



SPECIFICATION AND PERFORMANCE GUIDE

Enviroair Single Zone System (ECW/EHW)

Straight Cool/Heat Pump

P/N# 240-3308, Rev. 2.4 [03/05]

ENVIROAIR DUCTLESS SPLIT AIR CONDITIONING SYSTEM

NOMINAL CAPACITIES: 9,000-24,000 Btuh (Straight Cool) and 12,000-24,000 Btuh (Straight Cool/Heat Pump)



ACW/AHW

CCW/CHW

PRODUCT DESCRIPTION

The EnviroAir system (ECW/EHW) is an efficient ductless split air conditioning system with cooling capacities from 9-24,000 Btuh and heat pump capacities from 12-24,000 Btuh. Designed for quiet operation and boasting compact dimensions, the EnviroAir system includes advanced features like auto-restart, full feature remote control, and a field installed low ambient option.

Comprised of three standard components - the ACW/AHW high wall air handler, the CCW/CHW condenser, and an infrared handheld remote control - the EnviroAir system is engineered to the highest performance and reliability standards. The ACW/AHW air handler is equipped with permanent washable air filters as well as motorized air sweeps for enhanced air circulation, and the CCW/CHW condensing unit is equipped as standard with a high efficiency rotary or reciprocating compressor depending on capacity. The unit's interconnecting circuitry and standard power supply is 208/230v.

EMI recommends the EnviroAir system for residential and light commercial cooling applications. The EnviroAir system will operate in cooling mode down to 59°F outdoor temperature and, for cooling at lower levels, a low ambient kit may be purchased for straight cool units only. For critical cooling areas such as computer rooms where constant duty is required no matter what the outdoor temperature, please refer to the EMI AmericaSeries product line or contact customer service for more information.

The EnviroAir system is backed with the standard limited warranty that applies to all EMI equipment. For a copy of this limited warranty, please contact EMI customer service or refer to the website at www.enviromaster.com.

INDOOR UNIT (ACW/AHW)

The ACW/AHW is a ductless type evaporator combining attractive appearance with the highly efficient conditioning of small to midsize commercial or residential spaces. The angled faces of the unit provide separation of intake and discharge air, eliminating recirculation.

OUTDOOR UNIT (CCW/CHW)

The CCW/CHW condenser is an air cooled, high efficiency condensing unit, designed specifically to meet and/or exceed current standards for system energy efficiency ratings.

The CCW/CHW provides cooling/heat pump operation for the ACW/AHW evaporator and its compact design allows flexibility in the location and mounting of the unit while its advanced air flow design maximizes the heat transfer capability of the enhanced fin coil.

CONTROLS AND COMPONENTS (FACTORY INSTALLED OR SUPPLIED)

INDOOR UNIT (ACW/AHW)

- Infrared microprocessor controls
- 208/230v, 60 hz, 1 Phase condenser connections
- Auto-restart
- Multiple operating modes
- Timed operation
- Motorized air sweeps

OUTDOOR UNIT (CCW/CHW)

- Main power connection
- High voltage terminals (for interconnecting with the ACW/AHW evaporator)
- Filter drier (18-24,000 Btuh capacities only)

OPTIONAL OR FIELD SUPPLIED COMPONENTS

OPTIONAL

- 25' interconnecting tube set insulated with flare fittings
- Field-installed low ambient kit (for operation below 59°F down to 40°F) **(For Straight Cool Units Only)**
- Bio-carbon air cleaning filters

FIELD SUPPLIED

- Mounting screws/fasteners
- Power interconnect wiring
- Condensate piping
- Interconnecting tube set (*see above*)

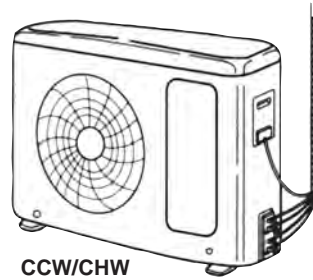
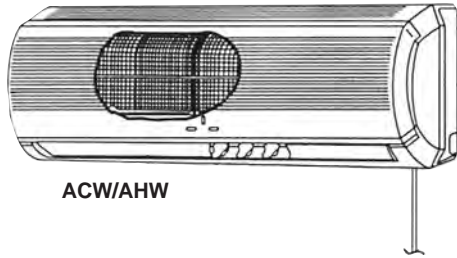
TUBING RUN LENGTH/LIFT

The maximum tubing run length/lift allowable within warranty coverage is 50 feet of overall run length with the maximum allowable lift within run length to be 25 feet.

