

CAH 12-S1HA9000

Cassette Air Handler Single - Zone Heat Pump

Rev. 1.2 [01/08]

JOB NAME:	LOCATION:
PURCHASER:	
ENGINEER:	
SUBMITTED TO:	
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 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

	SYSTEM CAPACITIES									
Mod	dels		Cooling							
Indoor	Indoor Outdoor		SEER	SHR	EER					
		9,000 Btuh (2.6 Kw)	13.0	0.80	11.60					
			Heating							
CAH_12	S1HA9000	High Temperature	Low Temperature	HSPF	СОР					
		8,000 Btuh (2.3 kW)	4,800 Btuh (1.4 kW)	7.7	3.3					

STANDARD FEATURES: -

INDOOR UNIT:

- In ceiling mounted unit
- 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











EMI ENGINEERING SUBMITTAL CAH 12-S1HA9000

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STANDARD FEATURES: -

INDOOR UNIT: Continued

- 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:

- Single Zone, Heat Pump, Side 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
 - Loss of Charge Switch
 - Crankcase heater
 - Start assist
- High Pressure Switch (manual reset)
- Factory Installed Compressor Start Assist Capacitor
- 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:	FIELD
INDOOR UNIT	INDOOR U
Power Connection:	24
<u>208/230-1-60</u>	
Electric Heat: None 1.5 kW (208/230 Volt)	
<u>OUTDOOR UNIT</u>	OUTDOOR
Power Connection: 115-1-60 208/230-1-60 Condenser Coil: Copper Tube/ Copper Fin Copper Tube/ Post-Coat Aluminum Fin	W Lo to Refrig 10' 25 50
) (

FIELD INSTALLED ACCESSORIES:
INDOOR UNIT
24 Volt Wall Thermostat
<u>OUTDOOR UNIT</u>
Wind Baffle/Hail Guard, Architectural Louver Kit (Required for cooling operation to 0° F (-18° C))
Refrigerant Line Sets
<u> </u>
<u> 25'</u>
<u></u> 50'

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ELECTRICAL SPECIFICATIONS

Indoor Unit	V-Ph-Hz	Voltage		Indoor Fan Motor		Heater		Unit	MCA	MOCP				
Unit		Min	Max	RLA	HP	kW	Amps	FLA						
CAH 12	208/230-1-60	107	240	0.25	0.1	-	-	0.4	0.5	15				
CAR_12	200/230-1-00	197 240 0.3	240	240	197 240	0.35	0.35	240 0.35 0	0.1	1.5	6.52	6.9	8.6	15

Outdoor Unit	Power Supply V-1-60		Control*	Co	mpres	sor	Outd	oor Fan	Motor	Unit FLA	MCA	МОСР	
	Volts	Min	Max	V-1-60	Qty	RLA	LRA	Qty	FLA	HP	FLA		
S1HA9000	115	104	126	24	1	6.6	39.2	1	1.4	0.125	8.0	9.7	15
	208/230	197	240	24	1	3.4	23.0	1	0.8	0.125	4.2	5.1	15

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

SOUND DATA

Unit	Sound dBA				
CAH 12	High	Low			
CAH_12	41	39			
S1HA9000	5	9			

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

WEIGHT DATA

Unit	Weight, Ibs (kg)
CAH_12	70 (31.8)
S1HA9000	98 (45)

INTERCONNECTING TUBING SPECIFICATIONS

	loor nit	Outdoor Unit	Maximum Separation, Equivalent ft (m)	Maximum Elevation Difference, ft (m)	Liquid Line OD	Suction Line OD	Condensate Line ID
CAH	H_12	S1HA9000	100 (30.5)	35 (10.7)	1/4"	1/2"	1/2"

INDOOR AIR FLOW

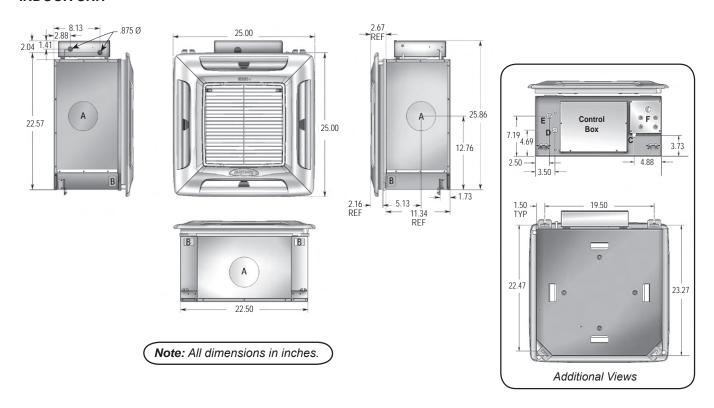
Indoo	Indoor Unit	CFN	/I (I/s)	Coil	ft/min (m/s)	Air Throw, ft. (m)	
	indoor onit	High Speed	Low Speed	Coll	10/11111 (11//5)		
	CAH_12	380 (180)	335 (158)	Dry	900 (4.6)	15 (4.6)	

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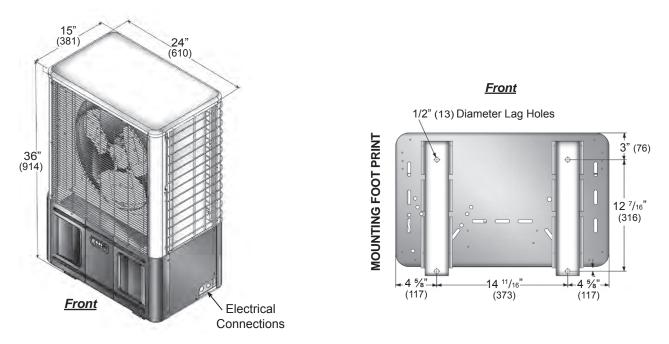
PHYSICAL DIMENSIONS

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INDOOR UNIT -



OUTDOOR UNIT



Note: Numbers in () are mm.

