

UAV

Air handling units for
industrial drying

- › Reproduction of customized drying and ageing cycles to guarantee the treatment of products in all seasons with any external climatic variation
- › Efficient air handling unit made of AISI 304 stainless steel
- › Equipped with removable panels for easy access to the components completely contained within the body
- › The units are precharged with refrigerant and complete with liquid receiver, taps, safety valve, filter drier and sight glass



An ideal and impeccable drying

The UAV series models are refrigeration units designed for drying cured meats, hams and cheeses with the need of temperature and relative humidity control in medium-large rooms for industrial applications. The operation range is from +25°C to +10°C while the achievable humidity range varies from 60% to 80%.

The UAV series is offered with a capacity range of 7,2kW ÷ 87kW with a total room volume of 20m³ ÷ 250m³. All units can reproduce customized drying and ageing cycles, guaranteeing production in all seasons with any external climatic variation.

The UAV system is composed by an efficient floor standing air handling unit, made of AISI 304 stainless steel and equipped with removable panels that allow easy access to the components completely contained within the body.

The UAV refrigeration system is equipped with semi-hermetic compressor provided with integrated thermal protection and crankcase heater.

The refrigerant expansion is through thermostatic expansion valve.

The air-cooled condenser is remote, equipped with 4 or 6-pole fans and thermostatic speed variator with horizontal air flow to optimize condensing pressure.

The units are precharged with refrigerant and complete with liquid receiver, taps, safety valve, filter drier and sight glass.

A distinctive feature of the UAV range is the humidification-

dehumidification system, necessary for the implementation of the drying cycles.

Regulated by an electronic controller, the humidity control is performed thanks to the water taken from the water network to which the unit is connected and automatically introduced through spray nozzles.

The dehumidification phase precedes a heat recovery post-heating process.

The temperature inside the room is regulated by electric heating with an electronic control thermostat to secure precise and efficient operations.

Fresh air intake process in the room is managed by the electronic controller which allows highly effective centralized monitoring.

After positioning the unit inside or outside the room with suitable insulation, the installer needs to connect the remote condenser.

The correct operation of the machine can always be controlled through an electronic control board placed laterally and equipped with safety fuses.

The parameters and working times of the UAV units can be adjusted directly by using the control unit with digital display for a fast, simple and highly customizable setting by the user.

Standard configuration

- › Frascold semihermetic compressor + Thermal overload protection
- › Power supply 380-400/3N~/50
- › Air + Axial fan (remote)
- › Embedded main electrical switchboard and remote control panel with Vision Touch controller + switch to select static/ventilated evaporator
- › Hot gas defrost
- › Magnetothermal switches
- › Liquid line predisposition for connection to static evaporators
- › Cataphoresis to the evaporator and heat recovery coil
- › Remote air cooled condenser
- › Soft start on centrifugal fan (starting from 15HP unit)
- › Liquid Receiver + Liquid receiver shut off valves
- › Safety valve
- › Filter dryer
- › Sight glass
- › Four-pole condenser fan
- › Thermostatic valve expansion
- › Evaporator centrifugal fan
- › Air suction duct
- › Condensing unit with refrigerant charge
- › Switchboard with automatic switches
- › Adjustable calibration Hp switch with manual reset
- › Adjustable calibration Lp switch with automatic reset
- › Pressure controlled condenser fan speed regulator
- › Humidity control during dehumidification with heat recovery
- › Temperature control in hot with electric heaters
- › Humidity control in humidification with automatic water supply
- › Crankcase heater
- › Fresh air intake
- › Evaporator/heat recovery coil Copper/Aluminium with cataphoresis treatment
- › Heat recovery coil + heating with electrical heaters
- › Embedded main switchboard and remote control panel with Vision Touch Controller

Personalization options and accessories

Power supply:

- › 440/3~/60
- › 380-400/3N~/60

Condensation types:

- › Water cooled (city water with plate exchanger and pressure valve)

Evaporator and defrost:

- › Hot gas defrost + evaporator/heat recovery coil Steel/Aluminium

Dehumidification and heating:

- › Heat recovery coil + heating with hot water

Soundproofing options:

- › Insulation for outdoor application

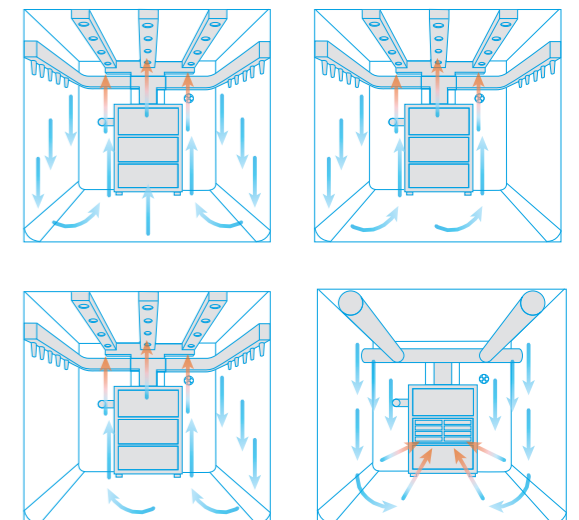
Accessories kit:

- › Standard "T"



Air distribution systems with textile channels

The UAV industrial drying units are equipped with large and efficient evaporators with centrifugal fan, capable of generating air flow from 1.500 to 14.600m³/h. This allows, thanks to the special galvanized sheet T-shaped ducts designed according to the room dimensions, an optimized distribution of the treated air in the room suitable for the required process. The T-shaped ducts are complete with motorized damper.

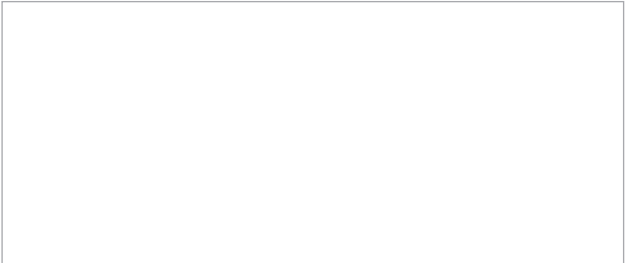


Technical data



Code	SB.UAV102RB812EAX	SB.UAV203RB812EAX	SB.UAV204RB812EAX	SB.UAV305RB812EAX	SB.UAV307RB812EAX	SB.UAV410RB812EAX	SB.UAV515RB812EAX	SB.UAV520RB812EAX	SB.UAV625RB812EAX	SB.UAV630RB812EAX	SB.UAV735RB812EAX
Refrigerant	R449A	R449A	R449A	R449A	R449A	R449A	R449A	R449A	R449A	R449A	R449A
Power supply [V/Ph~/Hz]	380-400/ 3N~/50	380-400/ 3N~/50	380-400/ 3N~/50	380-400/ 3N~/50	380-400/ 3N~/50	380-400/ 3N~/50	380-400/ 3N~/50	380-400/ 3N~/50	380-400/ 3N~/50	380-400/ 3N~/50	380-400/ 3N~/50
HP compressor	2	3	4	5	7,5	10	15	20	25	30	35
Cold room volume [m³]	20	30	40	60	75	90	130	160	180	200	250
Product quantity [kg]	400	800	1.200	1.600	2.000	2.400	3.200	4.800	6.400	8.000	10.000
PED category	2	2	2	2	2	2	2	2	2	2	2
Working temperature [°C]	+25 ÷ +10	+25 ÷ +10	+25 ÷ +10	+25 ÷ +10	+25 ÷ +10	+25 ÷ +10	+25 ÷ +10	+25 ÷ +10	+25 ÷ +10	+25 ÷ +10	+25 ÷ +10
Range RH [%]	60-80	60-80	60-80	60-80	60-80	60-80	60-80	60-80	60-80	60-80	60-80
Cooling capacity [Watt] [TC=10°C TA=30°C]	7.200	10.600	13.000	14.400	27.000	33.000	38.000	45.500	59.000	68.000	87.000

Responsible Editor: Zanotti S.p.A. Via M.L. King, 30 · 46020 Pegognaga (MN) · Italy · www.zanotti.com · P.IVA IT01856570203 · REA 220625



The present publication is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V. Daikin Europe N.V. has compiled the content of this publication to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this publication. All content is copyrighted by Daikin Europe N.V.