

www.winemate.com

WINE-MATE Split System

Installation, Operation & Care Manual

VINO2500SSD VINO4500SSD VINO6500SSD VINO8500SSD



Vînotemp

Vinotemp International Corp. www.vinotemp.com

READ AND SAVE THESE INSTRUCTIONS

TABLE OF CONTENTS

Important Safety Information2
Features & Specifications3
Cellar Construction8
Installer's Instruction9
Electrical Wiring16
Temperature Control & Humidity Adjustment22
Care Guide25
User' Troubleshooting26
Customer Support29
Warranty

Important Safety Information



WARNING

ELECTRIC SHOCK HAZARD

Disconnect electric supply from appliance before servicing.

Replace all panels before operating.

Failure to do so could result in death or electrical shock.

WARNING:

- DO NOT USE A GROUND FAULT INTERRUPTER (GFI).
- A DEDICATED 20 OR 30 AMP CIRCUIT IS REQUIRED (2500-4500SSD OR 6500-8500SSD).

Features and Specifications

- Wine-Mate split cooling systems VINO2500-8500SSD are designed and used to provide a cold temperature between 50~65 °F for a properly insulated wine room at a normal environment.
- The wine room will maintain humidity of 50~70% RH even when the environment becomes dry and humid. These temperatures and humilities are optimized for long term storage of wine.
- SSD units consist of a condensing unit and an evaporator unit, and they are connected by a liquid line and an insulated suction line.
- SSD condensing units can be located away from the evaporator units and wine cellars as far as 50 ft, which will bring you quiet operation.
- The SSD evaporator units provide two way air supply operation. The evaporator units can be installed on the ceiling in a wine cabinet or room.

MODEL	EVAP UNIT WE"xDE"xHE"	COND UNIT L"xD"xH"	Btu/h, CFM (55/90 [°] F)	CAPACITY (55/75 [°] F)	REFRIGERANT	ELECTRICAL EVAP UNIT/ COND UNIT	WEIGHT(Ib) EVAP UNIT/ COND UNIT
VINO- 2500SSD	WM-25SFCD 23X17.5 X7.5	WM- 250SCU 18x12 x14	2500/350	250 cu ft	R134a	115V-60HZ-1A 115V-60HZ-5.7A	35/40
VINO- 4500SSD	WM-45SFCD 23X17.5 X10.5	WM- 450SCU 18x12 x14	4500/460	1000 cu ft	R134a	115V-60HZ-1A 115V-60HZ-6.9A	40/60
VINO- 6500SSD	WM-65SFCD 29.875X21 X11.75	WM- 650SCU 24x18 x17	6500/660	1500 cu ft	R134a	115V-60HZ-1.5A 115V-60HZ-12A	66/90
VINO- 8500SSD	WM-85SFCD 29.875X21 X13.5	WM- 850SCU 24x18 x17	8500/810	2000 cu ft	R134a	115V-60HZ-1.5A 115V-60HZ-15A	95/115

The dimensions and capacities are specified as follows:

NOTE:

CAPACITY IS DETERMINED UNDER THE CELLAR TEMPERATURE, THE CELLAR AMBIENT TEMPERATURE AND THE CONDENSING UNIT AMBIENT TEMPERATURE OF 55°F, 75°F AND 90°F, WITH R11 INTERIOR AND R19 EXTERIOR INSULATIONS. ANY LOWER CELLAR AND HIGHER AMBIENT TEMPERATURES AND LOWER INSULATIONS WILL CAUSE REDUCING CAPACITY AND THE CELLAR TEMPERATURE MAY NOT BE MAINTAINED AT 55°F.

CAUTION:

LOW AMBIENT TEMPERATURE KIT IS REQUIRED IF THE INSTALLATION AREA WILL BE BELOW 50°F.

CAUTION:

LIQUID AND SUCTION LINES MAY DIFFER FROM WHAT ARE SHOWN HERE, PLEASE CHECK ON THE UNITS FOR PROPER INSTALLATION.

NOTE:

LEAVE MINIMUM 3" CLEARANCE FOR ELECTRICAL WIRING AND REFRIGERATION PIPING.

Parts included:

Condensing Unit (discharge and suction valves installed) + Liquid Filter + Liquid Indicator

Evaporator Unit (liquid line solenoid valve and expansion valve installed) Temperature Controller + Air Sensor













Fig. 5 Liquid Filter

Fig. 6 Liquid Indicator

Cellar Construction

This is only a guide and shall be considered as minimum requirements.

