

LIMITED RANGE HEAT PUMP

Nominal Capacities:
 9,000 and 12,000 Btuh

DESCRIPTION

EMI offers the finest high capacity dual zone outdoor units in the ductless split market, the S2HA High Capacity Condensing Unit. The S2HA allows the installation of two circuits from a single outside location when space or aesthetic requirements limit the use of locations. The S2HA has easy access interconnect valves on the back of the unit and each zone is independent so no mixing of refrigerant will occur.

When specifying heat pump(s), it is recommended that the matching evaporator(s) be equipped with electric heat. The S2HA will operate down to 35°F outdoor temperature in heating mode, at which point it will initiate change over to electric heat and shut down the condenser. In cooling mode the compressor will shut down at 35°F. All 9,000 and 12,000 Btuh units are equipped with the Duratec Performance package which includes a large capacity suction accumulator with surge baffles and enhanced oil management, a factory installed solid core filter drier and loss of refrigerant charge protection.

All EMI products are subject to ongoing development programs so design and specifications may change without notice.

CONDENSER STANDARD FEATURES

▲ **Compressors** - Hermetically sealed high efficiency rotary compressors. Motors are PSC type with inherent overload protection.

▲ **Cabinet -**

- Vertically arranged side discharge
- Scratch and dent resistant injection molded front access panel
- Powder coated (2,000 hour salt spray tested) 18 and 20 gauge aluminized steel
- Concealed service valves
- Easy access hose connections at 45° from valve body

▲ **Condenser Fan/Motor** - The condenser fan is a large diameter, high efficiency propeller type, which is directly connected to the totally enclosed PSC motor. The S2HA units are draw-through airflow design and the PSC motor is fitted with internal overload protection.

▲ **Condenser Coil** - Condenser coils are seamless copper tubing arranged in staggered configuration with enhanced aluminum fins tested to 460psig. The tubes are mechanically expanded for secure bonding to the fin shoulder.

▲ **Refrigeration Circuits** - The S2HA is delivered with pre-charged refrigerant for the condenser coils and evaporators while charging of field installed piping is required. Unit refrigeration service valves are solid brass for sweat connection. Solid core filter driers are factory installed on all models.

▲ **Refrigerant Run Options** - The standard system will support refrigerant runs to the inside unit of 35' of lift, up to 100' of interconnect.

▲ **Reverse Cycle Operation S2HA** - A four-way reversing valve, solenoid activated by 24V, is energized for cooling operation. A TXV with internal check valve provides proven operation through all temperature ranges when in the heat pump mode.

▲ **Controls and Components:**

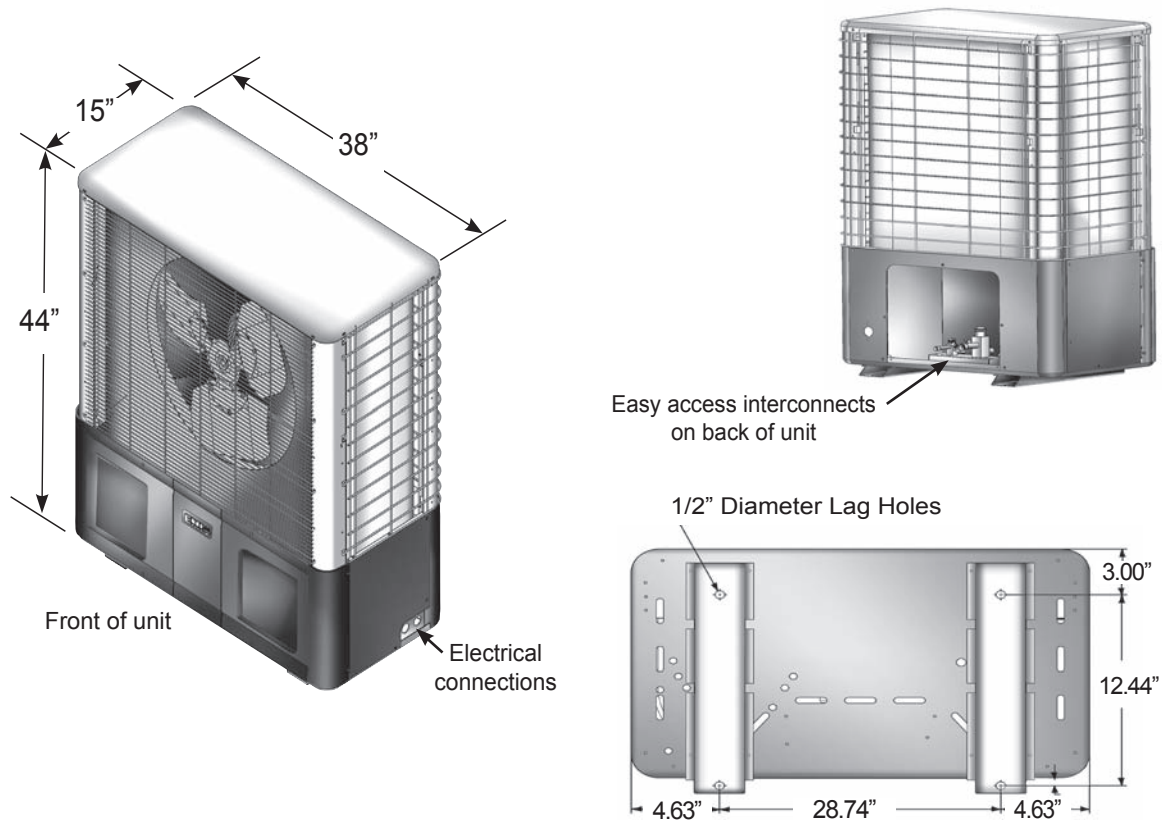
- Compressor and fan motor contactor
- Capacitor
- Loss of charge switch
- Low Voltage terminals for evaporator interconnection
- Large capacity suction accumulators
- Factory installed solid core filter drier
- Heat pump circuits equipped with crankcase heater
- Hard Start Assist

