



The Key to Wine Cellar Climate Control

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CellarMate FAQ's

Answers to questions most commonly asked.

Who designed CellarMate?

CellarMate was designed by an internationally recognized designer and builder of wine cellars – himself a serious collector of wine.

Why?

CellarMate was conceived as a reliable, economical, and easy to repair alternative to existing cooling units. The design approach for CellarMate is fundamentally new and precludes malfunctions because every area of concern was addressed in the design process.

What makes CellarMate different from other systems?

Design, technology and construction. The concept behind CellarMate was born out of many years of hands on wine cellar environment experience. To guarantee absolute construction quality control, CellarMate is built by a manufacturer of high tech HVAC systems with a reputation for uncompromising standards. Ease of installation, flexibility of application, and durability of construction...that's the CellarMate difference.

How large a space will CellarMate cool?

The CellarMate unit is recommended for installations where there is a utility room or mechanical space no more than 25 feet from the wine cellar. Attic space or crawl space works well providing the temperature never rises above 85F. The four models cover wine cellars from approximately 250 to 6,000 cubic feet. Larger applications are easily covered using multiple units.

Two 10" ducts from the CellarMate run to the cellar. One for cold air supply, and the other for warm air return. Some applications require two supply ducts. The CellarMate 25 uses 8" ducts.

The utility space should have free access to tempered air supply for the CellarMate. Additional air supply may be needed in some applications. A fresh air duct may be added to the unit to draw air from an air-conditioned space. Warm air from the CellarMate can be exhausted via the air duct, as well.

CellarMate offers four models – the CellarMate 025 (1/4 ton), the 050 (1/2 ton), the 088 (7/8-ton), and the 200 (2 ton).

What are other CellarMate features?

- CellarMate is a self-contained ducted system measuring:

CM025:	35”L x 14”W x 14”H
CM 050 and CM088:	39”L x 22”W x 14”H
CM200:	43”L x 22”W x 18”H
- The unit may be ceiling, wall, or floor mounted within the wine cellar, or may be located in an adjoining space.
- The unit is designed for easy installation--refrigeration contractor is not needed, operation, and repair. All panels are removable for maintenance and duct connections.
- CellarMate uses a digital electronic controller, electronic thermostat, and an integral air cooled condenser.
- Unit weights are (approx.):

CM025:	80 lbs
CM050:	125 lbs
CM088:	145 lbs
CM200:	195 lbs
- CellarMate is essentially maintenance free. The refrigeration system is hermetically sealed and requires no maintenance. Fan motors are permanently lubricated. Filters, if used, should be checked monthly and evaporator coils every three months. All panels are easily removed.
- CellarMate is constructed of commercial-grade components, with a cabinet made of 16 gauge galvanized steel. It uses a digital electronic controller, environmentally friendly R-134a refrigerant, and comes with a digital thermostat and 25’ of thermostat wire.
- Accessories including insulated ductwork, humidifier, heater, low-ambient and water-cooling are available.
- CellarMate is the only system that conforms to UL and CSA 1995 standards.
- CellarMate has a 1 year manufacturer’s warranty.

Does CellarMate require any special installation requirements?

CellarMate achieves optimum performance with limited duct runs; maximum length for each run is 25 feet.

CellarMate needs to be installed in a room where temperatures will not go above 85 degrees (the system has a 30-degree “temperature differential”). Temperatures can go a bit over 85 for short periods without causing the unit to work too hard (or to shut off, if temps get too high). For rooms where temperatures could go above 85 degrees, it will be necessary to duct condenser exhaust out of the room, and to duct conditioned air into the condenser section of the CellarMate. NOTE: if the only possible location for the CellarMate is a room where temperatures can get over 90 degrees, the water-cooled option will be required.

Electrical:

Unit 025: 8.6 amps/115 volts

Unit 050: 11.9 amps/115 volts

Unit 088: 9 amps/230 volts

Unit 200: 16 amps/230 volts

Power should be supplied by a dedicated circuit. Power cannot fall below 110V for 115V units or 208V for 230V units.

Typically, air from the wine cellar enters the return air section through the return air duct where it is cooled and supplied to the cellar through the supply duct. The condenser section draws in ambient air to cool the condenser. Heated condenser air is exhausted to the ambient space or ducted away. Multi panel construction allows all air inlet and outlet access from any side to the unit for flexible installation.