All interior walls and floors shall have a vapor barrier and a minimum of R11 insulation. All exterior walls and ceiling shall have a vapor barrier and a minimum of R19 insulation. The vapor barrier shall be installed on the warm side of the insulation. All joints, door frames, electrical outlets or switches and any pipes or vents that go through the enclosure shall be sealed to prevent air and moisture leakage into the room. Concrete, rock, and brick are not insulation or vapor barriers.

Doors shall be of a minimum size, insulated to at least R11 and tightly sealed with high quality weather stripping. Be sure to seal the bottom of the door and fill gap between the door's frame and wall before installing the cap molding. In order to maintain 55 °F in the wine cellar, the ambient temperature surrounding the enclosure shall not exceed the temperature of the enclosure by more than 25 °F. No enclosure wall shall receive direct sun or strong wind.

Lighting shall be of low wattage, with a timer to insure lights are not left on when the enclosure is not occupied.

The cooling system will not be able to maintain the proper temperature if fresh moisture-laden air is constantly being introduced to the enclosure. Symptoms of this condition are; unit runs all the time with only a slight reduction in temperature and/or water overflows from the unit. Because of the temperature difference between the inside and outside, very small cracks can allow large amounts of outside air to enter into the enclosure. Please be aware that moisture can pass through solid concrete, paint and wood. Often a newly constructed room contains fresh wood, paint, concrete and other building materials. These materials contain large amounts of moisture. When placed into operation in this type of environment, the system will work harder to remove this extra moisture resulting in increased "run" time.

Installer's Instruction



Always check wiring harness connections before initiating any test procedures.

Disconnect electric power from the appliance before performing any maintenance or repairs.

Voltage checks should be made by inserting meter probes beside the wires in the connector blocks with the electric power source on and the connector block plugged in.

Resistance checks should be made on components with the electric power off and the connector block disconnected.

Federal law requires that WINE-MATE split cooling systems be installed by an EPA certified refrigeration technician.

WINE-MATE split system is shipped as components and is ready for use only after a certified refrigeration technician has properly installed, evacuated, charged and tested the system. Proper installation is critical. Vinotemp can only warrant the quality of the components. The installation and proper operation of the system must be warranted by the installer. Installation of the system must be done in accordance with all state and local building and electrical codes.

The condensing unit and evaporator unit are connected by a liquid line and an insulated suction line that are supplied by the installer. These lines must be properly sized for the distance between the two units. After the units and the lines are installed, the system must be pressure tested. If no leaks are found, evacuate and charge system. Refrigerant amount will vary depending on the length of line set.

1. Condensing Unit

• Place the condensing units WM250-850SCU in a properly ventilated location. If it is not, heat exhausted by the condensing unit will build up and the cooling system will not operate properly.



- Condensing unit shall be elevated to avoid possible flooding and shaded from direct sun. It shall not be exposed to temperatures higher than 110 °F or lower than 50 °F (optional low ambient kit available).
- Leave minimum 5 ft clearance for the exhaust side and leave minimum 1 foot clearance for the fresh air intake side.

CAUTION:

IF THE CONDENSING UNIT IS EQUIPPED WITH A LOW AMBIENT CONDITION KIT, DO NOT TURN ON THE COMPRESSOR UNTIL THE CONDENSING UNIT HAS BEEN POWERD FOR 24 HOURS.

2. Discharge/Suction Valve Operation (Condensing unit)

Back Position: Normal operation, process and manometer port closed **Front Position**: Liquid/suction line connection closed **Middle Position**: All ports open for evacuation, charge and manometer reading



- 1 Process & Manometer; 2 Receiver Discharge or Compressor Suction
- 3 Liquid Line or Suction Line; 4 Pressure Control
 - 3. Evaporator Unit
 - The WM25-85SFCD evaporator units shall be installed for ceiling mount with air supply on both sides and air return on the bottom.
 - Supply air flow shall be unobstructed for at least 12" for free installation or 2" for deflector installation and return air shall be unobstructed for 6".
 - There is a gravity drain line and the unit shall be installed level or with a slight angle toward the drain connection. If rise-up is needed, a condensation pump must be used.