SYSTEM OPTIONS

- Sea Coast Style Coated Coils / Copper-Copper coils
- Wind Baffles - Louvers

S2HA DIMENSIONS AND SPECIFICATIONS

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S2HA ELECTRICAL SPECIFICATIONS

MODEL (1)	VOLTS/HZ/PHASE	FAN		COMPRESSOR 1		COMPRESSOR 2		TOTAL AMPS	MIN. CIR. AMPS (2)	HACR BRKR
		RLA	HP	RLA	LRA	RLA	LRA			
9900	208-230/60/1	1.8	0.33	3.4	23	3.4	23	8.6	9.5	15
2200	208-230/60/1	1.8	0.33	4.3	27	4.3	27	10.4	11.5	15
9200	208-230/60/1	1.8	0.33	3.4	23	4.3	27	9.5	10.6	15

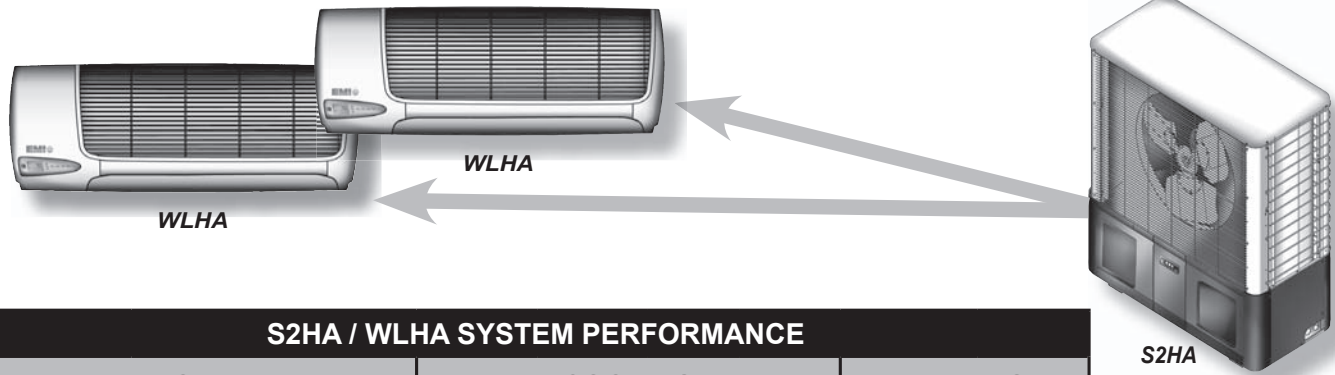
(1) Circuit Designators: 9 = 9,000 Btuh • 2 = 12,000 Btuh (ex. - Model 9200 consists of one 9,000 Btuh compressor and one 12,000 Btuh compressor)

(2) Always refer to the rating plate for Minimum Circuit Ampacity on all multiple compressor units.

