable controls
- Ultra-quiet operation



WHY CHOOSE A WSHP?

- Lower installation costs compared with central built-in systems
- Individual zone temperature control
- Design and installation flexibility



CONSOLE WATER SOURCE HEAT PUMP

ICE AIR's Console Water Source Heat Pump offers superior performance, quality manufacturing and heavy duty commercial grade construction. Units provide years of trouble-free operation in commercial, industrial and multi-family buildings. All units function independently and are piped to a central water loop.

FEATURES:

- Enclosures available in Flat Top or Slope Top configurations
- Fabricated from furniture grade galvanized steel and finished with designer grade baked powder coating
- Ideal for new construction or replacement applications
- Replacement unit for Singer®, McQuay®, ClimateMaster®, Trane®, Carrier® and other OEM equipment*
- Digital controls – 7-day programmable and non-programmable
- Field-ready universal right-hand / left-hand piping
- Optional removable chassis
- Full selection of factory-installed piping packages
- Cabinets come in standard colors: Arctic White and Antique White
- Custom colors available



	5HPW09	5HPW13	8HPW09	8HPW13	8HPW16	8HPW19
Voltage	115		208/230			
Cooling Capacity*	9,800	13,000	9,800	13,000	16,500	20,000
Cooling EER	13.5	14.6	13.5	14.6	14.2	14.6
Heating Capacity**	12,200	15,750	12,200	15,750	20,600	27,250
Heating COP	4.4	4.5	4.4	4.5	4.5	4.4
Amperage	7	8.7	3.9	4.8	5.5	5.8
Watts	800	1,000	800	1,000	1,200	1,400
Typical CFM	300	400	300	400	500	500

Specifications subject to change due to ongoing development

**BTU/H at 80.6°F DB, 66.2°F WB EAT; 86°F EWT*

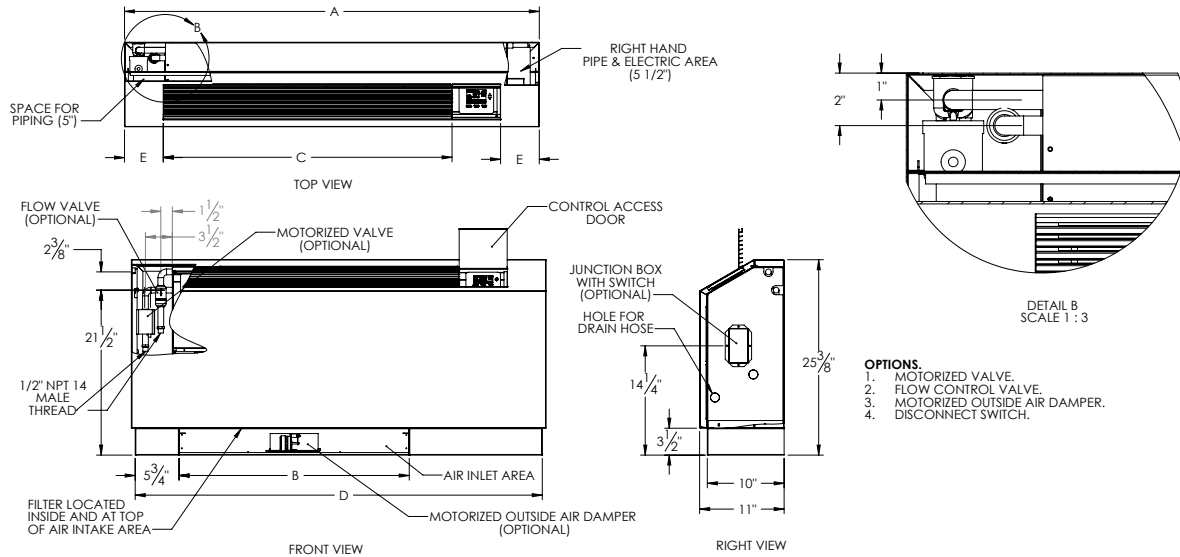
***BTU/H at 68°F DB, 59°F WB EAT; 68°F EWT*