CellarMate is designed for indoor operation, as close to the wine cellar as possible with short, straight duct runs. One or two cool air supply openings entering the wine cellar should be high on the wall or thru the ceiling and a warm air return should be located low on the wall, and as far as possible from the supply ducts. Openings into the cellar should total 80 square inches or more.

Notes:

Air out of the unit can be as low as 48 degrees, but room cannot be controlled at 48. A properly insulated room will stay at 55/56 degrees, maintaining a 9 to 10 degree temperature differential between return air and supply air.

Other applications: CellarMate maintains 72/74 degrees for applications with temperature- or humidity-specific requirements, such as artwork, archives, musical instruments, and laboratories.

Questions? Call us anytime.

New! from CellarMate

Smaller is Better!

For years CellarMate has set the industry standard for reliable ducted wine cooling. With its commercial-grade construction, versatility, UL/CSA standards, and user-friendly design, CellarMate has become synonymous with wine storage peace-of-mind.

Now all the advantages of the CellarMate system are available in a ¼-ton model. For wine cellars up to 1,000 cubic feet, our new model brings all of these benefits to customers with smaller cellars:

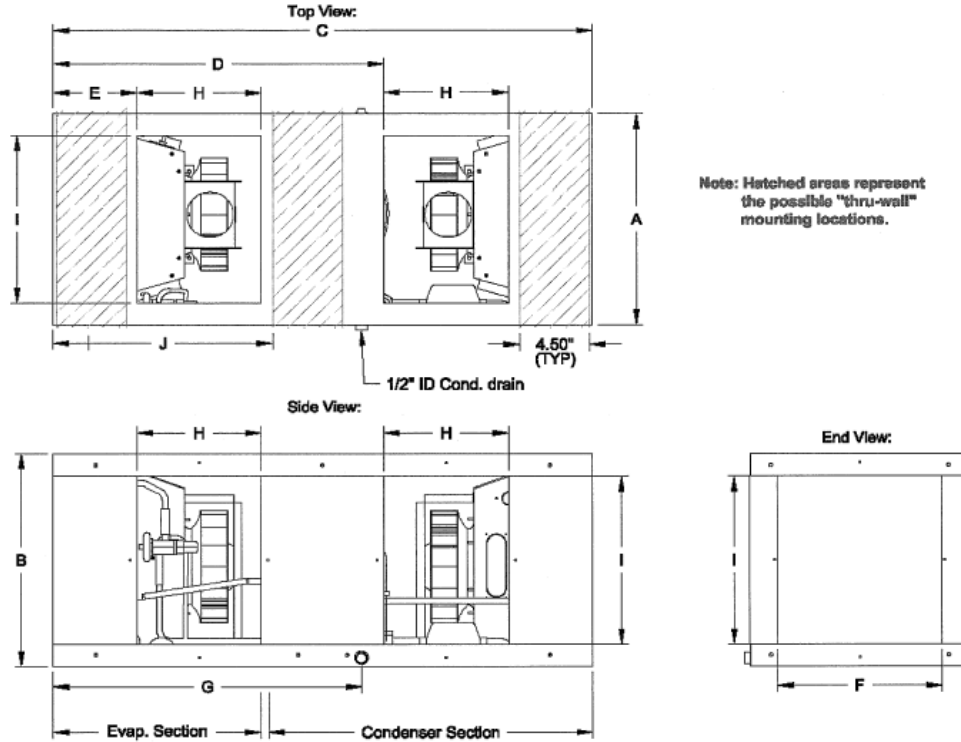
- compact design – 14”H x 14”W x 35”L
- designed to provide powerful, quiet operation
- self-contained, pre-charged
- installation flexibility – can be through-wall or duct mounted
- digital thermostat
- maintenance and service accessibility
- heating, humidification, water-cooled and low-ambient options available
- four models to cover any size of wine cellar

At last the CellarMate line of wine coolers is applicable to virtually any wine cellar, large or small. Keep in mind this exciting new addition to the CellarMate line. Your customers will thank you for it. Visit our website cellarmate.com, or call Michael at 888-564-2932.

CellarMate...the key to wine cellar climate control.