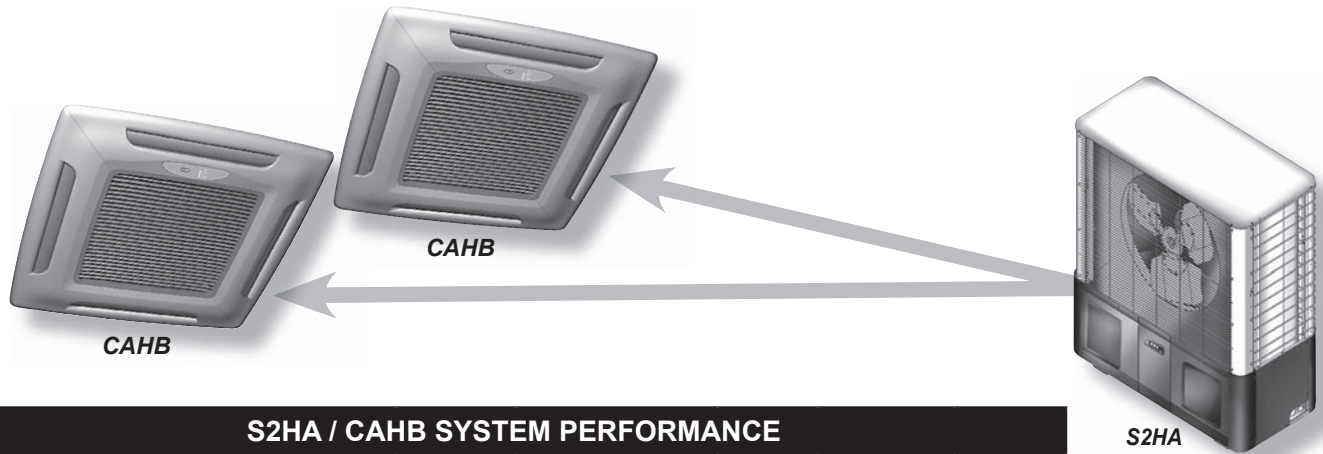
Model#	S2HA PIPING SPECIFICATIONS		SOUND DATA	SHIPPING WEIGHT
	Line Sizes			
	Liquid	Suction	dBA	Lbs.
9900	1/4"	1/2"	64	159
2200	1/4"	1/2"	65	197
9200	1/4"	1/2"	65	187



S2HA SYSTEM PERFORMANCE



S2HA / WLHA SYSTEM PERFORMANCE							
MODEL		COOLING				HEATING	
S2HA (Outdoor)	Indoor Units	Btuh	SEER	SHR	EER	Btuh	C.O.P.
9900	WLHA09 + WLHA09	18,600	13.0	.80	12.2	16,000	3.3
2200	WLHA12 + WLHA12	22,600	13.0	.72	11.9	20,400	3.3
9200	WLHA09 + WLHA12	20,600	13.0	.76	12.0	18,200	3.3

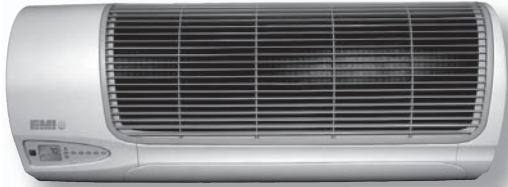


S2HA / CAHB SYSTEM PERFORMANCE							
MODEL		COOLING				HEATING	
S2HA (Outdoor)	Indoor Units	Btuh	SEER	SHR	EER	Btuh	C.O.P.
9900	CAHB12 + CAHB12	18,600	13.0	.79	11.7	15,700	3.1
2200	CAHB12 + CAHB12	22,600	13.0	.75	11.6	20,200	3.2
9200	CAHB12 + CAHB12	20,600	13.0	.77	11.6	18,000	3.1

EMI'S HIGH SEER PRODUCT LINE

EVAPORATORS

WLCA/WLHA
High Wall Evaporator



CACA & CAHB
Cassette Evaporator

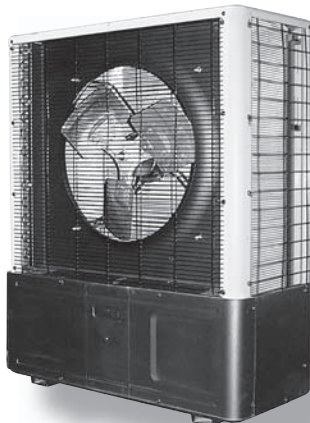


CONDENSERS

S1CA & S1HA
Single Zone
Side Discharge



S2CA & S2HA
Dual Zone
Side Discharge



T2CA, T3CA & T4CA
2, 3 & 4 Zone
Top Discharge

