

- The connection pipes must be suitably supported so that they do not weigh down on the machine.
- Avoid rigid connections between the machine and the pipes, and install vibration dampers.
- For temperatures, minimum and maximum water flow rates and the volumes of water in the heat exchanger hydraulic circuit refer to the technical bulletin.
- Any heating elements installed to prevent the pipes from freezing must be kept away from devices, sensors and materials that the heating elements could damage or cause to malfunction (for example, temperature sensors, plastic components and power cables).
- The carrier fluid in the water circuits must be prevented from flowing in the reverse direction as this can damage the pumps or cause by-passes, affecting the flow and temperature of the system.

### AIR FILTERS

The machine in its basic configuration is supplied with G4+F7 filters on the delivery line and G4 filters on the return line.

It is possible to ensure a higher degree of filtration on the delivery line and a better deodorising effect with class F9 bag filters or F7 activated carbon bag filters, which are available on request and as OPTIONAL accessories.

### RAINPROOF HOOD AND MESH ON EXTERNAL AIR INTAKE

A rainproof hood with integrated anti-bird mesh is available on request for the external air intake. The accessory prevents small objects or drops of rain water from entering the machine through the air intake when there are no ducts connected to the external air intake and the machine is installed outdoors.

The machine is supplied with the hood already mounted (increase of the overall dimensions of about 150 mm).

Weight [kg]							
MODEL	3000	5000	7500	10000	12500	15000	20000
Rainproof hood and mesh on external air intake	4	7	10	14	17	19	26

### ROOF

The "aluminium roof" accessory must be used as the main form of protection against bad weather when the machine is installed outdoors.

The roof is provided already mounted on the unit (if the machine is sent already assembled), or mounted on each section.

Weight [kg]							
MODEL	3000	5000	7500	10000	12500	15000	20000
Roof	17	23	25	29	32	38	44

### EXTERNAL, SUPPLY, RETURN AND EXHAUST AIR DAMPERS

If the airflows in the network of air distribution ducts are shut off when the machine is stopped, it is possible to fit dampers on the external air intake, on the air supply line, on the air return line and on the exhaust air line.

These are available as optional accessories. The dampers are provided already mounted on the machine and with a servo drive for opening and closing. The control system of the machine is connected to the servo drives which open and close the dampers according to the control logic.

The individual dampers can be purchased separately.

Weight [kg]							
MODEL	3000	5000	7500	10000	12500	15000	20000
Fresh air damper	5	8	11	15	18	21	28
Supply air damper							
Return air damper							
Exhaust air damper							

### INCREASED USEFUL STATIC PRESSURE OF THE FANS.

If a useful static head higher than the 250 Pa of the standard configuration is required for the air distribution ducts, an oversize version of both the delivery fan and the return fan can be provided to increase the useful static pressure up to 400 Pa.

### VARIABLE SPEED HEAT RECOVERY UNIT.

The variable speed heat recovery unit is an optional component that can be installed in the place of the fixed speed heat recovery unit.

### RECIRCULATION DAMPER SECTION (ACCESSORY).

If recirculation of a part of the extracted air is required, an additional section with motorised recirculation damper is available as an accessory.

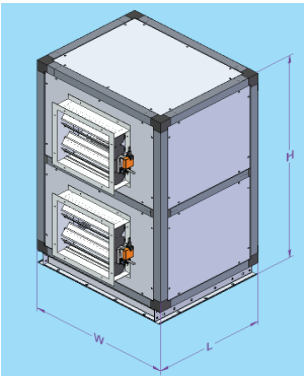
The recirculation damper can be controlled in different ways:

- With CO<sub>2</sub> probe, also available as an accessory. If the amount of CO<sub>2</sub> in the extracted air exceeds the threshold set on the WIZARDX controller, the external air intake damper will open and the recirculation damper will close, while if the CO<sub>2</sub> remains below the threshold the recirculation damper will open proportionally to reduce energy consumption.
- Start-up with total recirculation The unit starts up with the external air intake damper closed and the recirculation damper completely open. When the set conditions are reached, the machine starts working entirely with external air.
- Periodic air renewal: the machine forces 100% of external air at precise intervals set on the controller.

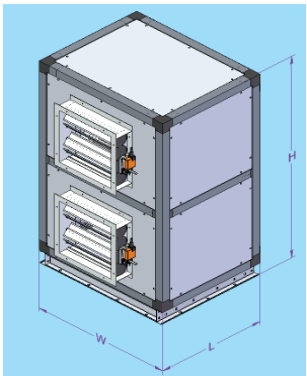
For the assembly of the "recirculation damper" section, see the chapter "JOINING THE SECTIONS".

The dimensional drawing of the "recirculation damper" section is supplied together with all the accompanying documentation.

MODEL	W	H	L	N. SECTIONS	WEIGHT
	[mm]	[mm]	[mm]		[kg]
3000	1000	1600	790	1	124
5000	1400	1600	790	1	150
7500	1500	2200	790	1	182
10000	1800	2200	790	1	202
12500	2000	2300	790	1	224
15000	2200	2360	790	1	238
20000	Not available				



MODEL	W	H	L	N. SECTIONS	WEIGHT
	[mm]	[mm]	[mm]		[kg]
3000	1000	1600	750	2	130
5000	1400	1660	790	2	157
7500	1500	2260	790	2	191
10000	1800	2260	790	2	212
12500	2000	2360	790	2	236
15000	2200	2420	790	2	250
20000	2500	2820	860	2	290