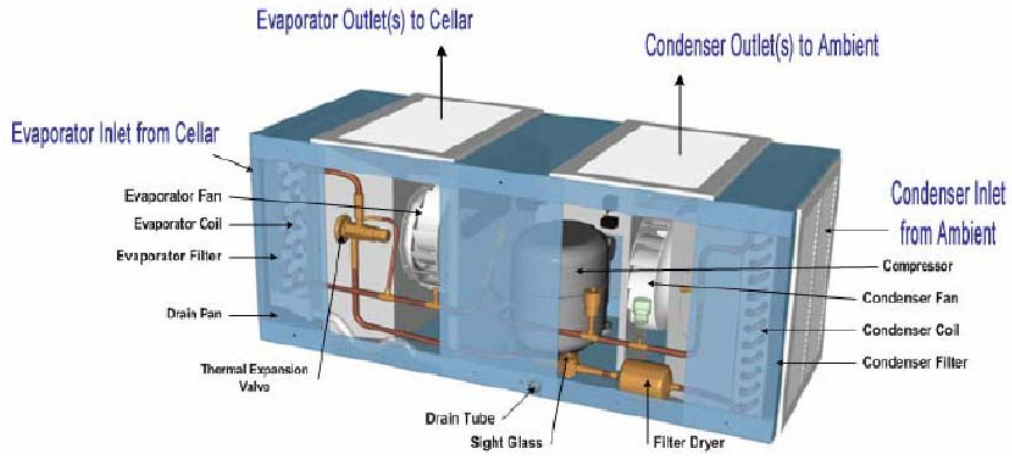
CellarMate Dimensions



Cellarmate Dimensional Data

Model Number		24S025	24S050	24S088	24S200
Dimensions - Nominal - add 0.375" for each grille					
A - Width	Inches	14	22	22	22
B - Height	Inches	14	14	14	18
C - Length	Inches	35	39	39	43
D - Cond. discharge location	Inches	21.25	23.25	23.25	26
E - Evap. discharge location	Inches	5.375	5.375	5.375	5.375
F - Inlet opening width	Inches	10.5	18.5	18.5	18.875
G - Drain outlet location	Inches	19.75	21.75	21.75	24.375
H - Discharge opening width	Inches	8	10	10	11.625
I - Inlet opening Height	Inches	11.132	11.125	11.125	15
J - Location to wall	Inches	14.5	16.5	16.5	18
Weight	Lbs.	80	125	145	195
Refrigerant Charge - 134A	Oz.	19	26	34	50

CellarMate Duct Port Diagram



Sizing Your CellarMate

Use for guideline purposes, only; actual correct system size determined by Heat Load Calculation

MODEL	CUBIC FEET
¼-ton unit	Up to 800 cubic feet
½-ton unit	Up to 1,500 cubic feet
1-ton unit	Up to 3,000 cubic feet
2-ton unit	Up to 5,500 cubic feet

CellarMate Technical Specifications

CellarMate achieves optimum performance with limited duct runs. A cumulative maximum of 50' of supply and return duct work is required.

Electrical:

Unit 025: 8.6 amps/115 volts

Unit 050: 11.9 amps/115 volts

Unit 088: 9 amps/230 volts

Unit 200: 16 amps/230 volts

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Typically, air from the wine cellar enters the return air section through the return air duct where it is cooled and supplied to the cellar through the supply duct. The condenser section draws in ambient air to cool the condenser. Heated condenser air is exhausted to the ambient space or ducted away. Multi panel construction allows all air inlet and outlet access from any side to the unit for flexible installation.

CellarMate is designed for indoor operation, as close to the wine cellar as possible with short, straight duct runs. One or two cool air supply openings entering the wine cellar should be high on the wall or thru the ceiling and a warm air return should be located low on the wall; can be high on a wall as well. Openings into the cellar should total 80 square inches or more. A total of no more than 50 cumulative feet of insulated duct runs is recommended.

Wine Cellar Specifications

Walls:

CellarMate recommends the cellar walls be made with 2"x 4" framing. Use R-13 fiberglass batts for insulation, plus a layer of ¾" high-grade foil-faced insulation board such as Celo-Tex or High-R. It is important that the foam board be on the side of the walls away from the wine. The seams of the foam board are taped with foil tape; the edges are caulked to make the whole unit hermetically sealed. The foil-faced insulation board in this case acts as the vapor barrier.

