



THENOW

BROCHURE

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Shanghai Thenow Purification Technology Co.,Ltd

Wine Cellar Cooling System





PART I
Wine Storage



Wine Storage Options

There are three main ways to store your bottles of wine safely and securely:

Wine cellar – this is the ideal way to store your wine bottles, temperature and humidity controlled ideally. Wine cellars are a cost effective solution for storing wine and are bespoke from one home to another.

A makeshift closet wine cellar – this is ideal for wine lovers and enthusiasts. It is a simple and quick way to store your wine bottles in any size space (small or large) in your house.

A makeshift closet wine cellar is perfect for an everyday drinker but not as effective as long term storage.

A wine cabinet or refrigerator – these are reliable ways to maintain the temperature of your wine bottles and are a worthwhile investment for wine professionals and wine merchants.

Factors Pronounced Effect On Wine Storage

Storage of wine is an important consideration for long-term aging. While most wine is consumed within 24 hours of purchase, fine wines are often set aside for long-term storage. Wine is one of the few commodities that can improve in flavour and value with age, but it can also rapidly deteriorate if kept in inadequate conditions.

Proper storage comes with several factors namely temperature, humidity, storage stability, the presence of light, bottle positioning, and keeping wine away from strong odors etc. Constant temperature and proper humidity have the most pronounced effect on long time wine storage.

Wine Storage Temperature & Humidity Guide

Temperature

Red wines are robust and slightly more resistant to heat than whites, thus the ideal storage temperature for such ranges from 10 – 15°C (50 – 59°F). Whites accept the given range, but some purists store them at slightly cooler temperatures ranging from 7 – 10 °C (45 – 50 °F) just to be safe.

According to some experts, storing wine at around 15 – 20 °C is perfectly safe, provided that the temperature does not fluctuate. Fluctuations in temperature will cause the liquid to expand and contract, disrupting the molecules and adversely affecting the chemical reactions within the wine. Air molecules may give the tittle a “raisin-like” or stewed flavor.

Humidity

Humidity should be kept at around 70% RH. This way, the corks are kept tight for long periods. When the humidity is higher than 70%, it will likely cause mold and degradation of the labels and glue. When the humidity is below 50%, corks will begin to dry out resulting in loss of liquid in the bottles and possible degradation of the wine.



Ideal Temperature & humidity For Some Wines:

Wine	Ideal Temperature	Ideal Humidity
Sweet & Semi-sweet Red Wine	14 - 16°C	65%-70%
Dry Red Wine	16 - 22°C	
Semi-dry Red Wine	16 - 18°C	
Dry White Wine	8 - 10°C	
Semi-dry White Wine	8 - 12°C	
Sweet & Semi-sweet White Wine	10 - 12°C	
Brandy	<15°C	
Champagne (Sparkling Wine)	5-9°C	

Wine storage proper temperature is around 12°C, but temperature range from 7 - 18°C just to be safe.

What Is The Difference Between A Regular Air Conditioner And Wine Cellar Cooling System?

1/ _____

Regular air conditioners are meant to go down to 18°C, possibly 16°C at the lowest. But wine is meant to be stored at around 12°C in order to age and evolve properly.

2/ _____

The humidity helps to keep corks moist. Standard AC units are built to cool the air quickly and to draw the humidity out of the air to make the room feel comfortable. While the wine cellar cooling units are designed to cool the air at a much slower rate to maintain the humidity in the room.

3/ _____

Normally wine cellar cooling units are always designed to run all year round without interruption. However, the failure rate of standard AC units is very high at such a frequency running

4/ _____

Long-term wine storage requires a constant temperature and humidity, this is also a normal standard air conditioning unit cannot provide. Most of Thenow cellar cooling units have built-in humidifier and heater, which can maintain the temperature and humidity at a stable level.