Water flow @ 3GPM/Ton

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CONSOLE

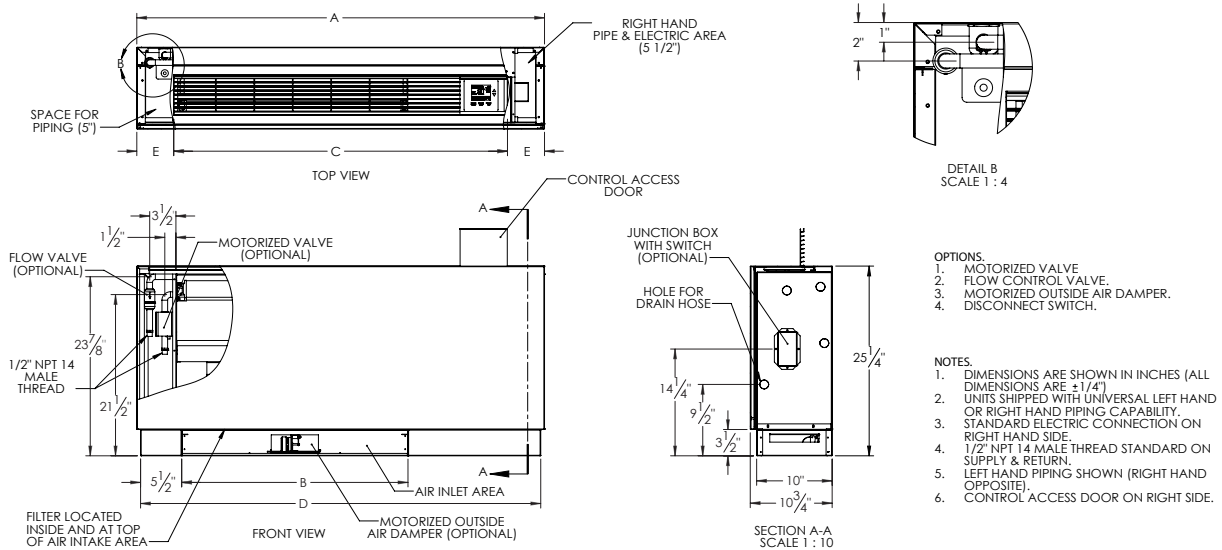
SLOPE TOP



- OPTIONS.**
1. MOTORIZED VALVE.
 2. FLOW CONTROL VALVE.
 3. MOTORIZED OUTSIDE AIR DAMPER.
 4. DISCONNECT SWITCH.

	A	B	C	D	E
5HPW09-ZS	46"	22"	29 1/2"	45"	5"
5HPW13-ZS	46"	22"	29 1/2"	45"	5"
8HPW09-ZS	46"	22"	29 1/2"	45"	5"
8HPW13-ZS	46"	22"	29 1/2"	45"	5"
8HPW16-ZS	54"	30"	37 1/2"	53"	5"
8HPW18-ZS	54"	30"	37 1/2"	53"	5"

FLAT TOP



- OPTIONS.**
1. MOTORIZED VALVE.
 2. FLOW CONTROL VALVE.
 3. MOTORIZED OUTSIDE AIR DAMPER.
 4. DISCONNECT SWITCH.

- NOTES.**
1. DIMENSIONS ARE SHOWN IN INCHES (ALL DIMENSIONS ARE ± 1/4")
 2. UNITS SHIPPED WITH UNIVERSAL LEFT HAND OR RIGHT HAND PIPING CAPABILITY. STANDARD ELECTRIC CONNECTION ON RIGHT HAND SIDE.
 3. 1/2" NPT 14 MALE THREAD STANDARD ON SUPPLY & RETURN.
 4. LEFT HAND PIPING SHOWN (RIGHT HAND OPPOSITE)
 5. CONTROL ACCESS DOOR ON RIGHT SIDE.

