



Comfort Where It Counts.

CAH_12-S1H2000_101
Cassette Air Handler
Single - Zone Heat Pump

Rev. A [05/08]

JOB NAME: _____ LOCATION: _____
PURCHASER: _____
ENGINEER: _____
SUBMITTED TO: _____ FOR: REFERENCE [] APPROVAL [] CONSTRUCTION []
SUBMITTED BY: _____ DATE: _____
UNIT DESIGNATION: SCHEDULE #: _____ MODEL #: _____

Manufacturer reserves the right to change these specifications at any time without incurring obligation.

Note: CAH_ = CAHA and/or CAHB



PERFORMANCE:

Performance certified in accordance with ARI 210/240

COOLING

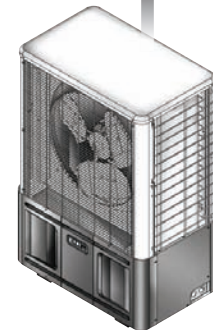
Indoor design conditions: 80°F Dry Bulb / 67°F Wet Bulb
Outdoor design conditions: 95°F

HEATING

Indoor design conditions: 70°F Dry Bulb / 57°F Wet Bulb
Outdoor design conditions (High): 47°F Dry Bulb / 43°F Dry Bulb
Outdoor design conditions (Low): 17°F Dry Bulb / 15°F Dry Bulb



CAHA/CAHB



S1H



EMI ENGINEERING SUBMITTAL

SYSTEM CAPACITIES					
Models		Cooling			
Indoor	Outdoor	Capacity	SEER	SHR	EER
CAH_12	S1H2000	11,600 Btuh (3.4 kW)	13.0	0.72	11.4
		Heating			
		High Temperature	Low Temperature	HSPF	COP
		10,800 Btuh (3.2 kW)	6,000 Btuh (1.8 kW)	8.0	3.4

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STANDARD FEATURES:

INDOOR UNIT:

- In Ceiling Mounted
- Connections for 24V remote wall thermostat
- Custom control board with anti-short cycle timer
- Relays and connectors to condensing unit
- Condensate Pump with 36" (0.9 m) lift – from base of unit
- 24V / 40VA Transformer
- Fans are backward curved impeller centrifugal design
- Single fan w/fire retardant plastic impeller
- Fan purge for improved efficiency
- Freeze protection
- Motor is multispeed, enclosed type w/thermal protection and sealed lifetime bearings
- Permanent, washable filter (user accessible)
- Branch duct knockouts on three sides for remote discharge locations (Use up to 2 non-adjacent)
- Fresh air intake capability on two sides of cabinet
- Four plastic air vanes are equipped w/manually adjusted air vanes
- Custom Control Board with 7-day, 4 event/day, Programmability (CAHB12 only)
- Infrared Hand-Held Controller (CAHB12 only)
- One year Limited Parts Warranty

OUTDOOR UNIT:

- Side Condenser Air Discharge Unit
- Standard Operating Low Ambient in Cooling 32 °F (0 °C)
- Internally Enhanced Copper Tube/Enhanced Aluminum Fin Outdoor Coil
- R-22 Refrigerant
- Duratec Compressor Protection Package which includes the following items:
 - Suction Accumulator
 - Filter Drier
 - Thermostatically controlled Crankcase heater
 - Start assist

Thermostatically controlled crankcase heater – This feature energizes the crankcase heater only when needed, removes the heater from the electrical circuit at conditions where it's not required, saving unnecessary Watts, and increasing overall system efficiency.

- Factory Installed Compressor Start Assist Capacitor
- High Pressure Switch (manual reset)
- Coated Wire Grille Condenser Coil Protection and Fan Guard
- Five years Limited Compressor Warranty, One year Limited Parts Warranty

Please use check-box to select Options and Accessories.