PART 2

About Thenow

士诺产业园
THENOW



THENOW INTRODUCTION

Stock code:834706

Thenow brand belongs to Capital Group which was founded in Singapore, Capital have been focusing on technology innovation, intelligent technology, high performance, excellent quality of the constant temperature and humidity system and fresh air ventilation system, relying on excellent R&D manufacturing ability and operations capability, Thenow has completed the product layout of fresh air ventilation system, ventilating dehumidification system, wine cellar cooling system and total air system etc., all are committed to improving people's living environment and conditions.

Manufacturing Advantages

Our factory is located in Tinglin town Industrial park Jinshan District, Shanghai, covering an area of 53,300 square meters and with annual output more than 500,000pcs. Besides, we have strong R&D team and state-of-the-art laboratories equipped with the most complete and professional instruments. Our products include wine cellar climate control system, fresh air ventilation system, total air system(constant temperature and humidity) and so on. And our factory totally have 4 production lines now, besides, we also have our own workshops for metal plates process, ex-change core and air filters production. We aim at becoming a world leading manufacturer in this area.



R&D Ability

Thenow R&D center have more than 50 experienced and professional engineers. Many of them have more than 10 years industry experiences. Meanwhile, Thenow jointed Shanghai Jiaotong University and Stanford University, setting up academic research center preparing talents and technical reserve. And we established a series of professional laboratories: enthalpy difference lab, 3m³ cabin(test noxious gas and microorganism), 30m³(test performance of machine), Noise lab, wind tunnel lab, high and low temperature lab, aging lab, nanometer dust lab etc.



30m³ Test Room



Noise Test



Aging Test



Enthalpy Difference



Wind Tunnel, Drop, Vibration



3m³ Test Room




PART 3

Wine Cellar Cooling System

WINE CELLAR COOLING UNITS SELF-CONTAINED

Thenow wine cellar cooling units self-contained is best suited for home or light commercial proper wine storage. This unit is intended for use in cabinets or smaller wine storage rooms. Designed to lower the temperature at its best scope 10~18oC(50-64oF), and maintains the humidity at optimal levels, between 50 and 70 percent. With build-in humidifier and PTC heater, our cooling units keep your collection area with perfect humidity and temperature level.

Features

-  Condenser and evaporator combined inside one appliance, easy and fast to install.
-  Intelligent control panel, famous brand sensors with stable quality, integrated ModBus connection.
-  Suitable temperature between 10~18°C and humidity maintenance within 50~70% RH.
-  Unique appearance design, no vibration, lower noise.
-  Optimal air distribution ensures the most uniform temperature in the wine cabinet space.
-  Commercial-grade, corrosion resistant components and spray painting frame for long-term durability.
-  Build-in wet film humidifier and heater, maintaining constant temperature and humidity.



Technical Datas

Model	Unit	HSN-J15-Z
Cellar Size (Up to)	m ³	5
Power	V/HZ	220V/50HZ
Cooling	W	410
Heating (Electrical)	W	2000
Air Flow(M)	m ³ /h	170
Static Pressure	Pa	20
Nosie	dB (A)	42
Refrigerant		R134a
Control	Intelligent Control Panel	
Temperature	°C	10-18°C, ±2°C
Humidity	°C	50~70%, ±5%
Total Power	W	2500
Humidifier	Type	Wet-film
Humidification	Kg/h	1
Indoor Unit Size	L*W*H (mm)	1176*440*350
Drainage	mm	20








Cellar inside dry-bulb t=12°C 60% Outside dry-bulb t=35°C, wet-bulb t=28°C.

WINE CELLAR COOLING UNITS SPLIT SYSTEM

Thenow wine cellar cooling units split system is intended for cellars without access to proper ventilation. They are known for their efficiency and longevity. Each unit is designed to maintain a consistent temperature and humidity in spaces where proper ventilation is not feasible. The units are functionally divided into two sections, the evaporator and the condenser. The evaporator is installed inside and the condensing unit can be placed as far as 30m away with external ductwork connections. Since it exhausts outside, split cooling systems operate quietly and reduce vibration inside the cellar, which is believed to negatively affect the quality of wine.