Wall Material:

Finished wall material can be m-r gypsum board, stucco, or a damp resistance wood such as cedar or redwood.

Framing insulation:

An alternative framing-insulation pattern is to use 2"x 6" framing members, 6" of fiberglass batt insulation, and 4 mill plastic vapor barrier on the outside of the wine cellar. Caulk the plastic tight to the perimeter of the walls with Phenoseal latex adhesive.

Ceiling:

If the ceiling has existing joists, cut strips of 4-mil plastic and staple it between the joists. R19 insulation is the minimum required on the ceiling.

Doors:

Doors are exterior type with a good weather seal and again caulked tight to the floor, jambs, and header.

Floors:

Install a vapor barrier under the floor; for concrete floors, treat with a water sealant. For floors *less than four feet* below grade, a minimum of R19 insulation is required.

Please feel free to call if there are any technical questions.

CellarMate Options

We offer four options for the CellarMate line, two of them being fairly recent introductions. Following is a summary and pricing for each option. (Options are factory-installed except for humidifier, which is easily field-installed; remember that factory-installed brings the unit to the full 30-day lead-time).

Water-cooled Condenser:

CellarMate cooling systems need to be mounted in an area that will not go above 85F degrees (slightly higher for short periods is acceptable). Most applications require that the condenser exhaust be ducted out of the mounting area; some also require that conditioned air be ducted into the condenser section from a remote location. For applications where the area could still get to 85 degrees, our water-cooled condenser option will be needed. A 1/2" water line (3/4" for the 200 model) is all that is required for this option which does away with the condenser fan. "Leaving water" is clean, and is acceptable for sewer or makeup water. This option also used where unit sound could be an issue.

Low-Ambient:

For installations where temperatures in mounting area could get down to 40 degrees or lower. Utilizes low-pressure switch and compressor crankcase heater.

Humidification:

Standard wine coolers will lower excess humidity; that's all they do, keep it from going over 70-75%. Given a good vapor seal in the wine cellar (required for every cellar), humidity will then fluctuate naturally between 50-70% with the standard CellarMate; dry periods can produce slightly lower levels. Some customers wish to minimize this humidity fluctuation with our humidification option. Supplied with its own humidistat, the option will maintain humidity a bit below or above 60%. A 1/4" water supply and 1/2" drain line are all that this option requires; no additional power source needed. Easily field-installed; adds only 4" to width.

Heater:

For installations where the wine cellar could get down to 45F degrees or lower, and for de-humidification in areas that can be cool (not warm enough to start the cooler) and damp (enough to raise humidity level in the cellar). No additional power source needed.

Unit Performance and Specifications Model #25

Performance	
Cooling Capacity (see note #1)	¼ ton (Approx.3300BTU)
Power Requirements (Volts/Phase/Hertz)	115/1/60
Current Draw (Amps)	8.6
Circuit Size (Amps)	15
Controls	
Type	Thermostat
Accuracy	+/- 2°F
Evaporator Section	
Fan Motor Size (watts)	75
Rated Air Flow (CFM)	235
Air Flow w/25' Flex Duct (CFM)	207
Drain	½" I.D. Clear Plastic Tube
Condenser Section	
Fan Size (watts)	75
Rated Air Flow (CFM)	253
Air Flow w/25' Flex Duct (CFM)	220
Cabinet	
Construction	16-gauge aluminum cabinet
Finish	Blue, Powder coat, Corrosion resistant
Electric Heat (optional)	
Capacity	1 kW
Temperature rise – including fan	13.5F
Current Draw	9.4 Amps
Humidifier (optional)	
Accuracy	+/- 10%
Capacity	1.6 gal./day @ 60F water temp. 3.5 gal./day @ 90F water temp. 5.1 gal./day @ 120F water temp.
Weight (pounds)	80
Dimensions (Inches)	35 x 14 x 14
ETL Conforms to UL STD. 1995, CAN/CSA C22.2 No. 236	