Tubing run lengths/lifts that exceed these parameters will void the warranty.

SPECIFICATIONS AND PERFORMANCE DATA

NOTE: Due to ongoing development programs, product design, specifications, and performance data may change without notice. Please contact the factory for more information.



NOTE: Use ACW/AHW mounting bracket as template for fasteners, refrigerant lines, and electrical service connections.

ELECTRICAL SPECIFICATIONS AND SYSTEM PERFORMANCE

EnviroAir System	Cooling Capacity		SEER	Heating Capacity (Btuh) ⁽²⁾	HSPF	Volts/HZ/Phase	Total Amps	MCA	Max. Fuse
	Nominal ⁽¹⁾	Sensible							
ECW9000	9,500	7,030	10.9	-	-	208/230/60/1	5.0	6.1	15
ECW12000	12,000	8,760	10.6	-	-	208/230/60/1	6.2	7.6	15
EHW12000	12,000	8,760	10.4	12,500	7.2	208/230/60/1	6.2	7.6	15
ECW18000	18,000	12,800	11.5	-	-	208/230/60/1	9.0	10.9	15
EHW18000	18,000	12,800	11.5	18,000	7.0	208/230/60/1	9.0	10.9	15
ECW24000	24,000	16,800	10.3	-	-	208/230/60/1	12.1	14.8	25
EHW24000	24,000	16,800	10.0	24,000	6.8	208/230/60/1	12.0	14.8	25

(1) Indoor 80/67° F, Outdoor 95° F

(2) Indoor 70/58° F, Outdoor 47° F

INDOOR UNIT (ACW/AHW) SPECIFICATIONS

Model	Air Flow (Dry CFM)	Condensate Drain Connection (I.D.)	Sound Pressure (dB)
09D-B	265	5/8"	33
12D-B	320	5/8"	40
18D-C	460	5/8"	50
24D-B	471	5/8"	52

OUTDOOR UNIT (CCW/CHW) SPECIFICATIONS

Model	Refrigerant Control	Refrigerant Piping Size (Inches O.D.)*		Sound Pressure (dB)
		Liquid	Suction	
09D-B	Capillary	1/4"	3/8"	46
12D-B	Capillary	1/4"	1/2"	46
18D-C	Capillary	1/4"	5/8"	54
24D-B	Capillary	3/8"	5/8"	55

* Flare connections

SYSTEM WEIGHTS AND DIMENSIONS

Unit	Model	Weight (lbs.)	Dimensions		
			L	D	H
ACW/AHW	09D-B/12D-B	19	30"	7 1/2"	10 7/8"
	18D-C	33	42 1/8"	8 7/16"	11 3/4"
	24D-B	29	41 5/16"	7 1/2"	11 3/4"
CCW/CHW	09D-B	63	27 9/16"	7 11/16"	20 13/16"
	12D-B	65/68*	31 1/2"	10 7/16"	21 1/4"
	18D-C	106/108*	32.7"	12 1/2"	22.8"
	24D-B	145/150*	35"	12 1/2"	28"

* Reflects weight of CCW (first number) and CHW (second number)

ENVIROAIR OPERATING RANGES*

Mode	Temperature (°F)		Indoor Humidity
	Indoor	Outdoor	
Cool	70-90	70-109	<80%
Dry	59-90	59-109	<80%
Heat	59-81	32-75	<80%

* Operating your EnviroAir system outside the above mentioned conditions may activate the safety device and cause the system to shut down.



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