Features

-  Three speed air flow under auto control to maintain the ideal environment for long-term wine storage.
-  Adopt circulating water wet-film auto control humidification system, wet film is made of Swedish organic polymer material with sterilization and disinfection function.
-  Intelligent control panel, famous brand sensors with stable quality, integrated ModBus connection.
-  High COP, green energy saving.
-  Auto cooling and heating mode, keep wine cellar under constant temperature.
-  Pull-out design wet film module, Sweden brand, easy to replace.
-  Control constant condensation temperature.









Technical Datas

Model	Unit	HSN-J15	HSN-J30	HSN-J60	HSN-J90	HSN-J150
Cellar Size (Up to)	m ³	15	30	60	90	150
Power	V/HZ	220V/50HZ			380V/50HZ	
Cooling	W	570	1120	3100	5000	7600
Heating (Electrical)	W	2000	4000	6000	9000	12000
Air Flow(M)	m ³ /h	154	450	740	900	1300
Static Pressure	Pa	20	30	30	40	60
Nosie	dB (A)	40 (Indoor)	50 (Indoor)	50 (Indoor)	53 (Indoor)	62 (Indoor)
Refrigerant		R134a	R410A			
Control		Intelligent Control Panel				
Temperature	°C	10-18°C, ±2°C				
Humidity	°C	50~70%, ±5%				
Total Power	W	2700	5300	7400	11900	17000
Humidifier	Type	Wet-film				
Humidification	Kg/h	1	2	2	4	6
Indoor Unit Size	L*W*H (mm)	885*375*315	945*790*300	1345*790*300	1545*790*300	1945*890*350
Outdoor Unit Size	L*W*H (mm)	700*300*460	860*300*540	860*300*540	1000*405*870	1010*405*1250
Tube Connection	Liquid(mm)	6.35	6.35	9.52	9.52	12.7
	Gas(mm)	9.52	9.52	12.7	15.88	19.05
Drainage	mm	20	20	20	20	20

Cellar inside dry-bulb t=12°C 60% Outside dry-bulb t=35°C, wet-bulb t=28°C.

WINE CELLAR COOLING UNITS PLUG-IN TYPE

Thenow's plug-in type self-contained cooling units, available in two sizes, are perfect for small to middle size wine cabinet and cellar. The three-speed optional airflow is more suitable for different temperature and humidity conditions, effectively controlling noise, and improving the uniformity of indoor temperature and humidity. Besides, plug-in type makes the installation becoming very simple and you don't need a licensed HVAC technician to install it for you, you may be able to install the unit yourself or an experienced handyman.

-  Compact plug-in design, easy to install.
-  Optional airflow, more suitable for different temperature and humidity conditions, effectively controlling noise.
-  Unique self-absorption drainage design, no need to connect drainage pipe.
-  Intelligent control panel, famous brand sensors with stable quality, integrated ModBus connection.
-  Famous brand compressor, safe, stable and low energy consumption.
-  Traditional Chinese knot design radiator, better heat dissipation.



Technical Datas

Model	Unit	HSN-JC5
Cellar Size (Up to)	m ³	5
Power	V/HZ	220V/50HZ
Cooling	W	440
Heating (Electrical)	W	/
Air Flow(M)	m ³ /h	170
Static Pressure	Pa	30
Nosie	dB (A)	44
Refrigerant	R134a	
Control	PC Full-touch smart control	
Temperature	°C	10-18°C, ±2°C
Humidity	°C	/
Total Power	W	700
Humidifier	Type	/
Humidification	Kg/h	/
Drainage	/	Self-absorption

Cellar inside dry-bulb t=12°C 60% Outside dry-bulb t=35°C, wet-bulb t=28°C.

PART 4

Cases

