



SPECIFICATION AND PERFORMANCE GUIDE

EnviroAir Multi-Zone System (EMCW/EMHW)

Straight Cool/Heat Pump
P/N 240-4433, Rev. 2.4 [11/04]

ENVIROAIR MULTI-ZONE SYSTEM (EMCW/EMHW)

NOMINAL CAPACITIES PER CIRCUIT: 9,000 - 12,000 BTUH



PRODUCT DESCRIPTION

The EnviroAir multi-zone system (EMCW/EMHW) is an efficient ductless split air conditioning system with two cooling capacity circuits of 9,000 or 12,000 Btuh per circuit. Designed for quiet operation and boasting compact dimensions, the EMCW/EMHW includes advanced features like auto-restart, full feature remote control, and a field installed low ambient option.

Comprised of five standard components - two ACM/AHM high wall air handlers, a CCM/CHM condenser, and two infrared handheld remote controls - the EMCW/EMHW is engineered to the highest performance and reliability standards. The ACM/AHM air handlers are equipped with permanent, washable air filters as well as motorized air sweeps for enhanced air circulation, and the CCM/CHM multi-zone condensing unit is equipped as standard with two high efficiency rotary (9,000-12,000 Btuh) compressors. The unit's interconnecting circuitry and standard power supply is 208/230v.

EMI recommends the EnviroAir multi-zone system for residential and light commercial cooling applications. The EMCW/EMHW 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 EMI's AmericaSeries line or contact customer service for more information.

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

INDOOR UNITS (ACM/AHM)

The ACM/AHM air handlers are ductless-type evaporators combining attractive appearance with the highly efficient conditioning of small to midsize commercial or residential spaces. The angled face of the units provide separation of intake and discharge air, eliminating recirculation.

OUTDOOR UNIT (CCM/CHM)

The CCM/CHM multi-zone condenser is an air cooled, high efficiency condensing unit, designed specifically to meet and/or exceed current standards for system energy efficiency ratings.

The CCM/CHM provides cooling operation for two ACM/AHM evaporators 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 UNITS (ACM/AHM)

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

OUTDOOR UNIT (CCM/CHM)

- Main power connection
- High voltage terminals (for interconnecting with the ACM/AHM evaporators)

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** - 2 required per EMCW system)
- Bio-carbon air cleaning filters

FIELD SUPPLIED

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

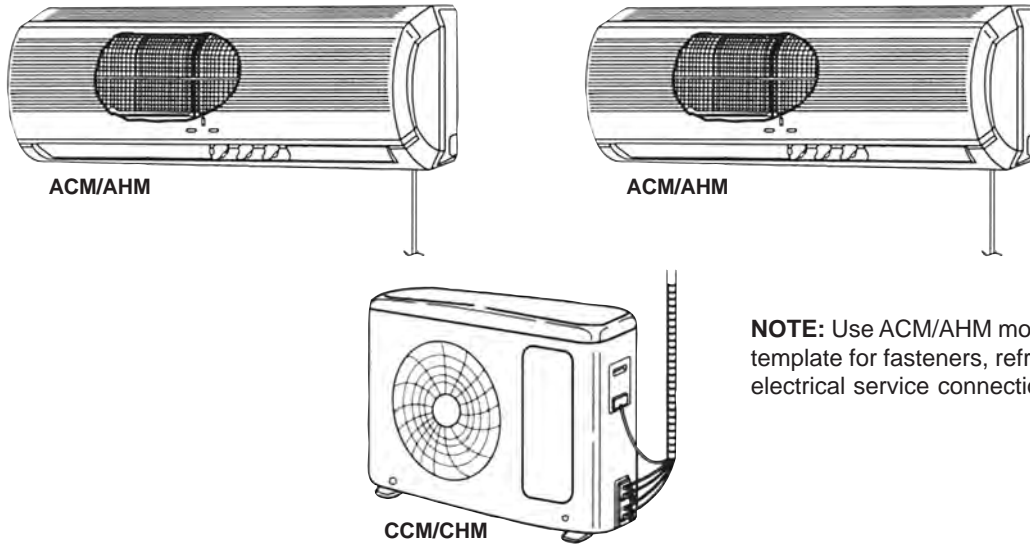
TUBING RUN LENGTH/LIFT

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

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.



Multi-Zone System	Cooling Capacity (Btuh)		SEER	Heating Capacity (Btuh) ⁽⁶⁾	HSPF	Volts/HZ/Phase	Cond Fan Mtr		Compressor Circuits 1 & 2		Indoor Fans		Total Amps	MCA	HACR BRKR	Min Volt
	Nominal ⁽⁵⁾	Sensible					AMPS	HP	RLA	LRA	AMPS	HP				
EMCW18000 ⁽¹⁾	18,000	12,600	10.9	-	-	208/230/60/1	0.72	0.2	4.45	26	0.22	0.06	10.1	11.1	15	197
EMHW18000 ⁽²⁾	17,400	11,700	10.0	17,700	6.8	208/230/60/1	0.72	0.2	4.45	26	0.22	0.06	10.1	11.1	15	197
EMCW24000 ⁽³⁾	24,000	15,500	10.6	-	-	208/230/60/1	0.72	0.2	5.85	29	0.22	0.06	12.9	13.4	20	197
EMHW24000 ⁽⁴⁾	21,000	14,100	10.0	21,250	6.8	208/230/60/1	0.72	0.2	5.85	29	0.22	0.06	12.9	13.4	20	197

- (1) EMCW18000 consists of two ACM-09D-B (9,000 Btuh) air handlers and one CCM-09D-B condenser.
 (2) EMHW18000 consists of two AHM-09D-B (9,000 Btuh) air handlers and one CHM-09D-B condenser.
 (3) EMCW24000 consists of two ACM-12D-B (12,000 Btuh) air handlers and one CCM-12D-B condenser.
 (4) EMHW24000 consists of two AHM-12D-B (12,000 Btuh) air handlers and one CHM-12D-B condenser.
 (5) Indoor 80/67° F, Outdoor 95° F (6) Indoor 70/58° F, Outdoor 47° F

INDOOR UNIT SPECIFICATIONS

Model	Air Flow (Dry CFM)	Condensate Drain Connection (I.D.)	Sound Pressure (dB)
ACM-09D-B	265	5/8"	33
AHM-09D-B	265	5/8"	33
ACM-12D-B	320	5/8"	40
AHM-12D-B	320	5/8"	40

OUTDOOR UNIT SPECIFICATIONS

Model	Refrigerant Control	Refrigerant Piping Size (Inches O.D.)*		Sound Pressure (dB)
		Liquid	Suction	
CCM-09D-B	Capillary	1/4"	3/8"	46
CHM-09D-B	Capillary	1/4"	3/8"	46
CCM-12D-B	Capillary	1/4"	1/2"	46
CHM-12D-B	Capillary	1/4"	1/2"	46

* Flare connections

SYSTEM WEIGHTS AND DIMENSIONS

Model	Weight (lbs.)	Dimensions		
		L	D	H
ACM-09D-B	19*	30"	7 1/2"	10 7/8"
AHM-09D-B	19*			
ACM-12D-B	19*			
AHM-12D-B	19*			
CCM-09D-B	115	35"	12 5/8"	28"
CHM-09D-B	115			
CCM-12D-B	130			
CHM-12D-B	130			

* per air handler, 2 required.

ENVIROAIR OPERATING RANGES*

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

* Operating the Enviroair multi-zone system outside the above-mentioned conditions may activate the safety device and cause the system to shut down.



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