4. Air Sensor and Temperature Controller

- The air sensor can be located in the wine room 5 ft above the floor or the return air area, but not the supply air area or air dead area.
- If the temperature controller is mounted outside the wine room but the air sensor is located inside the wine room, use 18 gauge wires to extend the air sensor if needed.
- 5. Piping, Evacuating, Charging and Starting

CAUTION:

- ALWAYS USE THE SUPERHEAT AND SUBCOOLING, PRESSURE READINGS TO CHARGE REFRIGERANT PROPERLY, THE LISTED CHARGES ARE FOR REFERENCE ONLY.
- CHARGE 15% MORE REFRIGERANT IN THE SUMMER IF THE UNIT IS EQUIPPED WITH A LOW AMBIENT CONDITION KIT.

NOTES:

- THE LINE CONNECTION SIZES OF LIQUID FILTER & INDICATOR, THE VALVE CONNECTION SIZES OF CONDENSING UNIT AND THE LINE CONNECTION SIZES OF EVAPORATOR UNIT MAY NOT NECESSARY THE SAME AS THE ABOVE LISTED LINE SIZES.
- IF THE CONDENSING UNIT IS INSTALLED ABOVE THE EVAPORATOR UNIT, USE THE SUCTION LINE ONE LISTED SIZE SMALLER. EXPANSION AND SOLENOID VALVES ARE INSTALLED ON LIQUID LINE.
 - 1) The installation order starts from condensing unit (including receiver and discharge valve), liquid line filter-drier, moisture-liquid indicator/sight glass, liquid line, to evaporator unit (including liquid line connection, solenoid valve, expansion valve, and suction line connection), returning to insulated suction line, suction valve and then back to condensing unit.
 - 2) Use inverted siphons to prevent liquid from flooding back to the compressor and aid oil returning to the compressor.
 - 3) Both discharge and suction valves must be in the middle positions during evacuating and charging.
 - 4) Charge the system after pipe brazing, leak testing and evacuating. Liquid must always be charged into the hide side.
 - 5) The subcooling at the condensing unit shall be around 10°F. The charge may be complete when there are no more bubbles forming in the liquid indicator.
 - 6) Head pressure range: $125 \sim 150$ psig at $70 \sim 90$ °F condensing unit ambient temperature.
 - The evaporator's constant pressure expansion valve is set around 30 ~ 35 psig (35 ~ 40°F) at factory. This pressure setting gives a dew point to maintain the humidity for storing wine.
 - 8) The temperature split across the evaporator shall be 8 ~ 10°F at 55°F wine room temperature.

- Again, must verify if the superheat at the evaporator unit is around 9 ~ 18°F at 50 ~ 65 °F wine room temperature with a normal condensing unit ambient temperature.
- 10) If the superheat is high, check the subcooling first to know if the refrigerant charge is sufficient. If the charge is not sufficient, add more refrigerant. If the charge is good, then increase the evaporator suction pressure by turning the hex nut (5/16") clockwise.
- 11) If the superheat is low, then decrease the evaporator suction pressure by turning the hex nut (5/16") counter-clockwise.
- 12)Both discharge and suction valves must be in the back positions before disconnecting evacuating and pressure gauges.



Fig. 9 Expansion Valve

The line sizes and refrigerant charges are listed as follows.

MODEL	REFRIGERATION LINES	LIQUID LINE	SUCTION LINE	DRAIN LINE	CHARGE
VINO- 2500SSD	<= 50 FT	1/4" OD	3/8" OD	1/2" OD	R134a/19 OZ
VINO- 4500SSD	<= 50 FT	1/4" OD	1/2" OD	1/2" OD	R134a/26 OZ
VINO- 6500SSD	<= 50 FT	1/4" OD	1/2" OD	1/2" OD	R134a/32 OZ
VINO- 8500SSD	<= 50 FT	3/8" OD	5/8" OD	1/2" OD	R134a/40 OZ

6. Use of the adjustable pressure control (if applicable for pump-down)

Suction pressure setting: Cut out=5 psig; Cut in=25 psig; Differential=20 psig Head pressure setting: Cut out=230 psig; Cut in=150 psig; Differential=80 psig It may need to adjust the setting in the field to get the right cycle time.