FACTORY INSTALLED OPTIONS:

INDOOR UNIT

Power Connection:

- 208/230-1-60

Electric Heat:

- None
- 1.5 kW (208/230 Volt)

OUTDOOR UNIT

Power Connection:

- 115-1-60
- 208/230-1-60

Condenser Coil:

- Copper Tube/ Copper Fin
- Copper Tube/ Post-Coat Aluminum Fin

FIELD INSTALLED ACCESSORIES:

INDOOR UNIT

- 24 Volt Wall Thermostat

OUTDOOR UNIT

- Wind Baffle/Hail Guard, Architectural Louver Kit (Required for cooling operation to 0° F (-18° C))

Refrigerant Line Sets

- 10'
- 25'
- 50'

EMI ENGINEERING SUBMITTAL CAH_12-S1H2000_101

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ELECTRICAL SPECIFICATIONS

Indoor Unit	V-Ph-Hz	Voltage		Indoor Fan		Heater		Unit FLA	MCA	MOCP
		Min	Max	RLA	HP	kW	Amps			
CAH_12	208/230-1-60	197	240	0.35	0.1	-	-	0.4	0.5	15
						1.5	6.52	6.9	8.6	15

Outdoor Unit	Power Supply V-1-60			Control* V-1-60	Compressor			Outdoor Fan Motor			Unit FLA	MCA	MOCP
	Volts	Min	Max		Qty	RLA	LRA	Qty	FLA	HP			
S1H2000	115	104	126	24	1	8.6	48.3	1	1.4	0.125	10.0	12.2	20
	208/230	197	240	24	1	4.3	27.0	1	0.8	0.125	5.1	6.2	15

Note: *- Control Voltage is supplied from the indoor unit. No separate supply required.

SOUND DATA

Unit	Sound dBA	
	High	Low
CAH_12	41	39
	59	
S1H2000	59	

WEIGHT DATA

Unit	Weight, lbs (kg)
CAH_12	70 (31.8)
S1H2000	98 (45)

Note: Sound data for indoor unit at high speed, 230 V
Sound data for outdoor unit at 230V

INTERCONNECTING TUBING SPECIFICATIONS

Indoor Unit	Outdoor Unit	Maximum Separation, Equivalent ft (m)	Maximum Elevation Difference, ft (m)	Liquid Line OD	Suction Line OD	Condensate Line ID
CAH_12	S1H2000	100 (30.5)	35 (10.7)	1/4"	1/2"	1/2"

