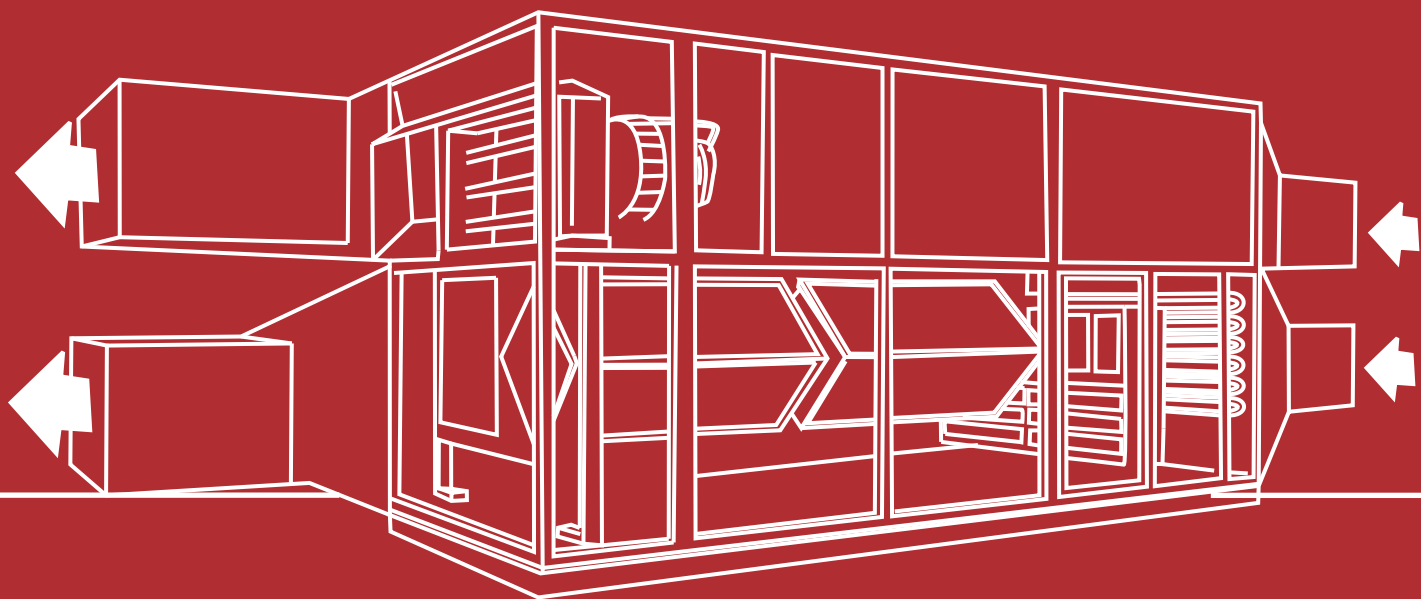
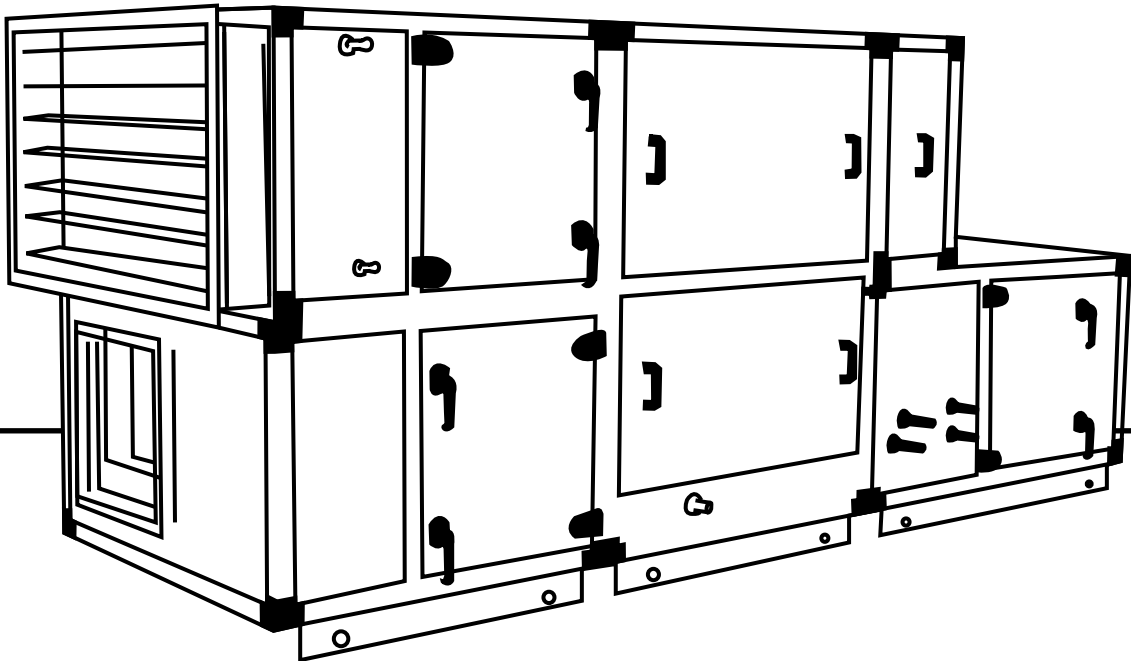


