

WINE CELLAR CONDITIONING UNIT



TECHNICAL SHEET



The Wine Cellar Conditioning Unit Made in Italy discover what's behind an excellent wine

MAIN FEATURES OF THE CONDITIONING UNIT



The wine cellar conditioner unit **BACCO** is designed and built focusing on excellence, attention to details and materials. We know that anyone who has a wine cellar wants to preserve their wine optimally; the role of the wine cellar conditioner is crucial to maintaining an ideal microclimate **controlling temperature and humidity**. To achieve this goal, you need an excellent wine cellar conditioner. **BACCO** is an Italian product present on the market for over 10 years. Its control system and its components are the results of a continuous improvement aimed to obtain the maximum quality. The goal is to make your wine cellar not just a simple "refrigerator", but a place that favours the slow ageing process that will elevate the taste and fragrance of your best wines.

TEMPERATURE

Wine is a delicate product that can't withstand sudden changes in temperature and intense light. For that reason, to preserve and refine bottled wine, it's essential having a conditioner unit that can maintain the temperature of the cellar between 14 and 16 °C. For this purpose, we set by default the BACCO's digital temperature controller at 16 °C. However, keep in mind that maintaining the cellar temperature does not depend only on the cooling or heating capacity of the conditioner unit; in particular, it is crucial to consider the thermal insulation of the entire room: from the walls to the front door, from the floor to any windows.

HUMIDITY

Another fundamental parameter for maintaining and refining bottled wine is the **humidity** that, in a wine cellar, must remain between 60% and 80%. Standard air conditioners dry the air and don't have any humidity control system; this is extremely harmful to cork stoppers which, drying up, contribute to accelerating the oxidation process of wine with the consequently premature ageing. BACCO, on the other hand, can detect in real time the humidity of the room and, if necessary, can activate a humidifier which reintegrates the moisture within the desired values. Here's why **BACCO** is the best choice to take care of your wines.

OPERATING UNIT

AESTHETIC

placed inside the wine cellar



The structure of **BACCO 30** is made entirely of **AISI 304 stainless steel**, brushed on the outside or painted in anthracite colour. It contains the low noise rotary type compressor, the cooling coil, and the 1Kw electric heater for the production of hot air.

The **evaporator** is a **high-efficiency** finned pack type, consisting internally of copper tubes and aluminum fins, and protected by a retina in spiration that retains any foreign bodies.

The **supply fan** is of the helical type and guarantees a very high air distribution. The unit provides a condensation drain. The machine is characterised by the absence of vibrations and low maintenance.

PROBE FOR THE MEASUREMENT of temperature and humidity

The DIXELL **temperature and humi-dity probe** is used to monitor the two parameters; it interacts with the Control Unit which, consequently, adjusts the operation of the main unit and the humidifier.

The **probe** must be connected to the Operating Unit through a **provided 3 meter cable**, and it should be positioned inside the cellar at the most suitable point for an accurate detection (generally the best position is next to the wine shelves, at average height).



CONTROL UNIT

on the conditioning unit



The Control Unit is integrated to the Operating one. A DIXELL microprocessor-based digital controller manages the main parameters; it has explicitly been designed for applications on refrigerating units and for maintaining temperature and humidity. There is a difference of 2°C (hysteresis) between the stop and restart of the compressor to optimise the power consumption. Wine bottles are not affected from this small temperature variation because the thermal inertia of the wine inside the bottles is such that it is not affected by this temperature variation which, in fact, only affects the ambient air.

The controls are digital, with bright LED display, and easy to set. **Air temperature** is shown in red at the top, while the **relative humidity** level is highlighted in yellow at the bottom of the display. Besides, the Control Unit provides information on the status of the compressor, as well as any alarms.

HUMIDIFIER

The **humidifier** is of the adiabatic type, and it nebulises water using the centrifugal force and producing a very fine fog which the environment absorbs quickly. The humidifier **reintegrates the humidity percentage that is missing**, compared to the one set on the digital control panel. It must be connected to the water and electric supply. The unit provides for the discharge of water every end of the cycle to be conveyed in the same drainage line of the air conditioner.

Water consumption: 0,85 l/h
Weight: kg 4,30
Nominal power: 40 w

Dimensions: 302x339xh312 mm



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SUMMARY TABLE OF THE TECHNICAL FEATURES*

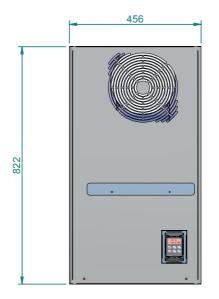


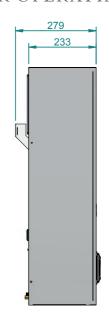
Wine cellar volume	up to 30 cubic meter**
Bacco 30	warm and cold
Installation type	Wall
Supply voltage	230 V / 1 Ph / 50 Hz
Cooling potentiality	1350 W***
Cooling power consumption	550 W
Cooling rated current	2,9 A
Min. indoor operating temperature	10°C
Cooling max power consumption	700 W
Cooling max current consumption	3,5 A
Min/Max outdoor operating temperature	da -5 a 38 °C
Heat exchangers	Battery with aluminium fins and copper pipes
Internal fan air flow	450 mc/h
External fan air flow	300 mc/h
% Humidity	digital reading
Unit weight	36 kg
Unit measures	456 x 279 x h 822 mm
Unit noise level	≤ 55 dB (A)
Unit protection grade	IPX4
Coolant	R134a
Humidifier water consumption	1L/h
Instruction manual	yes

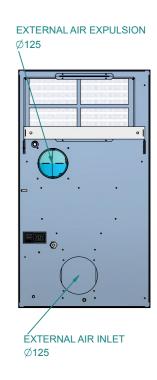
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TECHNICAL DRAW

OF THE INDOOR OPERATING UNIT





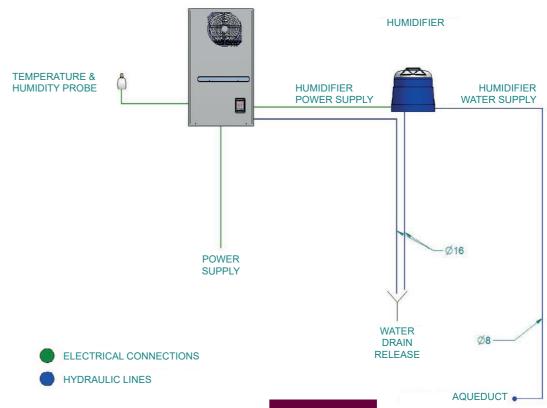






CONNECTIONS SCHEME

FOR ELECTRICAL, HYDRAULIC AND REFRIGERATION



^{*} The above specifications may change to achieve continuous performance improvement. Therefore MONTEC srl reserves itself the right to modify them without prior notice.

^{**} Data refers to an adequately insulated room, with particular reference to walls, doors, floor and windows.

^{***} Air temperature: outdoor 32°C, indoor 14°C

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