

# SPECIFICATIONS & PERFORMANCE VCH

Cooling Only P/N# 240-3247, Rev. 1.2 [9/01]

# VERTICAL IN-WALL STRAIGHT COOL CONDENSING UNITS

NOMINAL CIRCUITS: 18000, 24000, and 30000 BTU/h



## **DESCRIPTION**

The VCH In-Wall Condensing Unit is a highly-efficient straight cool unit designed to meet current efficiency standards. The VCH is designed to provide cooling to evaporators developed by Environaster International or other manufacturers.

Air is drawn in at the bottom of the unit, passed through the coil, and discharged at the top. Water "weep" drains are provided in the base pan's outdoor side, allowing gravity drainage when the pan is slightly pitched to the outside.

Please note that, due to ongoing product development, design and specifications may change without notice. Consult the factory for current performance data.

# CAPACITIES/EFFICIENCY

The VCH is available in nominal capacities of 18,000 BTU/h, 24,000 BTU/h, and 30,000 BTU/h and, when used in combination with an EMI evaporator like the WHP, produces a system SEER of 10.0 as indicated in the *Reference Circuit Ratings* chart in this spec sheet.

**NOTE:** When used with other evaporator units, certain system data may change. Please consult factory for further information.

## MATERIALS OF CONSTRUCTION

• Cabinet- fabricated of unpainted G-90U galvanized steel.

• Fan guard (black) built with heavy gauge vinyl-coated wire.

#### **COMPRESSOR**

Hermetically sealed reciprocating type. Motor is PSC type with internal overload protection. Compressor is installed on resilient mountings. The removable back panel provides all access to the compressor, as well as to the blower and electrical box.

#### REFRIGERATION CIRCUIT

The VCH is delivered with pre-charged refrigerant for the condenser coil and indoor evaporator. Charging of the field installed piping is required. Unit refrigeration valves are solid brass Primore for sweat connection.

## COIL

Coil is seamless copper tubing arranged in staggered configuration with enhanced aluminum fins tested to 460 psig. The tubes are mechanically expanded for secure bonding to fin shoulder.

# **BLOWER & MOTOR**

The centrifugal blower is statically and dynamically balanced for quiet operation. A direct-drive single speed blower is used.

# CONTROLS & COMPONENTS (FACTORY SUP-PLIED OR INSTALLED)

- Refrigeration connections for evaporator unit
- Compressor and fan motor contactor
- Capacitor
- Low voltage interconnection with evaporator
- High pressure control

# **REFRIGERANT RUN OPTIONS**

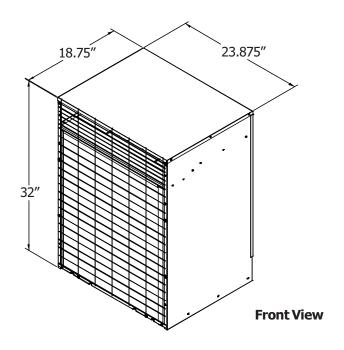
The standard system will support refrigerant runs to the inside unit of 35' of lift, up to 100' of interconnect. Consult factory if greater run/lift interconnect is required.

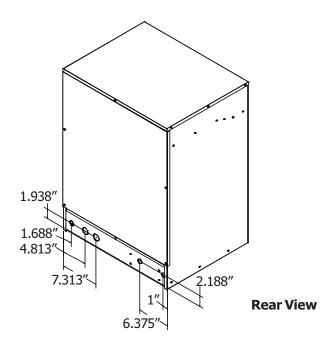
#### SYSTEM OPTIONS

- · Sea coast coated coil
- Architectural louver
- Low ambient options (Consult factory for more information)

# VCH SPECIFICATIONS AND PERFORMANCE

NOTE: Due to ongoing development programs, design and specifications may change without notice.





**NOTE:** Outside louvers vary in design. Use of an existing outside louver or an outside louver supplied by other than EMI must be approved by EMI engineering. Failure to receive this approval may void the warranty.

## **ELECTRICAL SPECIFICATIONS**

MODEL	VOLTS/HZ/PHASE	FAN HP	FAN FLA	COMP RLA	COMP LRA	TOTAL AMPS	MIN. VOLT	MCA	MAX. FUSE
18	208/230/60/1	0.25	1.9	7.4	48	9.3	197	11.2	15
24	208/230/60/1	0.25	1.9	9.6	60	11.5	197	13.9	20
30	208/230/60/1	0.25	1.9	11.8	73	13.7	197	16.7	25

## REFERENCE CIRCUIT RATINGS

MODEL	BTU/H	SEER		
18	18,100	10		
24	22,700	10		
30	26,400	10		

## PIPING SPECIFICATIONS AND CHARGE

MODEL	REF. LIN	REF. CHARGE		
WIODEL	LIQUID	SUCTION	OZ.	
18	3/8"	5/8"	40	
24	3/8"	3/4"	45	
30	3/8"	3/4"	68	





## **Enviromaster International LLC**

5780 Success Drive, Rome, NY 13440

Phone: 1-800-228-9364 Fax: 1-800-232-9364

Email: emi@enviromaster.com Web: http://www.enviromaster.com