A. P70 Single/Dual Control



Fig. 10 Adjustable Pressure Control

B. PS2 Dual Control





7. Use of the encapsulated pressure control (if applicable)



Fixed suction pressure setting: Cut in = 32 psig; Cut out = 10 psig

Fig. 12 Fixed Pressure Control

8. Use of the condenser fan control (if applicable for low ambient kit)

Head pressure setting: Cut in=170 psig; Cut out=120 psig; Differential=50 psig

It closes on rise of pressure. It may need to adjust the setting in the field to avoid fan short cycle.

9. Use of the crankcase heater (if applicable for low ambient kit)

The crankcase heater is installed around the lower part of the compressor and shall be turned on all the time. The heater is self-regulated.

10. Pressure, Superheat and Subcooling Readings

CAUTION: THE VALVES MUST BE IN THE MIDDLE POSITIONS TO READ PROPERLY.

	Complaint		Possible Causes
a.	High suction pressure and low head pressure	a.	Compressor may be bad
	Zero superheat and zero subcooling		
b.	High suction pressure and low head pressure	b.	Expansion valve opened, too
	Low superheat and low subcooling		much oil
C.	High suction pressure and high head pressure	C.	Overcharge
	Low superheat and high subcooling		
d.	High to normal suction pressure and high head pressure	d.	Non-condensable gas
	Low subcooling		
е.	High suction pressure and high head pressure	e.	Air restricted, dirty condenser,
	Low superheat and low subcooling		bad condenser fans
f.	High suction pressure and high head pressure	f.	High room temperature, high
	High superheat		evaporator load
g.	Low suction pressure and low head pressure	g.	Undercharge
	High superheat and low subcooling		
h.	Low suction pressure and low to normal head pressure	h.	Liquid line restricted after
	High superheat and high subcooling		receiver, solenoid valve

	1	restricted
Low suction pressure and low head pressure	i.	Suction line restricted
o 1		
	j.	Air restricted at evaporator,
		evaporator iced
	k.	Evaporator restricted
	١.	Expansion valve restricted
a 1		
	m.	Both evaporator and condenser
High superheat and high subcooling		restricted; liquid and suction lines connected wrong
Low suction pressure and high head pressure	n	
High superheat and high subcooling	11.	receiver
low to normal suction pressure and high head pressure	о.	Condenser restricted
Normal to high superheat and high subcooling		
	Normal to high superheat and low subcooling Low suction pressure and low head pressure Low superheat and low subcooling Low suction pressure and low to normal head pressure High superheat and normal to high subcooling Low suction pressure and normal head pressure High superheat and normal subcooling Low suction pressure and high head pressure High superheat and high subcooling Low suction pressure and high head pressure High superheat and high subcooling Low suction pressure and high head pressure High superheat and high subcooling low to normal suction pressure and high head pressure	Normal to high superheat and low subcoolingj.Low suction pressure and low head pressurej.Low superheat and low subcoolingj.Low suction pressure and low to normal head pressurek.High superheat and normal to high subcoolingl.Low suction pressure and normal head pressurel.High superheat and normal subcoolingm.Low suction pressure and high head pressurem.High superheat and normal subcoolingm.Low suction pressure and high head pressuren.High superheat and high subcoolingn.Low suction pressure and high head pressuren.High superheat and high subcoolingo.

11. Condensing Unit Troubleshooting

	Unit not running				
a.	Incorrect power supply		Check for proper voltage		
b.	Incorrect or loose wirings	b.	Check all wirings and connections		
C.	Failed components	c.	Check start relay, start capacitor, overload protector, compressor.		
d.	Liquid refrigerant in the compressor		Call service for OEM information Check for system restriction or low		
e.	Low pressure switch shutting down the unit		refrigerant		

Electrical Wiring

CAUTION:

- USE MINIMUM 14 GAUGE WIRES FOR POWER LINES.
- IF EQUIPPED WITH LOW AMBIENT CONDITION KIT, USE LOW AMBIENT TEMPERATURE WIRING DIAGRAMS. TURN OFF THE COMPRESSOR BEFORE POWER THE CONDENSING UNIT. ONLY TURN ON THE COMPRESSOR AFTER THE CONDENSING UNIT HAS BEEN POWERED FOR 24 HOURS.