1. Net cooling capacity @ cellar temp/humidity of 55F/60%RH at rated air flow.

Unit Performance and Specifications Model #050

Performance	
Cooling Capacity – (See note #1)	½ ton (Approx. 5600BTU)
Power Requirements (Volts/Phase/Hertz)	115/1/60
Current Draw (Amps)	11.9
Circuit Size (Amps)	15
Controls	
Type	Digital Thermostat
Accuracy	+/- 2°F
Evaporator Section	
Fan Motor Size (watts)	100
Rated Air Flow (CFM)	430
Air Flow w/25' Flex Duct (CFM)	400
Drain	½"O.D. Clear Plastic Tube
Condenser Section	
Fan Size (watts)	100
Rated Air Flow (CFM)	400
Air Flow w/25' Flex Duct (CFM)	365
Electric Heat (optional)	
Capacity	1 kW
Temperature rise – including fan	8.6F
Current Draw (Amps)	9.6
Humidifier (optional)	
Accuracy	+/- 10%
Capacity	1.6 gal./day @60F Water Temp. 3.5 gal./day @90F Water Temp. 5.1 gal./day @120F Water Temp.
Cabinet	
Construction	16-gauge aluminum cabinet
Finish	Blue, Powder Coat, Corrosion Resistant
Weight (pounds)	125
Dimensions (Inches)	39L x 22W x 14H
ETL Conforms to UL STD. 1995, CAN/CSA C22.2 No. 236	

1. Cooling capacity rating conditions: 55°F/60%RH evaporator, 80°F condenser at rated air flow.

Unit Performance and Specifications Model #088

Performance	
Cooling Capacity – See note #1	1 ton (Approx. 8400BTU)
Power Requirements (Volts/Phase/Hertz)	230/1/60
Current Draw (Amps)	9.0
Circuit Size (Amps)	15
Controls	
Type	Digital Thermostat
Accuracy	+/- 2°F
Evaporator Section	
Fan Motor Size (Watts)	195
Rated Air Flow (CFM)	510
Air Flow w/25' Flex Duct (CFM)	485
Drain	½"O.D. Clear Plastic Tube
Condenser Section	
Fan Size (Watts)	195
Rated Air Flow (CFM)	500
Air Flow w/25' Flex Duct (CFM)	475
Electric Reheat (optional)	
Capacity	2 kW
Temperature Rise – including fan	12F
Current Draw (Amps)	9.6
Humidifier (optional)	
Accuracy	+/- 10%
Capacity	1.6 gal./day @60F Water Temp. 3.5 gal./day @ 90F Water Temp. 5.1 gal./day @120F Water Temp.
Cabinet	
Construction	16-gauge aluminum cabinet
Finish	Blue, Powder Coat, Corrosion Resistant
Weight (pounds)	145
Dimensions (Inches)	39"L x 22"W x 14"H
ETL - Conforms to UL Std. 1995, CAN/CSA C22.2 No. 236	

1. Cooling capacity rating conditions: 55°F/60%RH evaporator, 80°F condenser at rated air flow.

Unit Performance and Specifications Model #200

Performance	
Cooling Capacity – See note #1	2 ton (Approx. 16200BTU)
Power Requirements (Volts/Phase/Hertz)	230/1/60
Current Draw (Amps)	16
Circuit Size (Amps)	20
Controls	
Type	Digital Thermostat
Accuracy	+/- 2°F
Evaporator Section	
Fan Motor Size (watts)	240
Rated Air Flow (CFM)	740
Air Flow w/25' Flex Duct (CFM)	715
Drain	½"O.D. Clear Plastic Tube
Condenser Section	
Fan Size (watts) HP	240
Air Flow (CFM)	750
Air Flow w/25' Flex Duct (CFM)	720
Electric Reheat (optional)	
Capacity	2 kW
Temperature rise – including fan	8.1F
Current Draw (Amps)	10
Humidifier (optional)	
Accuracy	+/- 10%
Capacity	1.6 gal./day @ 60F water temp. 3.5 gal./day @ 90F water temp. 5.1 gal./day @ 120F water temp.
Cabinet	
Construction	16-gauge aluminum cabinet
Finish	Blue, Powder Coat, Corrosion Resistant
Weight (pounds)	195
Dimensions (Inches)	43"L x 22"W x 18"H
ETL – Conforms to UL Std. 1995, CAN/CSA C22.2 No. 236	

1. Cooling capacity rating conditions: 55°F/60%RH evaporator, 80°F condenser