C o o l i n g   a s   v a s t   a s   c o m f o r t



## Air Handling Unit(AHU)

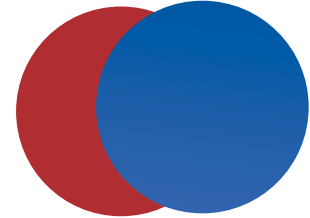
- Low Noise.
- High Quality.
- Super Silence.
- High Efficiency.
- Compact Dimensions.



## DESCRIPTION

### Air Handling Unit:

- AHU – From 2000 to 50000 cfm.
- Heat recovery section.
- Multi section and double.
- Easy to install, use and maintain.
- Available in Several type and model.



## General features

### Control Section

Supporting frame made of special aluminum profiles, connected with aluminum corners. Construction side are closed with thermo and acoustic insulated panels. In structure (UU universal section) are necessary elements for air treatment.

### Side panels

Panels made of galvanized sheet steel with powder coating at their external side (RAL7035) and heat and acoustic insulated middle layer.

### BU – Fan section

The section consists of centrifugal fan with forward or backward curved impeller. The type of fan is selected depending to the specific requirements, according to the air flow and resistance of the installation:

BDB – Belt-driven double inlet centrifugal fan with backward curved impeller, standard version (section 03.07) CBP – Belt-driven double inlet centrifugal fan with forward curved impeller (section 03.08) only for models AHU06, AHU09, AHU12

### TU – Thermal section

Include heating and/or cooling section (heat exchanger), drop separator and drain tray.

## AFU – Air filter section

Air filter section contains one or two consequently mounted air filters with different efficiency from lower to higher class from G2 to F9, according BDS EN 779 (section 02.03). For rough dust several air filter cassettes type AFC-V (class G3) or AFC-Z (class G4) are mounted together. The cassettes slide into the section through glides (rails) and are fixed with profiles and bolt connection. For fine purification filter wall made of several bad filters type AFC-B (class F6–F8). The cassettes are fixed to the filter wall through reamers. Air filter cassettes are disposable; they are consumables for the air handling units. In more specific the section could be completed with other type air filters: reusable metal filters, carbon or absolute filters, class H10–H13.

## CMU–Mixing section

Build of one or two universal sections, horizontally or vertically adjoined. Equipped with three dampers (PRJ) –multiple leaf damper, section 02.09):

Outlet (exhaust air)

Inlet (fresh air)

Mixing –mounted between both streams

## RU–REC / RU–ROT Recuperative (heat recovery) section

Recuperative heat exchanger “Air–air” incorporated in double deck construction:

RU–REC with plate heat exchanger type REC–AL, efficiency 50–61% (section 02.07).

RU–ROT with rotary regenerative heat exchanger type RRU, efficiency 67–80%.

## Options and additional features

### In air handling units could be incorporated also:

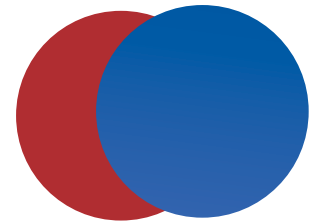
- Fans with 2-speed motors.
- Fans with direct-drive motors and inverter.
- Heating section with working fluid – steam.
- Steam humidifier.

