

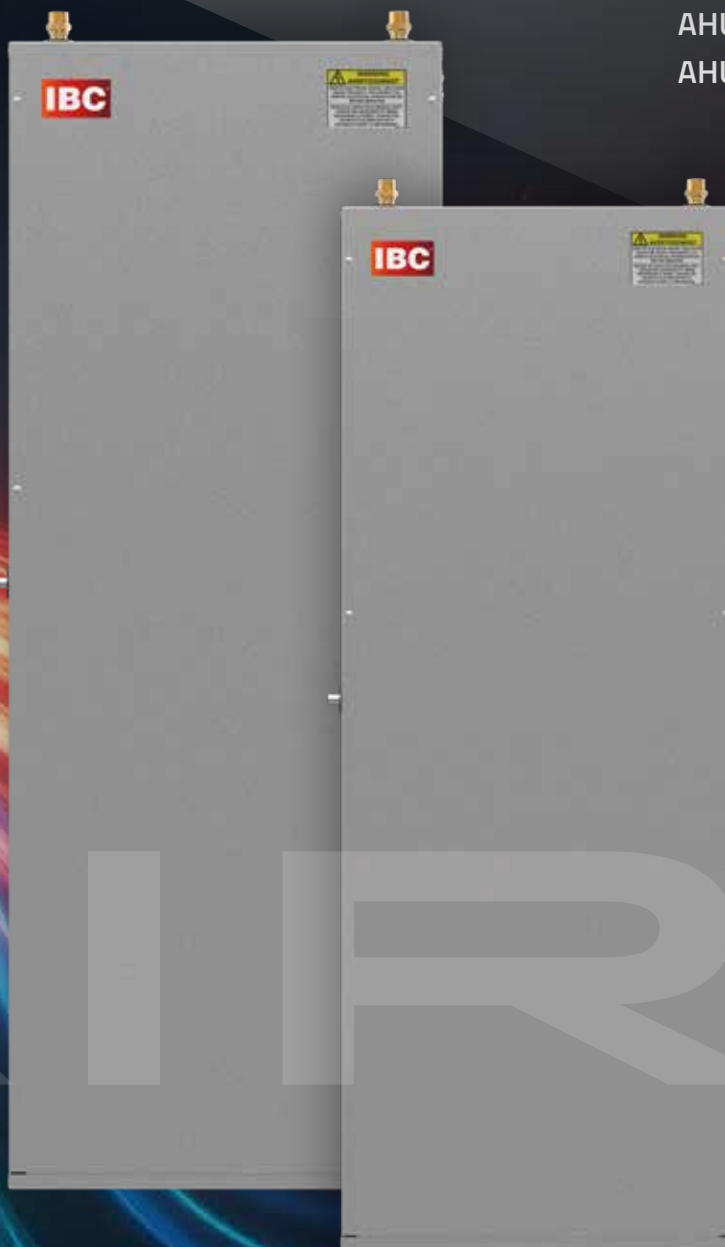


# AHU<sup>TM</sup>

## AIR HANDLER

HEATING & COOLING

AHU 1200 HC  
AHU 2000 HC



HYDRONIC  
AIR HANDLER



# IBC<sup>®</sup>

# No Refrigerant Cert Required

When used with IBC's HPX Heat Pump, the AHU HC models use water to transfer heating and cooling so no refrigerant enters the home. This means no refrigerant certification is needed, opening installation to plumbers, hydronic techs, and general contractors.

For traditional DX applications, standard refrigerant-based systems are still supported.



IBC HPX Heat Pump

# INNOVATION

## Air Handler Innovation

**Hydronic Cooling Integration:** Hydronic systems traditionally lacked cooling. This AHU solves that—when paired with IBC's air-to-water heat pump, it delivers heating and cooling without third-party coils or high-velocity systems. It also supports DX refrigeration for added versatility.

**Slant Coil Design:** The integrated slant coil delivers heating and cooling from one unit, reducing installation time and improving efficiency with a compatible heat source.

**Heat Pump Flexibility:** Optimized for IBC's HPX Heat Pump but compatible with other brands, the AHU HC offers more design and upgrade options than traditional air handling units.

