



Comfort Where It Counts.

UNHA24-S1HA8000  
Universal Air Handler  
Single - Zone Heat Pump

Rev. 1.0 [07/07]

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.



**▲ 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

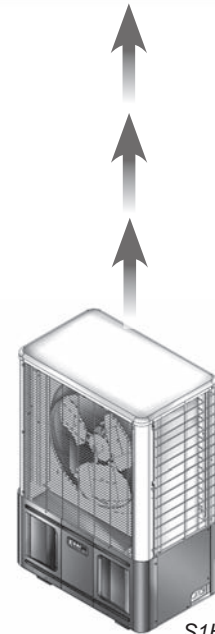
**HEATING**

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

UNHA



SYSTEM CAPACITIES					
Models		Cooling			
Indoor	Outdoor	Capacity	SEER	SHR	EER
UNHA24	S1HA8000	18,000 Btuh (5.3 kW)	13.0	0.71	11.70
		Heating			
		High Temperature	Low Temperature	HSPF	COP
		16,400 Btuh (4.8 kW)	9,200 Btuh (2.7 kW)	7.7	3.5



S1HA

**▲ STANDARD FEATURES:** \_\_\_\_\_

**INDOOR UNIT:**

- Ceiling-Suspended or Floor Console mounted without any field modification
- Internally Enhanced Copper Tube/Enhanced Aluminum Fin Indoor Coil
- Unit-mounted, Infrared compatible control package, configurable to either unit mount or 24 Volt wall thermostat
- Control programming stored in non-volatile memory (unit will restart following power failure)
- Indoor coil freeze protection



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**▲ STANDARD FEATURES:** \_\_\_\_\_

**INDOOR UNIT:** *Continued*

- Anti-short cycle compressor protection
- Fan purge
- Dry mode for humidity control (*requires electric heat*)
- Factory-installed condensate pan overflow protection
- Factory-supplied molex-type connector for condensate pump power and control connections
- 24-7 programming
- One year Limited Parts Warranty
- 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

**OUTDOOR UNIT:**

- Single Zone, Heat Pump, Side Discharge Unit
- Standard Operating Low Ambient in Cooling 32 °F (0 °C)

*Please use check-box to select Options and Accessories.*

**▲ FACTORY INSTALLED OPTIONS:** \_\_\_\_\_

**INDOOR UNIT**

***Power Connection:***

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

***Electric Heat:***

- None
- 0.75 / 3.0 kW (115/230 Volt)
- 1.25 / 5.0 kW (115/230 Volt)

**OUTDOOR UNIT**

***Power Connection:***

- 208/230-1-60

***Condenser Coil:***

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

**▲ FIELD INSTALLED ACCESSORIES:** \_\_\_\_\_

**INDOOR UNIT**

***Condensate Pump:***

- 48" (1.2 m) Lift
- 144" (3.7 m) Lift
- Floor Mount Trim Kit*** (*Required for Floor Mount with Condensate Pump accessory*)
- 24 Volt Wall Thermostat***
- Infrared Hand-Held Controller***

**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 UNHA24-S1HA8000**

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**ELECTRICAL SPECIFICATIONS**

Indoor Unit	V-Ph-Hz	Voltage		Indoor Fan Motor		Heater		Unit FLA	MCA	MOCP
		Min	Max	RLA	HP	kW	Amps			
UNHA24	115-1-60	104	126	1.2	0.08	-	-	1.20	1.5	15
						0.75	6.52	7.72	9.7	15
						1.25	10.90	12.10	15.1	20
	208/230-1-60	197	240	0.56	0.07	-	-	0.56	0.7	15
						3.00	13.04	13.60	17.0	20
						5.00	21.74	22.30	27.9	30

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			
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
UNHA24	56
S1HA8000	62

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

**WEIGHT DATA**

Unit	Weight, lbs (kg)
UNHA24	116 (52)
S1HA8000	156 (71)

**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
UNHA24	S1HA8000	100 (30.5)	35 (10.7)	3/8"	5/8"	1/2"

\* UNHA24 Suction Connection size is 3/4" O.D. and must bush down at the UNHA Unit.

