

CAH_24-S1HA8000

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 #: | |
| | |

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

| SYSTEM CAPACITIES | | | | | | | | |
|-------------------|----------|-------------------------|------------------------|------|------|--|--|--|
| Models Cooling | | | | | | | | |
| Indoor | Outdoor | Capacity | SEER | SHR | EER | | | |
| | | 18,000 Btuh (5.3 kW) | 13.0 | 0.78 | 12.0 | | | |
| | S1HA8000 | | | | | | | |
| CAH_24 | | High Temperature | Low Temperature | HSPF | СОР | | | |
| | | 15,000 Btuh (4.4 kW) | 8,800 Btuh (2.6 kW) | 7.7 | 3.3 | | | |

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 with aluminum impeller











1

EMI ENGINEERING SUBMITTAL CAH 24-S1HA8000

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

STANDARD FEATURES: -

INDOOR UNIT: Continued

- Fan purge for improved efficiency
- Freeze protection
- Motors are 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
- Fresh air intake capability on three sides of cabinet
- Four plastic air vanes; motor driven w/auto sweep or fixed position stop setting
- Custom Control Board with 7-day, 4 event/day, Programmability (CAHB24 only)
- Infrared Hand-Held Controller (CAHB24 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
- Suction Line Accumulator
- 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 INSTALLED ACCESSORIES: |
|--|---|
| INDOOR UNIT Power Connection: | INDOOR UNIT 24 Volt Wall Thermostat |
| OUTDOOR UNIT Power Connection: 208/230-1-60 Condenser Coil: Copper Tube/ Copper Fin Copper Tube/ Post-Coat Aluminum Fin | 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_24-S1HA8000

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

ELECTRICAL SPECIFICATIONS

| Indoor | V-Ph-Hz | Volt | age | Indoor Fan Motor | | Heater | | Unit | MCA | МОСР | |
|--------|--------------|------|-----|------------------|------------|--------|-------|------|------|-------|--------|
| Unit | V-PII-HZ | Min | Max | RLA | HP | kW | Amps | FLA | FLA | INICA | INIOCE |
| CAH 24 | 208/230-1-60 | 197 | 240 | 0.55 | 0.125 | - | - | 0.6 | 0.7 | 15 | |
| CAH_24 | 200/230-1-00 | 197 | 240 | 0.55 | 0.55 0.125 | 3.0 | 13.04 | 13.6 | 17.0 | 20 | |

| Outdoor | | er Supp /-1-60 | ly | Control* | Compressor | | Compressor Outdoor Fan Motor | | | Unit FLA | MCA | МОСР | |
|----------|---------|-------------------|-----|----------|------------|-----|------------------------------|-----|-----|-------------|-----|------|----|
| Unit | Volts | Min | Max | V-1-60 | Qty | RLA | LRA | Qty | FLA | HP | FLA | | |
| S1HA8000 | 208/230 | 197 | 240 | 24 | 1 | 5.4 | 36.0 | 1 | 0.8 | 0.125 | 6.2 | 7.6 | 15 |

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

SOUND DATA

| Unit | Sound dBA | | | | |
|----------|-----------|-----|--|--|--|
| CAH_24 | High | Low | | | |
| | 44 | 42 | | | |
| S1HA8000 | 62 | | | | |

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_24 | 108 (49) |
| S1HA8000 | 156 (71) |

INTERCONNECTING TUBING SPECIFICATIONS

| Indoor | Outdoor | Maximum Separation, | Maximum Elevation | Liquid Line | Suction | Condensate |
|--------|----------|---------------------|--------------------|-------------|---------|------------|
| Unit | Unit | Equivalent ft (m) | Difference, ft (m) | OD | Line OD | Line ID |
| CAH_24 | S1HA8000 | 100 (30.5) | 35 (10.7) | 3/8" | 5/8"* | 1/2" |

^{*} CAH_24 Suction Connection size is 3/4" O.D. and must bush down at the CAH_24 Unit.

INDOOR AIR FLOW

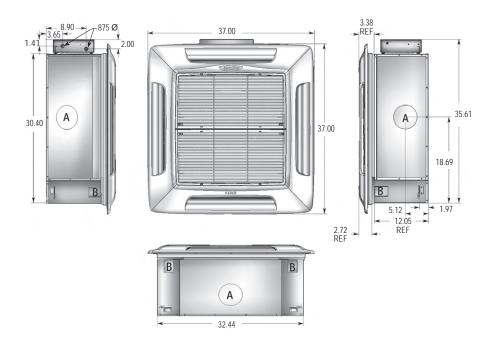
| Indoor Unit | CFN | Coil | |
|-------------|------------|-----------|------|
| | High Speed | Low Speed | Coll |
| CAH_24 | 700 (350) | 620 (293) | Dry |

EMI ENGINEERING SUBMITTAL CAH_24-S1HA8000

PHYSICAL DIMENSIONS

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

INDOOR UNIT-



6.87 Ep Control Box 258

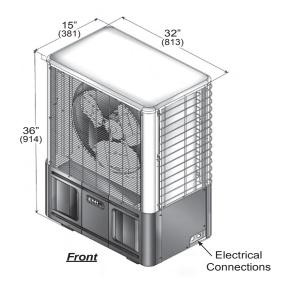
1.63 29.19

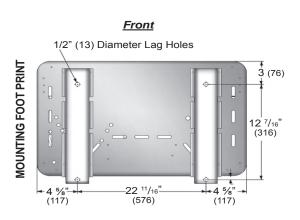
TYP

Additional Views

Note: All dimensions in inches.

OUTDOOR UNIT-





Note: Numbers in () are mm.