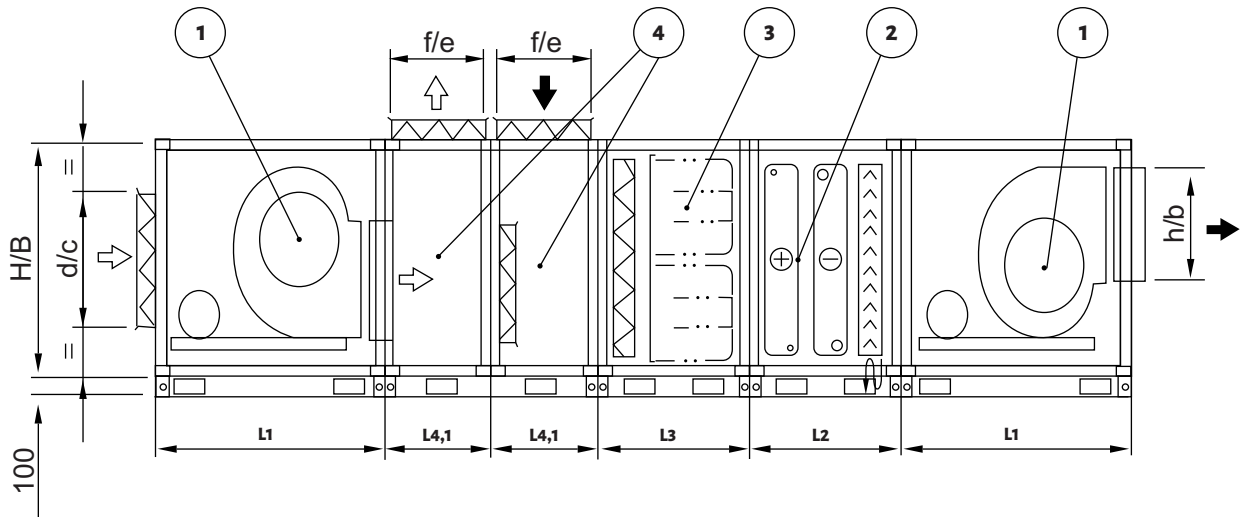
### For outdoor installation:

- Sections with increased insulation thickness (50mm) for outdoor installation (AHU 06– AHU20).
- Additional roof covers to lead the rain water.
- Protection guard for direct discharge with net or NJR.
- Precast unit made of hot galvanized profile tube and adjustable in height.
- Steps (feet) for installation on surface with inclination up to 5%.

### Management, control and automation:

- Anti-frost protection of water sections.
- Torn belt signalization.
- Dirty filter signalization.
- Electric motor (actuator) for control valves (PJR, PJR-BP).
- 3-way valves with actuator for heating and cooling sections.
- Automatic defrost of recuperative heat exchanger (REC) and possibility of working in “free cooling” mode”
- Speed control of the rotary regenerative heat exchanger
- Air temperature and/or humidity remote tracking
- Electric motor (actuator) for control valves (PJR, PJR-BP).
- Electric board for control and automation





- 1** BU – Fan section
- 2** TU – Thermal section
- 3** AFU – Air filter section with two-stage cleaning
- 4** CMU – Mixing section

MODEL	Unit	Air handling unit								
		AHU 06	AHU 09	AHU 12	AHU 16	AHU 20	AHU 24	AHU 30H	AHU 36H	AHU 45H
AirFlow	M3/h	3000-6500	5000 - 9500	6800-12500	9000-16500	11000-21000	14000-25000	17000-31000	20000-37000	23000-48000
B	mm	1350	1600	1850	2100	2360	2360	2360	2360	2360
H	mm	950	1050	1150	1250	1350	1500	1700	1900	2300
L1	mm	1300	1400	1500	1500	1700	1800	1900	2100	2400
L2	mm	800	800	1000	1000	1000	1000	1200	1200	1200
L3	mm	1000	1000	1000	1000	1000	1200	1200	1200	1200
L4.1	mm	600	600	600	700	800	800	1000	1000	1000
b=h	mm	450	500	570	640	720	800	900	1000	1300
c	mm	800	1000	1200	1200	1400	1600	1600	1600	1800
d	mm	400	500	500	700	800	800	1000	1200	1200
e	mm	800	900	1200	1300	1400	1600	2000	2000	2200
f	mm	300	400	400	500	600	600	600	700	800