

# Air Handling Units



### WIZARD Series

The Wizard series of Air-Handling Units incorporate the entire design experience of Climaveneta in order to fully satisfy all market requirements in the various sectors of application. Tailored though massproduced industrial products, these high quality and reliable units guarantee total safety.

The WIZARD air handling units are suitable for both traditional application fi elds as hotels, museums, theatres, airports, banks, shops and specifi c sectors as hospitals, food industry, electronics or pharmaceutical industries and all the industrial applications with temperature or controlled-contamination processes.

#### Version

Different accessories and configurations are available as the brushless motors, the plate or wheel recuperators and the control systems for plug&play untis.

## **Features**

#### STRUCTURE

The range is made of 24 sizes for air fl ows up to 115.000 m³/h. The panels are 25, 42, 45 or 62 mm thick, according to the different kinds of application requiring different thermal and acoustic isolation.

The sandwich panels are available in galvanized steel sheet, pre-painted or plastic-coated galvanized steel sheet, aluminum or AISI 304 stainless steel sheet with isolation by injected polyurethane or mineral rock wool.

The frame is made of aluminum profi les available also in thermal cut version, for an higher thermal isolation, and in internally rounded version for hospital application.

Heat exchangers, fi Iters, humidifi ers, energy recovery systems, fans and any other component required in the units are selected to grant the best performances according to the customer requests.

## "EC" FANS

The option for fans with brushless motors allows for units with reduced dimensions. Controlled by means of a 0-10V signal even without a frequency inverter, these fans are very versatile and easy to be used.

## PLUG&PLAY UNITS

As an option, a complete control system is provided to handle all the units functions.

The electrical board is built-in and totally wired as all the control components such as 3-way valves, probes, damper motors and humidifiers.

## REDUCED TIMING AND COSTS

The plug&play units are ready to use without any further operation on site.

Compared to the traditional AHUs, the easier and quicker installation of the plug&play units results in a strong costs reduction solution.

All the signal and controls are verified and check with a final factory test before delivery. In case of units divided in sections, special connectors are provided to rebuild the signals lines on sites. These connectors are error-proof and don't required qualified technicians.

## LOW NOISE EMISSIONS

The WIZARD units are designed to minimize the acoustic impact in each operating condition.

In case of special applications, such as theatres, conference rooms or cinemas, it is possible to provide sound absorbing panels and customized sound attenuators.

# Controls

AHU 3000

The AHU3000 controller is featured as option for the air handling units. It offers functions and regulations able to satisfy the numerous combinations possible with these units. Furthermore this option enhances and simplifies the unit's commissioning, allowing also the interfacing towards other resources and devices. The keypad features aesthetic design, easy-to-use interface, smart LCD display. The regulation integrates numerous characteristics, depending on the unit's configuration and selected options: command of the dampers and of the free-cooling; regulation of the resources for heating, cooling as well as humidity and air quality; regulation of supply and exhaust fans with control in constant flow or constant pressure. The diagnostics includes a complete alarm management, with the the "black-box" and alarm logging functions for enhanced analysis of the unit operation. Supervision can be easily developed via proprietary devices or the most common protocols as ModBus, Bacnet. Compatibility with the remote keyboard (connected up to 200 m.). Availability of an internal real time clock for operation scheduling (4-day profiles with 10 hour belts).







WIZARD			300	380	440	570	710	920	1070	1220
Air Flow (Speed 1,5 m/s)	(1)	m³/h	650	810	970	1130	1400	1700	2200	2650
Air Flow (Speed 2 m/s)	(1)	m³/h	860	1070	1300	1500	1870	2300	2950	3550
Air Flow (Speed 2,5 m/s)	(1)	m³/h	1080	1340	1620	1880	2330	3650	3650	4450
Air Flow (Speed 3 m/s)	(1)	m³/h	1300	1600	1950	2250	2800	4400	4400	5300
WIZARD			1530	1720	2080	2300	2920	3600	4300	6060
Air Flow (Speed 1,5 m/s)	(1)	m³/h	3200	4200	4900	5600	6300	7800	9300	12500
Air Flow (Speed 2 m/s)	(1)	m³/h	4350	5600	6500	7450	8400	10300	12400	16700
Air Flow (Speed 2,5 m/s)	(1)	m³/h	5450	7000	8200	9300	10500	12900	15600	20900
Air Flow (Speed 3 m/s)	(1)	m³/h	6550	8400	9800	11200	12600	15500	18600	25100
WIZARD			7500	8480	11400	13900	16580	19860	22920	26400
Air Flow (Speed 1,5 m/s)	(1)	m³/h	15600	18100	21400	26400	32200	38000	46500	57000
Air Flow (Speed 2 m/s)	(1)	m³/h	20700	24200	28500	35200	42800	51000	62000	75000
Air Flow (Speed 2,5 m/s)	(1)	m³/h	25900	30300	35600	44900	53500	64000	77500	95000
Air Flow (Speed 3 m/s)	(1)	m³/h	31100	36300	42800	52700	64300	76500	93500	115400
Notes:										



Notes: 1 Air fl ows of the 24 sizes at different face velocities on the heat exchange coils.