**Decarbonization-Ready:** Replaces fossil fuel furnaces with water-based heat pump systems. Refrigerants remain outside the home, enhancing safety and eliminating indoor leak detection.

**Performance Alignment:** The AHU HC is part of a complete comfort system, efficiently distributing heated and cooled air when paired with a compatible heat pump. While it does not produce heating or cooling itself, it enables high-performance climate control. Efficiency metrics like COP reflect the combined output of the AHU HC and heat pump working together.



*\*Return air duct can be connected on the left, right, and/or bottom of the unit.*

## Interior

- |                              |                           |
|------------------------------|---------------------------|
| 1. Inlet                     | 6. Transformer            |
| 2. Outlet                    | 7. Control Board          |
| 3. Hot Water Coil            | 8. Temperature Sensor     |
| 4. Supply Water Temp. Sensor | 9. Fan and Motor Assembly |
| 5. Return Water Temp. Sensor | 10. Return Air Options*   |



When paired with IBC's HPX air-to-water heat pump, the AHU HC Air Handler is a compact, **all-in-one solution** that delivers hydronic **heating and cooling**—eliminating the need for separate furnaces and AC coils. It provides efficient, refrigerant-free indoor comfort without requiring refrigerant certification. Designed for easy installation, the dedicated upflow design reduces labor costs and expands access to more trades. It's compatible with DX refrigeration systems for traditional setups and integrates smoothly into existing ductwork—ideal for retrofits and new builds. Radiant heating upgrades are also supported.

#### ALL-IN-ONE SYSTEM

Combines hydronic heating and/or cooling in one unit. No need for separate furnace, AC coil, or condenser.

#### NO CERTIFICATION NEEDED

Uses water/polypropylene glycol for heat transfer so no refrigerant certification required when paired with HPX Heat Pump.

#### FLEXIBLE INTEGRATION

Fits existing ductwork, supports radiant upgrades. Ideal for retrofits and energy-efficient new construction.

## BUILT-IN FEATURES

Smart components that simplify design and enhance reliability

- Combines heating and/or cooling in one compact unit
- High-efficiency fin tube slant coil with an expanded surface area to optimize heat transfer performance
- ECM variable-speed motor delivers quiet, adaptive airflow
- Wi-Fi/Bluetooth setup and diagnostics via mobile app
- Supports single/two-stage heating & cooling control
- Built-in pump control (120V) simplifies wiring
- Dual-side electrical knockouts for flexible installation
- Integrated sensors monitor air, water, and humidity
- User-selectable freeze protection

## EASY TO INSTALL AND SERVICE

Streamlined installs, reduced labor, and better margins

- Slide-out fan for quick access
- Fewer components reduce install time
- No refrigerant cert needed - more trade flexibility
- Fits existing ductwork with minimal modifications
- Low, medium and high ductwork design
- Upright design simplifies install and condensate drainage
- Standard duct sizes fit easily into retrofits and new builds
- Remote setup/support reduces site visits
- Enables competitive bids and faster project timelines