Dimensional Data (in inches)

	A	B	C	D	E
5HPW09	46"	22"	29"	45"	5 1/2"
5HPW13	46"	22"	29"	45"	5 1/2"
8HPW09	46"	22"	29"	45"	5 1/2"
8HPW13	46"	22"	29"	45"	5 1/2"
8HPW16	54"	31"	38"	53"	5"
8HPW18	54"	31"	38"	53"	5"

*Left-hand piping shown

VERTICAL STACK WATER SOURCE HEAT PUMP

ICE AIR's Vertical Stack WSHP provides an ideal solution for high efficiency whisper quiet cooling and heating within a compact design that conserves floor space. With the lowest sound levels and smallest footprints available, our VWSHPs offer superior value – efficiently heating and cooling single or multiple spaces to low installation and operating costs. And, all of our units come equipped with features that others provide as expensive add-on options. Full thermal and acoustical insulation, advanced electronic control interface, high and low pressure protection, and condensate overflow sensors are all standard.

FEATURES:

- Ideal for condominiums, lodging, educational and institutional properties
- Heavy gauge galvanized stack casings
- Slide-out motor/blower assembly for easy service
- Powder coated decorator front covers (custom colors available)
- Available optional riser and piping packages
- Easily accessible electrical compartment



	8VSHPW09	8VSHPW12	8VSHPW15	8VSHPW18	8VSHPW24	8VSHPW30	8VSHPW36
Spec Voltage	208/230						
Cooling Capacity*	9,100	12,500	13,900	18,100	25,400	31,200	26,500
Cooling EER	13	13	13.1	13	13.3	13	13
Heating Capacity**	12,500	15,100	18,100	24,300	31,300	35,400	40,700
Heating COP	4.5	4.5	4.6	4.5	4.5	4.5	4.4
Amperage	3.4	4.6	5.1	6.7	9.2	11.6	13.5
Watts	700	960	1,060	1,390	1,910	2,400	2,800
Typical CFM	400	450	550	680	800	1,050	1,250

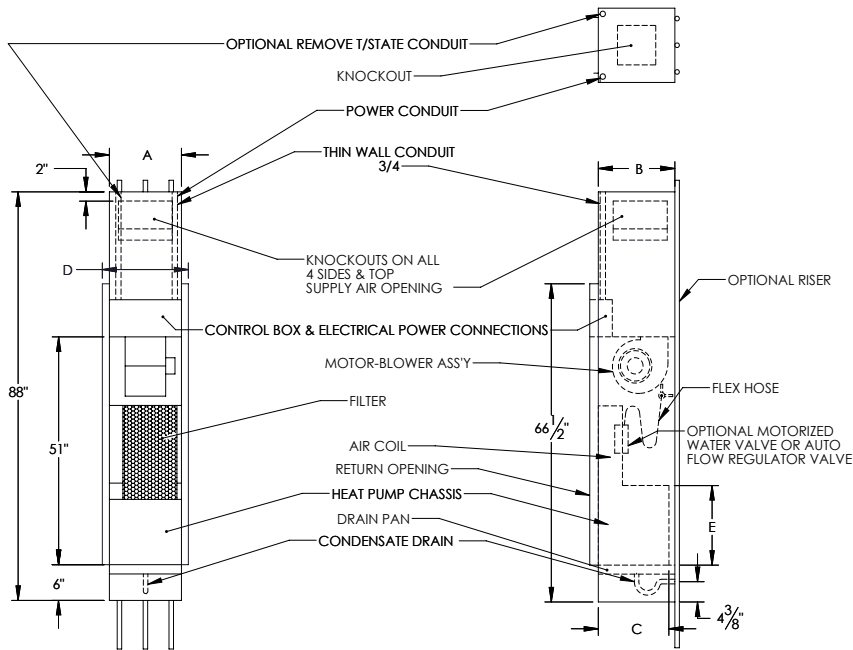
Specifications subject to change due to ongoing development