Fig. 13 VINO2500 & 4500SSD Wiring Diagram



Fig. 14 VINO6500SSD Electrical Wiring Diagram











Fig. 17 Low Ambient Temperature VINO6500SSD Electrical Wiring Diagram



Fig. 18 Low Ambient Temperature VINO8500SSD Electrical Wiring Diagram

Temperature Control & Humidity Adjustment

- 1. Temperature Setting
- Set the temperature at 55 °F for the optimum aging of wine
- On initial start-up, the time required to reach the desired temperature will vary, depending on the quantity of bottles, temperature setting and surrounding temperature.
- Allow 24 hours to stabilize the temperature for each new temperature setting operation
- 1. Use of the controller



Fig. 19 Digital Controller (4.25"L X 3.75D X 4.25"H)

1) Keys

SET: To display target set point; in programming mode it selects a parameter or confirm an operation.

(DEF): To start a manual defrost.

▲(UP): To see the maximum stored temperature; in programming mode it browses the parameter codes or increases the displayed value.

✓ (DOWN): To see the minimum stored temperature; in programming mode it browses the parameter codes or decreases the displayed value.

O: To turn on/off the power to the unit.

 $\triangle + \forall$: To lock/unlock the keypad.

SET+ V: To enter in the programming mode.

SET+A: To return to the temperature display.

2) Display

During normal operating conditions, the display shows the value measured by the air regulation probe. In case of active alarm, the temperature flashes alternately to the code alarm.

2.1 LED Functions

LED	MODE	FUNCTION
*	ON	Compressor enabled
÷.	Flashing	Anti-short cycle enabled
漆	ON	Defrost cycle enabled
\$	ON	Fan enabled
\$	Flashing	Fan delay after defrost enabled
(0)	ON	Alarm occurring
°C/°F	ON	Temperature measuring unit
°C/°F	Flashing	Programming mode

3) Alarm Signals

3.1 Code Description

MESSAGE	CAUSE	FUNCTION		
P1	Temperature probe faulty	Compressor switching to Con and CoF		
HA	High temperature alarm	Outputs unchanged		
LA	Low temperature alarm	Outputs unchanged		
CA	External alarm	All outputs off		

3.2 Alarm Recovery

Probe alarms P1", start a few seconds after the fault in the related probe; they automatically stop a few seconds after the probe restarts normal operation. Check connections before replacing the probe. Temperature alarms "HA", "LA" automatically stops as soon as the temperature returns to normal value. Alarm "CA" (with i1F=PAL) recovers only by switching off and on the instrument.

4) Temperature Set-Point

4.1 How to see the set-point

1. Press and immediately release the **SET** key, the display will show the set-point value.

2. Press again and immediately release the **SET** key or wait for 5 seconds to display the probe value again.

4.2 How to change the set-point

1. Press the **SET** key for more than 3 seconds until the "°C" or "°F" LED starts blinking and the set-point will be displayed.

2. To change the set value, press the up/down keys $\triangle \lor$ within 10 sec.

3. To store the new set-point value, press the **SET** key again or wait 10 sec.

5) Parameter Programming

1. Press the **SET** + ∀ keys for 3 sec until the "°**C**" or "°**F**" LED starts blinking, then release the keys.

2. Press again the **SET** + v keys for more than 7sec until the **Pr2** label will be displayed, then release the keys. The first parameter **Hy** will be displayed.

3. Press up/down keys ∧ ∀ to select the required parameter within 10 sec.

- 4. Press the "**SET**" key to display its value.
- 5. Use up/down keys $rightarrow \forall$ to change its value within 10 sec.
- 6. Press "**SET**" to store the new value.

7. To exit: Press SET + A or wait 15sec without pressing a key.

PARAMETER	DESCRIPTION	VALUE
Set	set-point (°)	55
Ну	temperature regulation differential (°)	4
AC	anti-short cycle delay (min)	10
Con	compress on with probe faulty (min)	15
CoF	compress off with probe faulty (min)	30
CF	temperature unit (°F/ °C)	F: Fahrenheit
rES	display resolution	in: integer
dLy	temperature display delay (min)	1
ot	probe calibration (°)	0
US	maximum set-point (°)	65
LS	minimum set-point (°)	50
idF	defrost cycle interval time (hour)	24
MdF	defrost cycle endurance time (min)	30
ALC	temperature alarm type	rE: relative to set-point
ALU	high temperature alarm (°)	10
ALL	low temperature alarm (°)	10
AFH	alarm recovery differential (°)	5
ALd	temperature alarm delay (min)	120
FnC	fan operating mode	C-n: on with compressor & off during defrost
Fon	fan on with compressor (min)	0
FoF	fan off with compressor (min)	15

Note:

- The parameter **Fon** is used to adjust the humidity in the wine cabinet. The higher **Fon** is, the higher relative humidity will be.
- The parameter FnC = C-y (on with compressor and on during defrost) with idF = 8 and MdF = 15 can be used to defrost more efficiently in case there is much frost.
- The unit turns on at set-point plus regulation differential **Hy** after anti-short cycle **AC** has elapsed and turns off at set-point.