## SYSTEM BENEFITS

Efficient, quiet, and future-ready comfort delivery

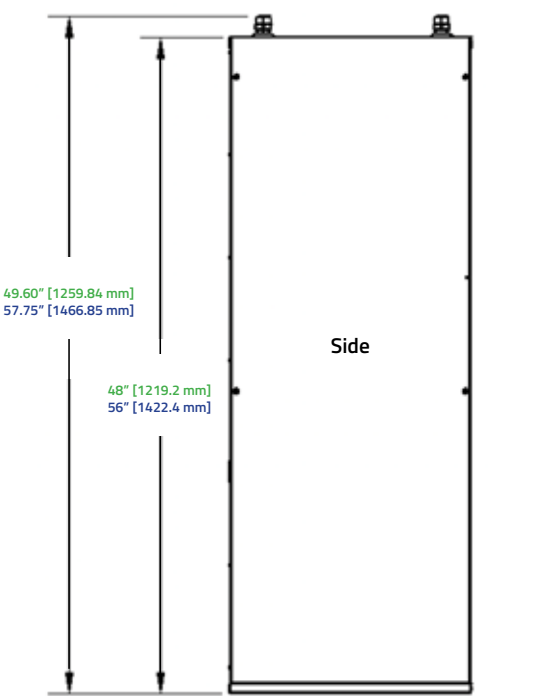
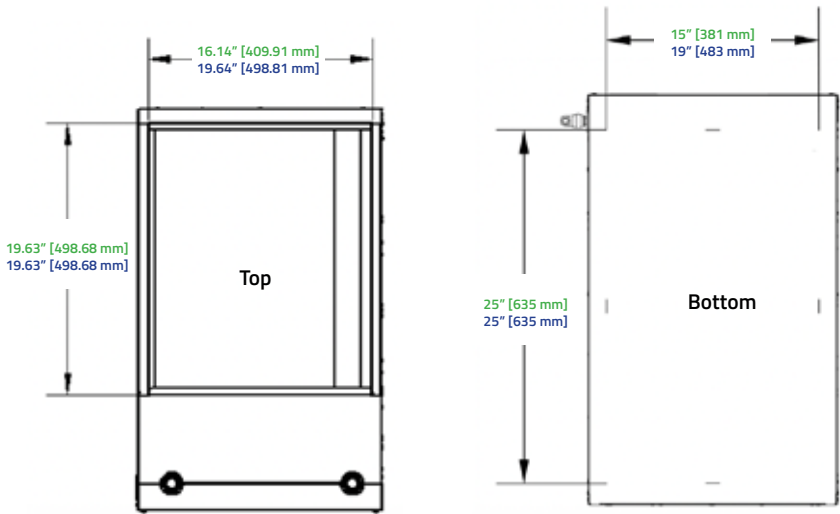
- Hydronic heating and cooling with no indoor refrigerants
- No refrigerant certification required
- Lead free. Certified to NSF/ANSI/CAN 372
- Quiet operation for improved comfort
- Compatible with IBC's HPX and other heat pumps
- Supports radiant heating and hydronic zone upgrades
- Compatible with standard heating & cooling thermostats



# AHU HC

## Dimensions

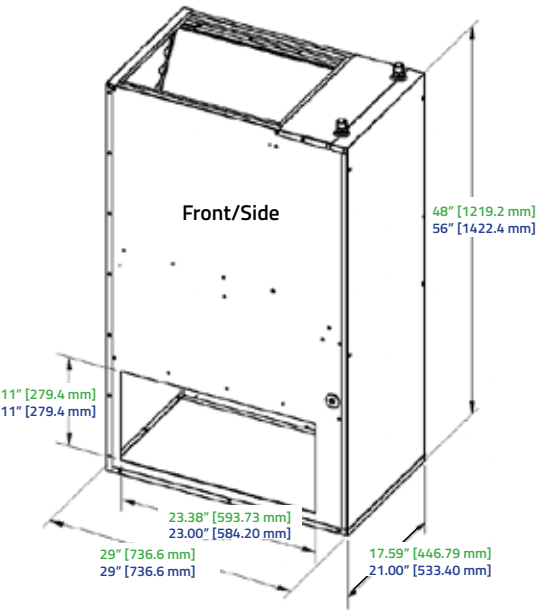
AHU 1200 HC Measurements | AHU 2000 HC Measurements



HEATING CAPACITY					
Entering Water Temp.	3 GPM	4 GPM	5 GPM	6 GPM	7 GPM
AHU 1200 HC - Entering Dry Bulb Temperature 70°F @ 1200 CFM					
180°F (82°C)	67.3 MBH	75.4 MBH	77.7 MBH	82.1 MBH	84.7 MBH
170°F (77°C)	60.6 MBH	67.5 MBH	70.3 MBH	74.7 MBH	77.2 MBH
160°F (71°C)	53.9 MBH	60.3 MBH	63.3 MBH	68.2 MBH	69.3 MBH
150°F (66°C)	47.7 MBH	53.3 MBH	55.8 MBH	60.3 MBH	61.2 MBH
140°F (60°C)	41.0 MBH	46.9 MBH	49.5 MBH	53.0 MBH	53.3 MBH
130°F (54°C)	35.2 MBH	40.8 MBH	42.0 MBH	45.4 MBH	45.5 MBH
120°F (49°C)	28.9 MBH	33.9 MBH	34.4 MBH	36.4 MBH	37.8 MBH
110°F (43°C)	22.8 MBH	28.0 MBH	28.2 MBH	30.1 MBH	30.8 MBH