*BTU/H at 80.6°F DB, 66.2°F WB EAT; 86°F EWT

**BTU/H at 68°F DB, 59°F WB EAT; 68°F EWT

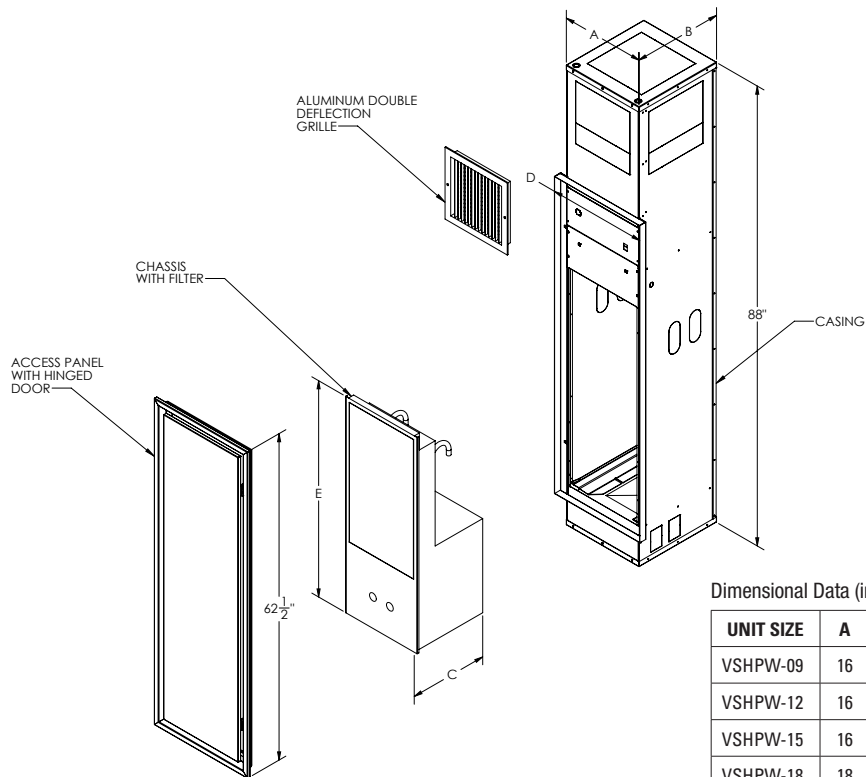
Water flow @ 3GPM/Ton

VERTICAL STACK



Dimensional Data (in inches)

UNIT SIZE	A	B	C	D	E
VSHPW-09	16	17	15	18 7/8	18
VSHPW-12	16	17	15	18 7/8	18
VSHPW-15	16	17	15	18 7/8	18
VSHPW-18	18	20	18	20 7/8	19
VSHPW-24	18	20	18	20 7/8	19
VSHPW-30	22	24	22	24 7/8	20
VSHPW-36	22	24	22	24 7/8	20



Dimensional Data (in inches)

UNIT SIZE	A	B	C	D	E
VSHPW-09	16	17	15	18 7/8	41 3/8
VSHPW-12	16	17	15	18 7/8	41 3/8
VSHPW-15	16	17	15	18 7/8	41 3/8
VSHPW-18	18	20	18	20 7/8	45 1/2
VSHPW-24	18	20	18	20 7/8	45 1/2
VSHPW-30	22	24	22	24 7/8	45 1/2
VSHPW-36	22	24	22	24 7/8	45 1/2

HORIZONTAL WATER SOURCE HEAT PUMP

Conserve space with ICE AIR's Horizontal WSHPs. Their low profile design ensures that they take up as little space as possible and provide superior energy efficiency. These units are installed inside the ceiling and are completely concealed.

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. Units have insulated cabinet panels and durable heavy gauge steel construction with easy access to control compartment.