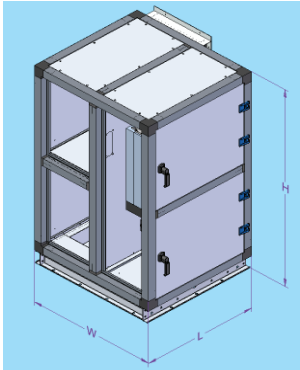
### CO<sub>2</sub> SENSOR

The WIZARDX control system can be integrated with a CO<sub>2</sub> sensor. Once a threshold level has been set for the CO<sub>2</sub> content in the return air, the WIZARDX control system operates in the following ways:

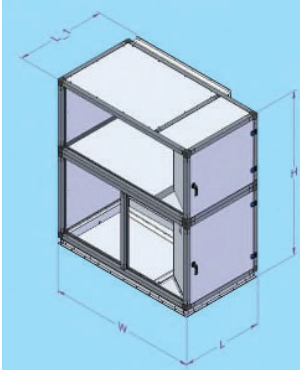
- Modulation of air flow on two levels, minimum and maximum: The air flow of the fans is set to the minimum level when the CO<sub>2</sub> is below the threshold level, and automatically set to the maximum level when the threshold is exceeded.
- Modulation in combination with the recirculation damper accessory: in this case the fans maintain the fixed flow rate while the recirculation damper is opened and closed as described in the paragraph on the accessory RECIRCULATION DAMPER SECTION.

### STEAM HUMIDIFIER SECTION (ACCESSORY).

MODEL	W	H	L	N. SECTIONS	WEIGHT
	[mm]	[mm]	[mm]		[kg]
3000	1000	1600	900	1	185
5000	1400	1600	900	1	223
7500	1500	2200	900	1	310
10000	1800	2200	1100	1	366
12500	2000	2300	1100	1	406
15000	2200	2360	1200	1	453
20000	Not available				



MODEL	W	H	L	N. SECTIONS	WEIGHT
	[mm]	[mm]	[mm]		[kg]
3000	1000	1660	900	2	194
5000	1400	1660	900	2	234
7500	1500	2260	900	2	326
10000	1800	2260	1100	2	385
12500	2000	2360	1100	2	427
15000	2200	2420	1200	2	476
20000	2500	2820	1300	2	538



If humidification is required indoors, there is an additional section available as an accessory that has an immersed electrode steam generator connected to a steam distribution ramp located in the section for the supply of air. The section comes with a drip tray. The delivered steam flow rate is calculated according to the size of the WIZARDX unit and the power consumption of the steam generator is defined in relation to this. Specific probes detect the humidity to allow the main controller of the WIZARDX to regulate the steam generator accordingly by means of a special 0-10V signal.

Humidity control can be for the flow of supply or return.

The section is designed for quick mechanical and electrical connection. In this case, the switchboard of the WIZARDX is supplied with the power and protection parts required for use of the steam generator.

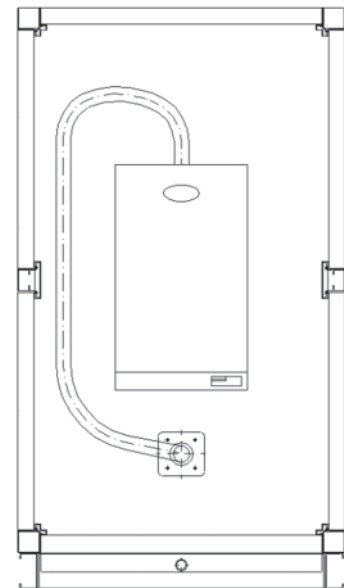
Before positioning and installation of the accessory, read the chapter "INSTALLING THE UNIT ON SITE". Follow all the instructions so as not to cause malfunctioning or breakage of the unit.

The steam generator needs to be connected to the hydraulic circuit for the supply and draining of water; observe the instructions in the user manual provided with the steam generator accessory.

Refer to the user manual of the steam generator for the specifications of the supply and draining of water.

The accessory is powered directly from the switchboard of the WIZARDX unit. See the chapter "JOINING THE SECTIONS" for the electrical and mechanical connection between the humidification section and the WIZARDX unit.

The section is equipped with a condensate collection tank for conveying the condensed steam towards the condensate drain of the tank. It is therefore necessary to set up a specific connection to the condensate drain on site, following the instructions in the chapter "HYDRAULIC CONNECTION OF THE CONDENSATE DRAIN".



The dimensional drawing of the "steam humidifier" section is supplied together with all the accompanying documentation.

#### **Immersed electrode humidifier (optional component).**

Do not use detergents or solvents for cleaning the plastic components.

To remove scale, use a solution containing 20% vinegar or acetic acid and then rinse with water.

**ACCESSORIES/OPTIONS** that can be used even after installation of the unit.

<b>ACCESSORIES/OPTIONS</b>	<b>PURCHASABLE</b>
Useful pressure 400 Pa	✓
Sorption variable speed rotary recuperator	✓
Steam humidification	✓
Electric pre-heating coil	✓
Electric post-heating coil	✓
H <sub>2</sub> O pre-heating coil	✓
H <sub>2</sub> O post-heating coil	✓
Supply air inlet damper	✓
Supply air outlet damper	✓
Return air inlet damper	✓
Return air outlet damper	✓
Recirculation damper (section with three dampers)	✓
CO <sub>2</sub> Sensor	✓
F7 activated carbon bag filters	✓
F9 bag filters	✓
Configuration with connectors and inspection doors on left side	X
Unit divided into five sections	X
Fully demountable unit	X
Rainproof hood + EA anti-bird mesh	✓
Aluminium roof	✓