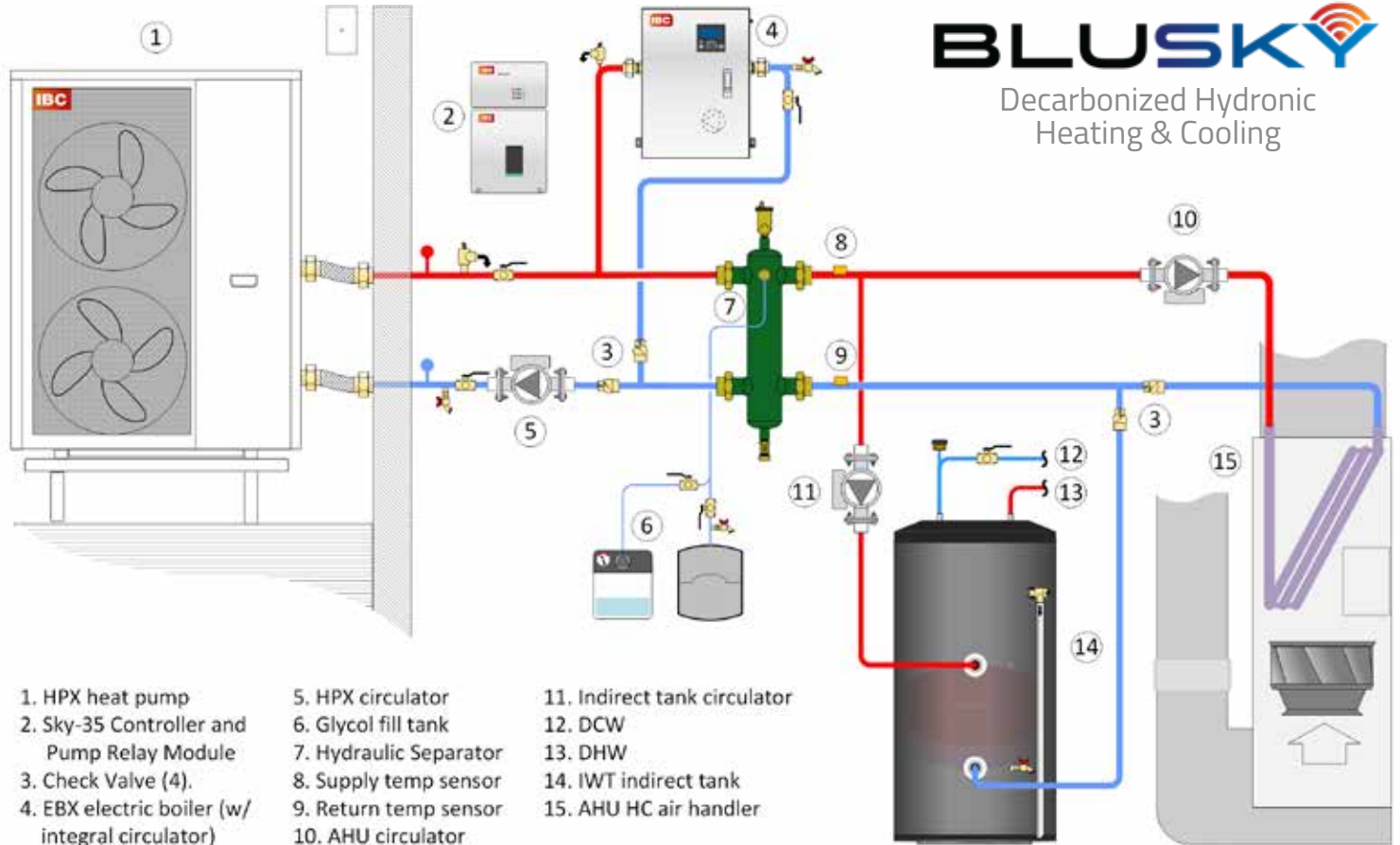
AHU 1200 HC - Entering Dry Bulb Temperature 70°F @ 2000 CFM					
180°F (82°C)	85.5 MBH	95.5 MBH	102.3 MBH	106.7 MBH	110.8 MBH
170°F (77°C)	77.3 MBH	86.9 MBH	94.6 MBH	97.1 MBH	101.5 MBH
160°F (71°C)	66.8 MBH	79.2 MBH	83.5 MBH	87.4 MBH	90.2 MBH
150°F (66°C)	60.5 MBH	70.6 MBH	74.8 MBH	76.6 MBH	80.2 MBH
140°F (60°C)	52.8 MBH	60.9 MBH	64.5 MBH	67.2 MBH	70.0 MBH
130°F (54°C)	43.2 MBH	52.0 MBH	57.1 MBH	57.9 MBH	58.7 MBH
120°F (49°C)	37.2 MBH	43.6 MBH	45.5 MBH	47.1 MBH	48.7 MBH
110°F (43°C)	29.0 MBH	33.5 MBH	36.6 MBH	36.6 MBH	38.2 MBH