FEATURES:

- Perfect for new construction or replacement projects
- Rear or side discharge can be field modified
- Rotary or scroll compressors
- R-410A Green refrigerant
- 12.0+ EERs
- Advanced programmable controls
- Ultra-quiet operation



	8HHPW09	8HHPW12	8HHPW15	8HHPW19	8HHPW24	8HHPW30	8HHPW36	8HHPW42	8HHPW48	8HHPW60	8HHPW70
Voltage	208										
Cooling Capacity (BTU/H)*	8,500	11,700	17,100	19,700	25,500	33,300	37,800	42,500	47,000	58,000	71,500
Cooling EER	12.2	12.3	14.2	13.4	12.8	13.5	13.5	12.2	13.2	13.2	12.5
Heating Capacity (BTU/H)**	11,200	15,200	20,400	24,500	31,300	39,700	46,100	51,900	55,300	70,200	83,300
Heating COP	4.3	4.2	4.6	4.6	4.4	4.5	4.6	4.2	4.5	4.9	4.3
Typical CFM	300	400	500	500	800	1,200	1,200	1,400	1,600	2,000	2,400

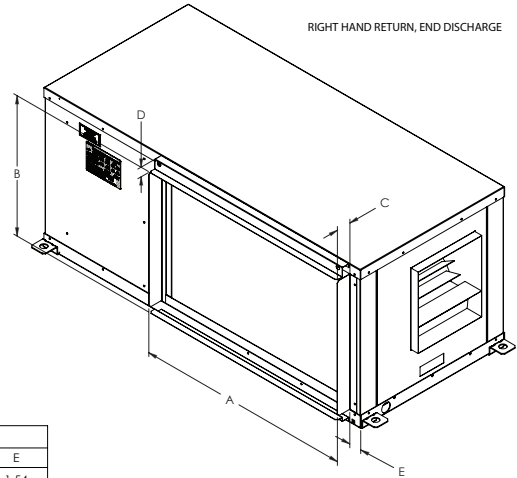
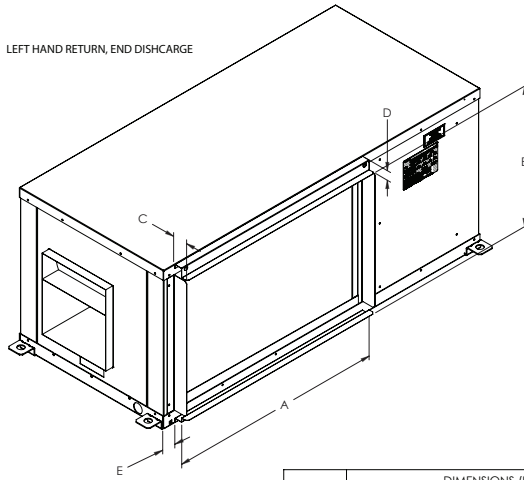
Specifications subject to change due to ongoing development

*BTU/H at 80.6°F DB, 66.2°F WB EAT; 86°F EWT

**BTU/H at 68°F DB, 59°F WB EAT; 68°F EWT

Water flow @ 3GPM/Ton

HORIZONTAL

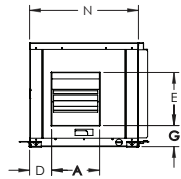
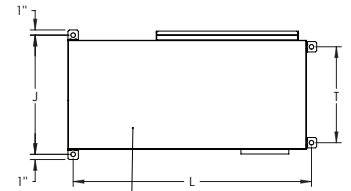


UNIT SIZE	DIMENSIONS (INCHES)				
	A	B	C	D	E
07,09,12	21.41	9.12	1.83	1.20	1.54
15,18	25.42	16.68	1.83	1.20	1.54
24,30	25.42	16.68	1.83	1.20	1.54
36,42	27.42	17.68	1.83	1.20	1.54
48,60,70	44.408	20.68	1.83	1.20	1.54