7) Manual Defrost

Press the DEF key for more than 2 seconds and a manual defrost will start.

Care Guide



In general, always unplug system or disconnect power while doing care.

1. Coil Cleaning

- Clean the condenser coil regularly. Coil may need to be cleaned at least every 6 months.
- Unplug the system or disconnect power.
- Use a vacuum cleaner with an extended attachment to clean the coil when it is dusty or dirty.
- Plug cooling system or reconnect power.

2. Moisture Removing

• Remove the extra condensate if it is accumulated in the wine cellar at high ambient temperature and humidity.

User's Troubleshooting

This Troubleshooting Chart is not prepared to replace the training required for a professional refrigeration service person, not is it comprehensive

Complaint	Possible Causes	Response
1.Unit not running	 a. No power b. Power cord unplugged c. Setting higher than ambient temperature d. Defrost light blinking e. Compressor light blinking f. Incorrect or loose wirings. g. Low voltage. 	 a. Check power at receptacle & fuses b. Check for power cord plug c. Lower temperature setting d. Unit is under defrost mode e. Unit waits for anti-short cycle delay f. Check all wirings and connections g. Contact an authorized electrician
2.Displaying Temperature fluctuating	a. Air sensor	When using an air sensor, the wine bottle temperature is mainly controlled by the average air temperature. If the set-point is 55°F with a differential 4 °F, the cooling unit turns on at 59°F of air temperature and turns off at 55°F of air temperature. The average air temperature is 57°F, and then the wine temperature is around 57+/-0.5°F. The air is light enough to change so quickly that it maintains relatively constant average temperature that would prevent wine bottle temperature from varying.
3.Temperature high, but displaying temperature low, unit stopping and starting with short running time	 a. air sensor contacting the evaporator b. Short circuit of air flow between supply and return air c. Setting too high d. Failed temperature controller and air sensor 	 a. Move the air sensor away from the evaporator b. Deflect the supply air down c. Lower setting d. Call service for diagnosis
4.Temperature high, compressor stopping and starting but short running time	 a. Incorrect voltage b. Failed components c. Improper condenser airflow d. Dirty condenser e. Overcharge of refrigerant f. Discharge or suction pressure too high 	 a. Check for voltage b. Check compressor windings, start relay and overload protector. c. Check for condenser fan d. Clean condenser e. Call service for removing refrigerant f. Call service for OEM information
5.Not cooling or temperature too high and	a. Improper room insulation & sealb. Room too largec. Ambient temperature too highd. Exhaust restricted	 a. Check for insulation, gasket and door opening b. Check for excessive size c. Check for installation location d. Leave minimum 3 ft clearance for

· · ·	1	
running		the exhaust side and leave minimum
continually		1 foot clearance for the fresh air
	a Malfunationing fana	intake side
	e. Malfunctioning fans	e. Check for both evaporator and
	f Improper evenerator er	condenser fans
	f. Improper evaporator or condenser airflow	f. Check for air restrictions
		g. Clean condenser
	g. Dirty Condenser h. Iced evaporator	g. Clean condenserh. Defrost and reset temperature
	i. Sealed system problem	i. Call service for checking loss of
	1. Sealed system problem	refrigerant or restrictions
	j. Undercharge or overcharge	j. Call service to add or remove
	j. Onderenarge of overenarge	refrigerant
		Tomgorant
6.Unit running	a. Improper room insulation & seal	a. Check for insulation, gasket and door
too long		opening
too long	b. Exhaust restricted	b. Leave minimum 3 ft clearance for the
		exhaust side and leave minimum 1
		foot clearance for the fresh air intake
		side
	c. Room too large	c. Check for excessive size
	d. Ambient temperature extremely	d. Check for installation location or
	high	increase setting
	e. Dirty Condenser	e. Clean condenser
- - /	. Even eveten ein fleuw ne striction	a Obash fan fan a OEM
7.Evaporator	a. Evaporator air flow restriction	a. Check for fans, CFM
freezing up	b. Unit not stopping due to air leak, high ambient temperature or low	b. Check for seal, door opening,
	setting	ambient temperature and setting
	c. Low ambient temperature	c. Defrost the unit
	d. Bad thermostat or sensor	d. Check for thermostat and sensor
	e. Refrigerant low or leak	e. Check for sealed system leakage
	f. Expansion valve blockage	f. Check for low side pressure
8.Water leak	a. Unit not level	a. Check for installation
	b. Drain line restricted	b. Check drain line
	c. Drip tray leak	c. Check for if water leak but no
		overflow
	d. Very high humidity	d. Use dehumidifier
	e. Wine room air leak	e. Check for air leak and if
		condensation on the cooling unit
9.Circuit	a. Incorrect fuse or breaker	a. Check for proper fuse or breaker
tripping	b. Incorrect wirings	b. Check for wirings and connections
	c. Overcharge of refrigerant	c. Call service for removing refrigerant
	d. Condenser air restriction	d. Check condenser fan
	e. Failed components	e. Call service