COOLING CAPACITY					
Entering Water Temp.	3 GPM	4 GPM	5 GPM	6 GPM	7 GPM
AHU 1200 HC - Entering Dry Bulb Temperature 80°F @ 1200 CFM					
45°F (7°C)	21.5 MBH	25.0 MBH	25.9 MBH	26.9 MBH	29.0 MBH
50°F (10°C)	17.5 MBH	19.5 MBH	20.7 MBH	22.5 MBH	23.2 MBH
55°F (13°C)	14.9 MBH	16.8 MBH	18.7 MBH	19.3 MBH	20.1 MBH
AHU 1200 HC - Entering Dry Bulb Temperature 75°F @ 2000 CFM					
45°F (7°C)	29.5 MBH	32.1 MBH	34.4 MBH	34.7 MBH	35.8 MBH
50°F (10°C)	25.4 MBH	27.5 MBH	29.4 MBH	30.8 MBH	30.9 MBH
55°F (13°C)	22.7 MBH	24.1 MBH	25.4 MBH	26.9 MBH	26.9 MBH



# AHU HC

## Application Drawings



**SKY-35**

Hybrid Controller



**HPX**

Heat Pump



**EBX**

Electric Boiler

- Controls multiple heat sources seamlessly
- Easy setup with smart interface
- Remote access via IBC portal
- Supports up to 6 ECM pumps
- Includes sensors and relay unit
- Flexible hardware for future upgrades
- Optimizes comfort and energy use

- Up to 400% energy efficiency
- Operates quietly—38–53 dB
- No fossil fuels, zero emissions
- Easy Install—no refrigerant cert needed
- Works in temps as low as -22°F
- Advanced temperature control system
- Reliable, low-maintenance monobloc design
- No combustion = cleaner indoor air

- 4 Sizes: 4/8/10/12 KW
- Zero emissions, no greenhouse gases
- No venting or gas required
- Compact, quiet, wall-mounted design
- Built-in 3-speed boiler pump
- Titanium elements, long-lasting performance
- Simple controls, easy installation

