



Comfort Where It Counts.

UNHA12-S1HA2000
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

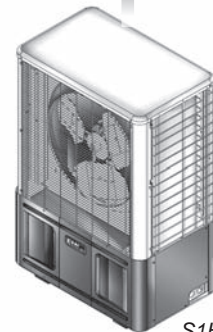
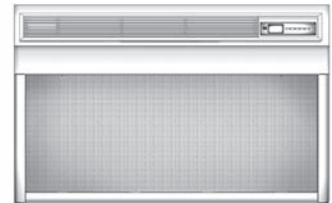
COOLING

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



S1HA

SYSTEM CAPACITIES					
Models		Cooling			
Indoor	Outdoor	Capacity	SEER	SHR	EER
UNHA12	S1HA2000	11,800 Btuh (3.5 kW)	13.0	0.73	11.7
		Heating			
		High Temperature	Low Temperature	HSPF	COP
		10,200 Btuh (3.0 kW)	6,000 Btuh (1.8 kW)	7.7	3.5



EMI ENGINEERING SUBMITTAL

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▲ 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, Infra-red 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
- 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

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
 - Loss of Charge Switch
 - Crankcase heater
 - Start assist
- 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:

INDOOR UNIT

Power Connection:

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

Electric Heat:

- None
- 0.75 / 3.0 kW (115/230 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

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 UNHA12-S1HA2000

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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			
UNHA12	115-1-60	104	126	0.64	0.02	-	-	0.64	0.8	15
						0.75	6.50	7.14	8.9	15
	208/230-1-60	197	240	0.34	0.02	-	-	0.34	0.4	15
						3.00	13.04	13.38	16.7	20

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			
S1HA2000	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
UNHA12	51
S1HA2000	59

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

WEIGHT DATA

Unit	Weight, lbs (kg)
UNHA12	95 (43)
S1HA2000	98 (45)

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
UNHA12	S1HA2000	100 (30.5)	35 (10.7)	1/4"	1/2"	1/2"

INDOOR AIR FLOW

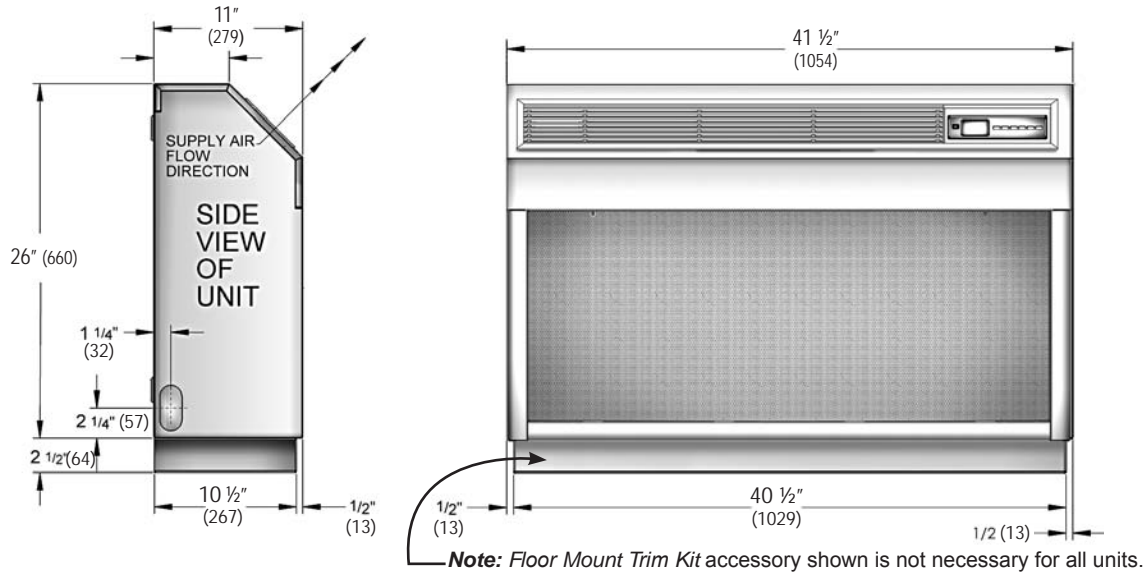
Indoor Unit	CFM (l/s)		Coil	ft/min (m/s)	Air Throw, ft. (m)
	High Speed	Low Speed			
UNHA12	425 (200)	375 (175)	Dry	900 (4.6)	15 (4.6)

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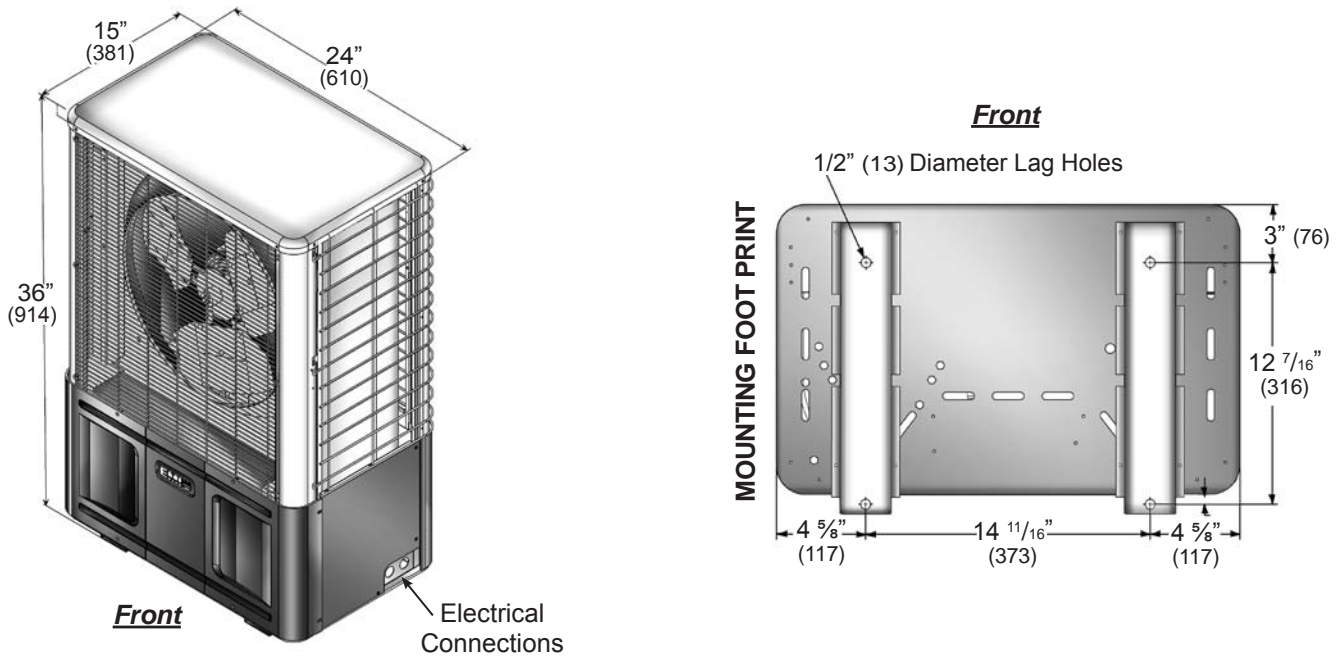
PHYSICAL DIMENSIONS

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INDOOR UNIT



OUTDOOR UNIT



Note: Numbers in () are mm.