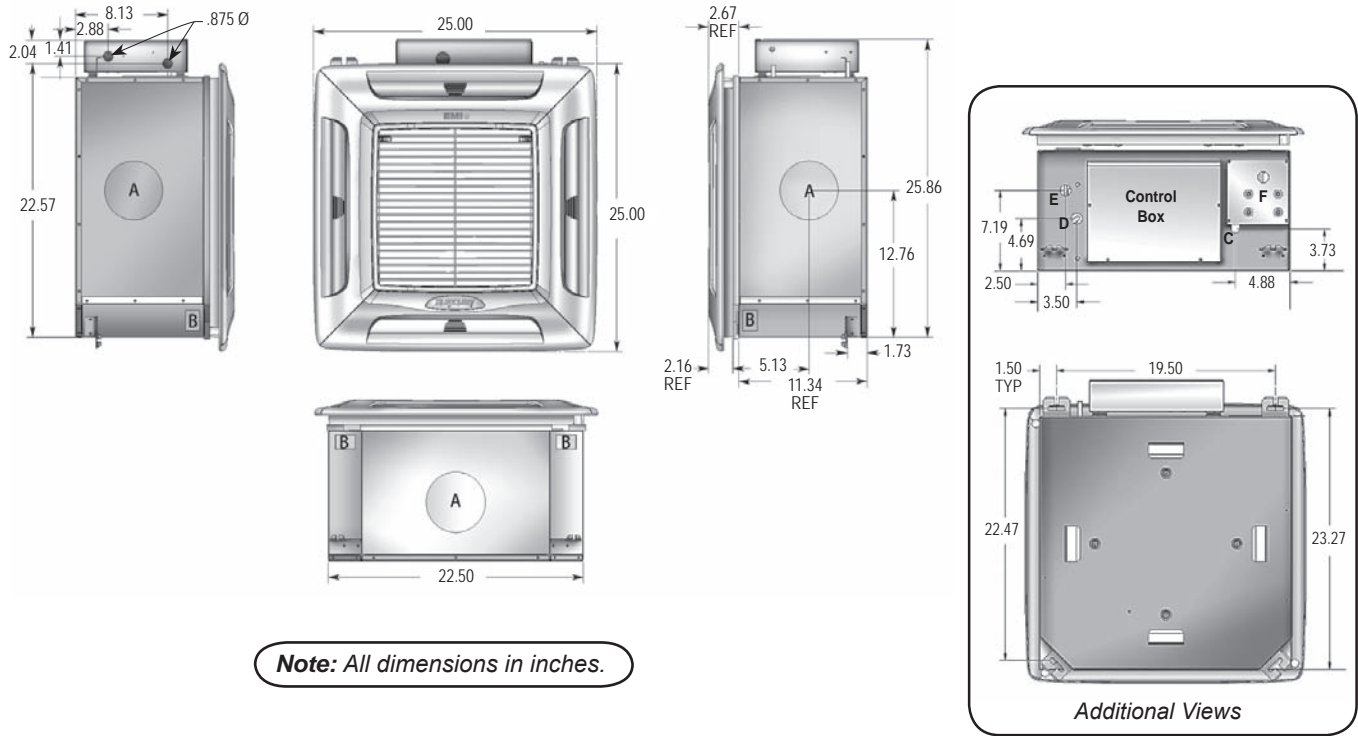
INDOOR AIR FLOW

Indoor Unit	CFM (l/s)		Coil	ft/min (m/s)	Air Throw, ft. (m)
	High Speed	Low Speed			
CAH_12	380 (180)	335 (158)	Dry	900 (4.6)	15 (4.6)

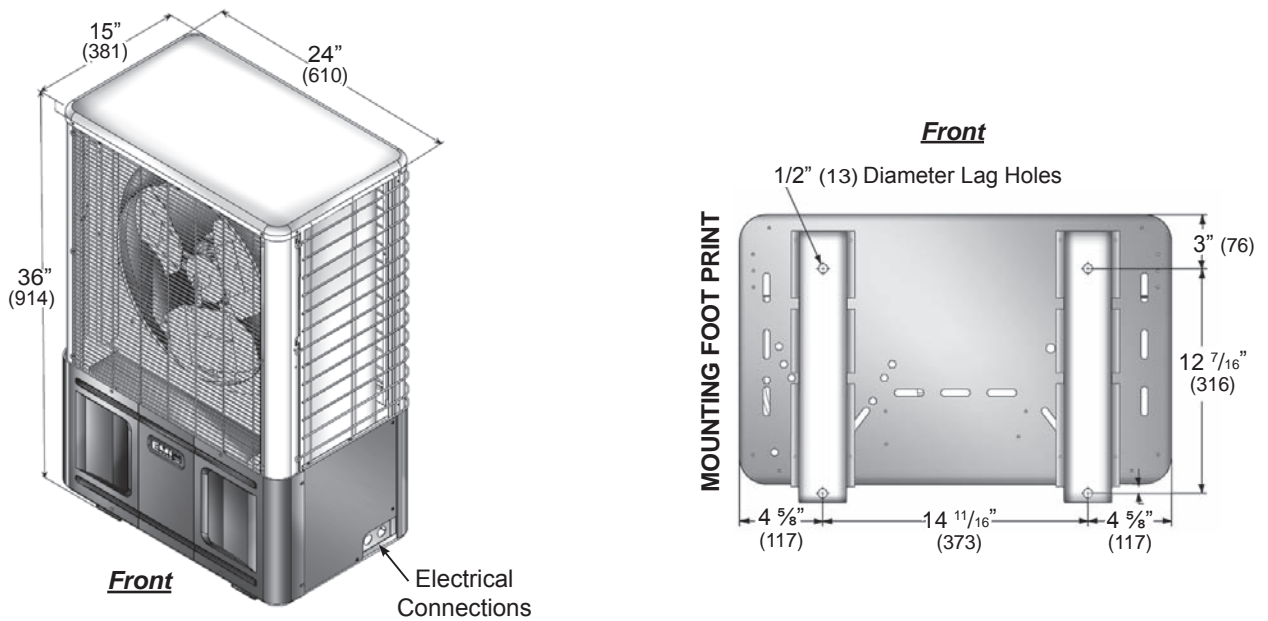
PHYSICAL DIMENSIONS

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INDOOR UNIT



OUTDOOR UNIT



Note: Numbers in () are mm.