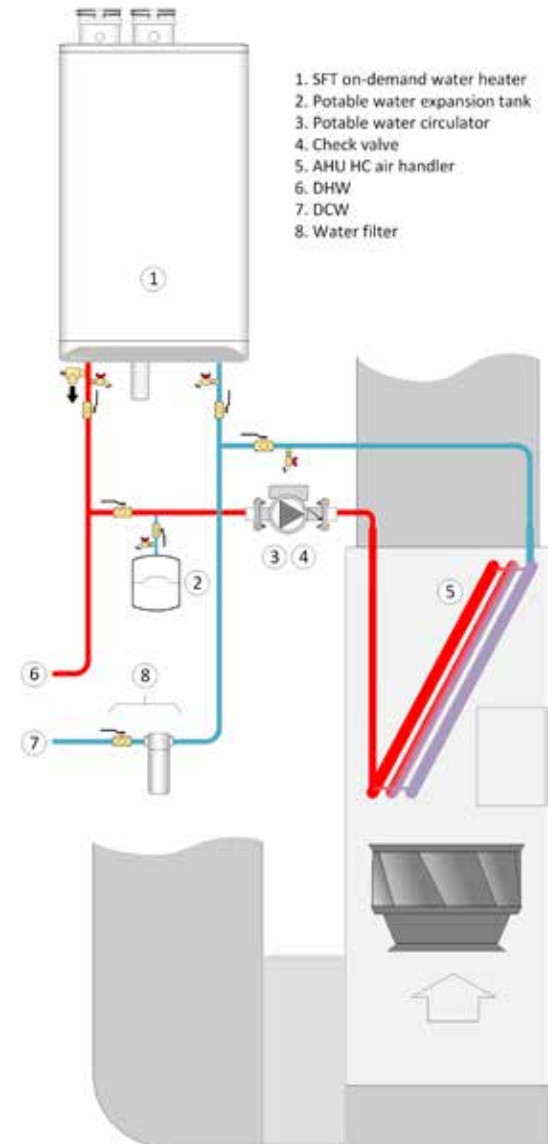
## Ideal Applications

- Forced-air retrofits
- Energy-efficient new builds
- Electrification upgrades
- Homes transitioning away from fossil fuels
- Tight-space installations (closet)



## Technical Information

SPECIFICATIONS		AHU 1200 HC	AHU 2000 HC
Airflow Capacity @ 0.5" Static Pressure		1200 CFM	2000 CFM
Heating Output at 180°F @ 5GPM (82°C @ 19 LPM)		77,600 Btu/hr	102,300 Btu/hr
Heating Output at 120°F @ 5GPM (49°C @ 19 LPM)		34,400 Btu/hr	45,500 Btu/hr
Heating Output at 45°F @ 5GPM (7°C @ 19 LPM)		36,500 Btu/hr	36,200 Btu/hr
Max. Water Flow		8 GPM (30 LPM)	10 GPM (38 LPM)
Head Loss on Coil (@ Max. Flow)		7.7 ft.	10.8 ft.
Max. Water Temperature		180°F (82.2°C)	180°F (82.2°C)
Min. Water Temperature		41°F (5°C)	41°F (5°C)
Max. Return Air Temperature		122°F (50°C)	122°F (50°C)
Min. Return Air Temperature (w/ Glycol)		-13°F (-25°C)	-13°F (-25°C)
Water Pipe Connections		3/4" MPT	3/4" MPT
Total External Static Pressure	Low (default)	0.50" W.C.	0.50" W.C.
	Medium	1.0" W.C.	1.0" W.C.
	High	1.5" W.C.	-
Min. Operating Water Pressure		8 psi (55 kPa)	8 psi (55 kPa)
Max. Operating Water Pressure		150 psi (1 MPa)	150 psi (1 MPa)
Supply Air Opening Width		16 1/8" (121.9 cm)	19 5/8" (49.9 cm)
Supply Air Opening Depth		19 5/8" (49.9 cm)	19 5/8" (49.9 cm)
Side Return Air Opening Height		11" (27.9 cm)	11" (27.9 cm)
Side Return Air Opening Width		23 3/8" (59.4 cm)	23" (58.4 cm)
External Pump Supply (120 Volts)		4.4 A	4.4 A
Recommended Circuit Breaker Rating		15 A	15 A
Voltage		120 V	120 V
Boxed Weight		145 lb (66 kg)	175 lb (79 kg)
Max. Altitude (above sea level)		12,000 ft. (3,660 m)	12,000 ft. (3,660 m)
Certification for Low Lead NSF 372		Yes	Yes



AHU-HC with SFT Tankless Water Heater

AHU-HC COIL HEAT LOSS - 180°F (82°C)								
	3 GPM	4 GPM	5 GPM	6 GPM	7 GPM	8 GPM	9 GPM	10 GPM
AHU 1200 HC Pressure Drop	1.2 ft.	2.1 ft.	3.2 ft.	4.5 ft.	6.0 ft.	7.7 ft.	--	--
AHU 2000 HC Pressure Drop	1 ft.	1.8 ft.	2.8 ft.	4 ft.	5.4 ft.	7 ft.	8.8 ft.	10.8 ft.