10.Noisy	а.	Mounting area not firm	a.	Add support to improve installation
operation	b.	Loose parts	b.	Check fans, cabinet washers, tubing contact and loose screws.
	C.	Compressor overloaded due to high ambient temperatures or airflow restriction	C.	Check for airflow blockage
	d.	Malfunctioning components	d.	Call service for checking Internal loose, inadequate lubrication and incorrect wirings

Customer Support

If you still have problems, please contact us at:

Vinotemp International 17631 South Susana Road Rancho Dominguez, CA 90221 Tel: (310) 886-3332 Fax: (310) 886-3310 Email: info@vinotemp.com

Warranty

Thank you for choosing a Vinotemp cooling unit.

Please enter the complete model and serial numbers in the space provided:

Model	
Serial No	

Attach your purchase receipt to this owner's manual.

1. Limited Warranty

VINOTEMP warrants its products, parts only, to be free from defects due to workmanship or materials under normal use and service for twelve months after the initial sale. If the product is defective due to workmanship or materials, is removed within twelve months of the initial sale and is returned to VINOTEMP, in the original shipping carton, shipping prepaid, VINOTEMP will at its option, repair or replace the product free of charge.

This warranty constitutes the entire warranty of the VINOTEMP with respect to its products and is in lieu of all other warranties, express or implied, including any of fitness for a particular purpose. In no event shall VINOTEMP be responsible for any consequential damages what is so ever. Any modification of VINOTEMP products shall void this warranty.

Service under Warranty

This service is provided to customers within the continental UNITED STATES only. VINOTEMP cooling units are warranted to produce the stated number of BTU/H. While every effort has been made to provide accurate guidelines, VINOTEMP can not warranty its units to cool a particular enclosure.

In case of failure, VINOTEMP cooling units must be repaired by the factory or its authorized agent. Repairs or modifications made by anyone else will void the warranty.

Shall a VINOTEMP cooling unit fail, contact the dealer for instructions, do not return the unit to the factory without authorization from VINOTEMP. If the unit requires repair, re-pack it in the original shipping carton and return it to the factory, shipping prepaid. VINOTEMP will not accept COD shipments. If the unit is determined to be faulty and is within the twelve month warranty period

VINOTEMP will, at its discretion, repair or replace the unit and return it free of charge to the original retail customer. If the unit is found to be in good working order, or beyond the initial twelve month period, it will be returned freight collect.

2. Limitation of Implied Warranty

VINOTEMP'S SOLE LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO, AT OUR OPTION, REPAIRING OR REPLACING OF UNIT.

VINOTEMP SHALL NOT BE LIABLE FOR: DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THE UNIT, DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THE UNIT, LOSS OF TIME OR COMMERCIAL LOSS, ANY OUTER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE.

THIS WARRANTY IS EXCLUSIBE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR INPLIED, INCLUDING BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

While great effort has been made to provide accurate guidelines VINOTEMP cannot warrant its units to properly cool a particular enclosure. Customers are cautioned that enclosure construction, unit location and many other factors can affect the operation and performance of the unit. There for suitability of the unit for a specific enclosure or application must be determined by the customer and cannot be warranted by VINOTEMP.