**INDOOR AIR FLOW**

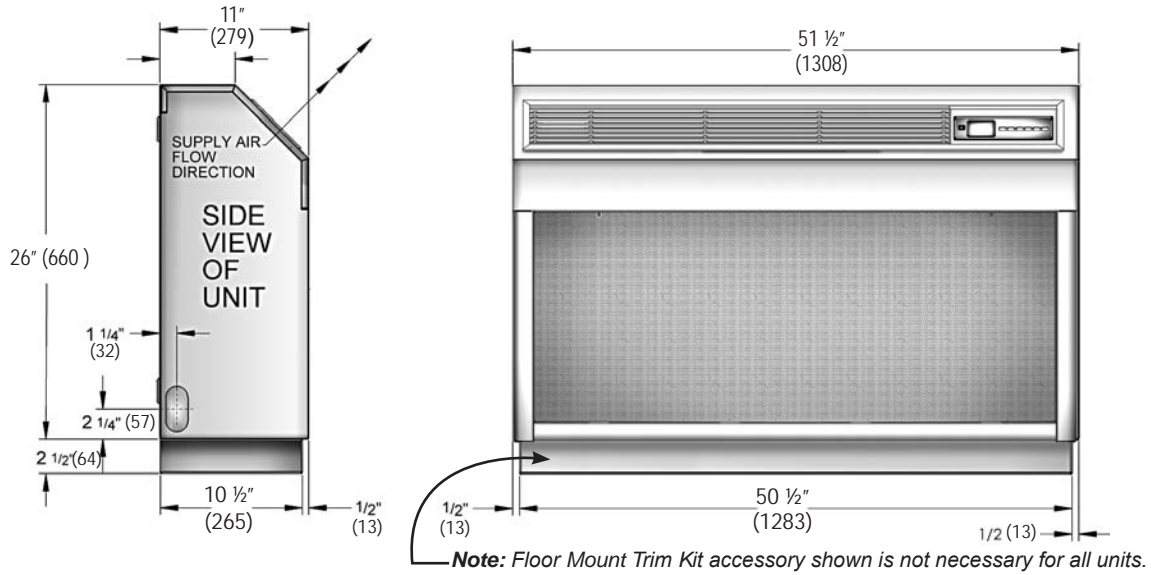
Indoor Unit	CFM (l/s)		Coil	ft/min (m/s)	Air Throw, ft. (m)
	High Speed	Low Speed			
UNHA24	700 (350)	550 (250)	Dry	1,225 (6.2)	24 (7.3)

# EMI ENGINEERING SUBMITTAL UNHA24-S1HA8000

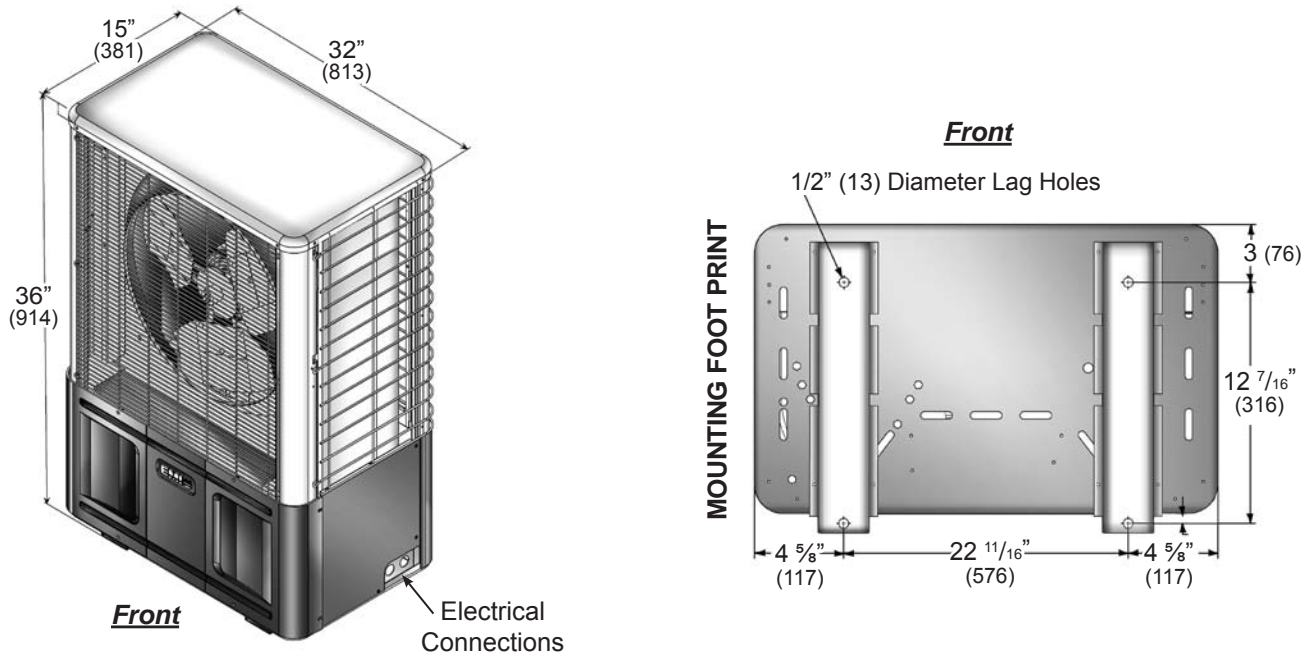
## PHYSICAL DIMENSIONS

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### INDOOR UNIT



### OUTDOOR UNIT



Note: Numbers in ( ) are mm.