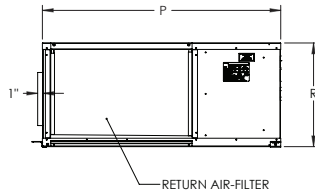
DIMENSIONAL DATA: END AND STRAIGHT DISCHARGE

PHYSICAL DATA

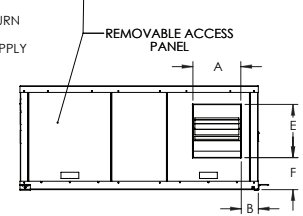
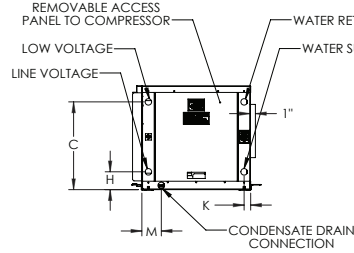
UNIT SIZE	07,09,12	15,18	24,30	36,42	48,60,70
OVERALL UNIT DIMENSIONS	20"Wx34"Lx11.50"H	20"Wx42"Lx17"H	20"Wx42"Lx18 1/4"H	21"Wx46"Lx20"H	28"Wx52"Lx23"H
WATER CONNECTIONS, FPT	1/2	1/2	3/4	3/4	3/4
CONDENSATE CONNECTION, FPT	3/4	3/4	3/4	3/4	3/4



END DISCHARGE VIEW



RETURN AIR-FILTER



STRAIGHT DISCHARGE VIEW

Dimensional Data (in inches)

UNIT SIZE	DIMENSIONS															
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	T
09,12	9.6	2.9	8.5	3.7	4.8	1.8	5.0	3.5	22	1.3	34	3.8	20	34	11.5	17.5
15,19	9.3	3.0	14.0	3.3	7.0	7.0	2.0	3.5	22	1.3	42	3.8	20	42	17	17.5
24,30	9.3	3.0	15.2	4.0	7.0	8.9	2.3	3.5	22	1.3	42	3.8	20	42	18.25	17.5
36,42	9.3	3.3	17.0	4.3	10.3	6.2	4.0	3.5	23	1.3	46	3.8	21	46	20	18.5
48,60,70	14.7	4.9	20.0	5.8	13.5	8.0	2.0	3.5	30	1.3	52	3.8	28	52	23	25.5

NOTE:

- RIGHT AND LEFT HAND RETURN DETERMINED BY FACING THE WATER CONNECTION SIDE OF THE UNIT
- BLOWER HOUSING ASSEMBLY CONVERTS FROM STRAIGHT DISCHARGE TO END DISCHARGE
- LEFT HAND RETURN SHOWN. RIGHT HAND RETURN OPTIONAL.

VERTICAL CLOSET WATER SOURCE HEAT PUMP

ICE AIR's Vertical Closet WSHPs are energy efficient and quiet units that feature high EERs, efficient fan motors and low-speed fan operation for low operating costs and reduced energy consumption.

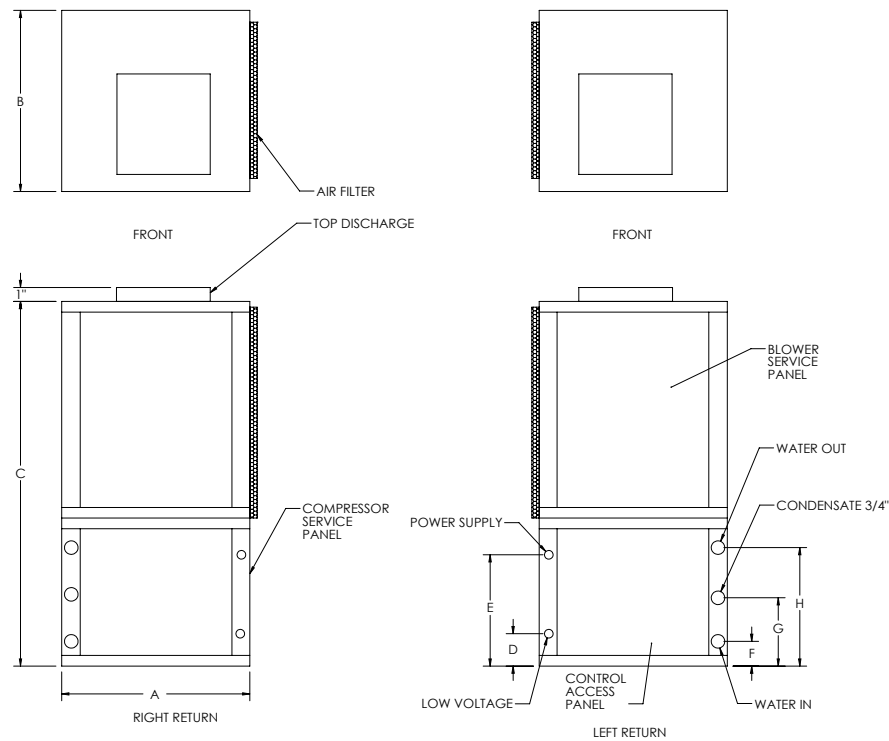
Vertical Closet WSHPs are designed to operate within an equipment or closet space, providing a clean look within rooms, as well as optimal installation and maintenance conditions.

Units have insulated cabinet panels and durable heavy gauge steel construction with easily accessible control compartment and refrigerant service valves.



FEATURES:

- Perfect for new construction or replacement projects
- Rotary or scroll compressors
- R-410A Green refrigerant
- 13.0+ EERs
- Advanced programmable controls
- Ultra-quiet operation



Dimensional Data (in inches)

UNIT SIZE	A	B	C	D	E	F	G	H
009-012	21.5	22.5	34.5	3.6	11.6	3.1	7.1	11.1
015-019	22.5	25.5	37.5	3.6	12.6	3.1	8.1	13.1
024-030	22.5	26	47.0	3.6	13.6	3.1	8.1	13.1
036	25.0	32.5	50.5	3.6	14.6	3.1	9.1	15.1
042-048	25.0	32.5	54.5	3.6	15.5	3.1	10.1	17.1
060-070	25.0	32.5	58.5	3.6	13.5	3.1	12.1	21.1

HYBRID WATER-COOLED AIR CONDITIONER

The Hybrid Water-Cooled Air Conditioner (HWCAC) combines high-efficiency cooling with an advanced hot water coil to provide hydronic heat for an entire room. ICE AIR's HWCAC conserves energy by not using the unit's compressor during heating mode.

The high capacity heating coil operates at low Entering Water Temperatures (EWT), between 95°-125°F. These units, when coupled with a high efficiency condensing boiler, provide the most cost-effective and efficient method of space heating for multi-family buildings, lodging, dormitories and similar properties.

FEATURES:

- Available in Console, Horizontal, Vertical Closet and Vertical Stack configurations
- Low EWT allows for condensing boiler use
- High environmental efficiency – one of the greenest systems available



CONSOLE HYBRID HWCAC

Model Number	Cooling Capacity*	Cooling EER	Heating Capacity** 105°F EWT	Typical CFM
5CHW09	9,800	14.1	12,200	300
5CHW12	13,500	14.5	14,900	350
8CHW13	13,500	14.5	14,900	350
8CHW16	16,500	14.7	17,900	500
8CHW19	19,900	14.8	23,000	500

VERTICAL STACK HYBRID HWCAC

Model Number	Cooling Capacity*	Cooling EER	Heating Capacity** 105°F EWT	Typical CFM
8VSHW09	9,100	14.1	12,500	14.1
8VSHW12	12,500	14.2	15,100	450
8VSHW15	13,900	14.2	18,100	550
8VSHW18	18,100	14.4	24,300	680
8VSHW24	25,400	14.7	31,300	800
8VSHW30	31,200	14.6	35,400	1,050
8VSHW36	36,500	14.5	40,700	1,250

HORIZONTAL HYBRID HWCAC

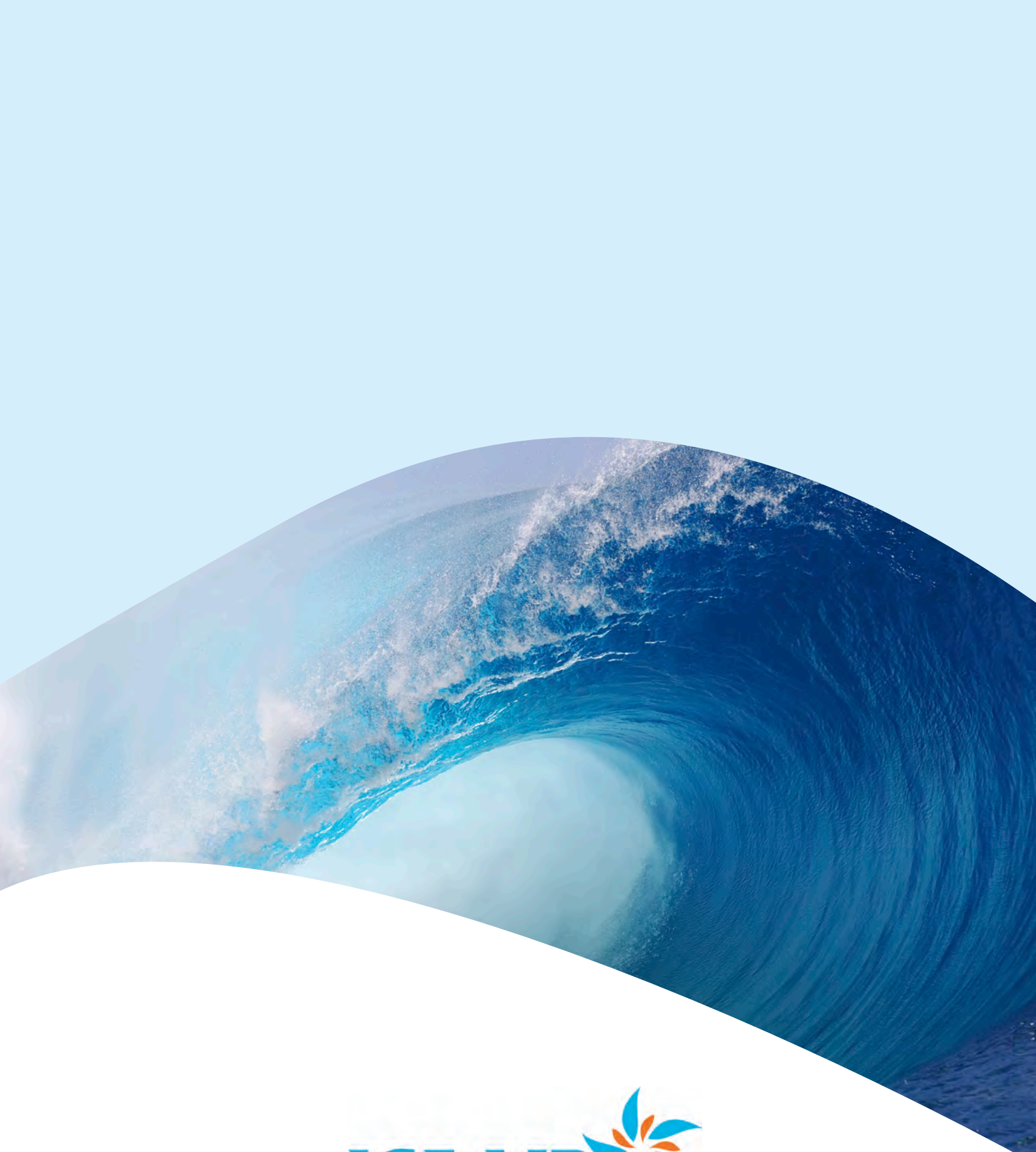
Model Number	Cooling Capacity*	Cooling EER	Heating Capacity** 105°F EWT	Typical CFM
8HHW09	8,500	13.4	9,800	350
8HHW12	11,700	13.5	11,600	400
8HHW15	17,100	13.5	14,000	500
8HHW18	19,700	13.2	16,560	600
8HHW24	25,500	13.5	26,640	800
8HHW30	33,300	13.1	26,800	1,000
8HHW36	37,800	13.5	29,920	1,200

Specifications subject to change due to ongoing development

**BTU/H at 80.6°F DB, 66.2°F WB EAT; 86°F EWT*

***BTU/H at 68°F DB, 59°F WB EAT; 68°F EWT*

Water flow @ 3GPM/Ton



80 Hartford Avenue, Mount Vernon, NY 10553 | Tel: 877-ICE-AIR-1 (877-423-2471) | Fax: 914-668-5643

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