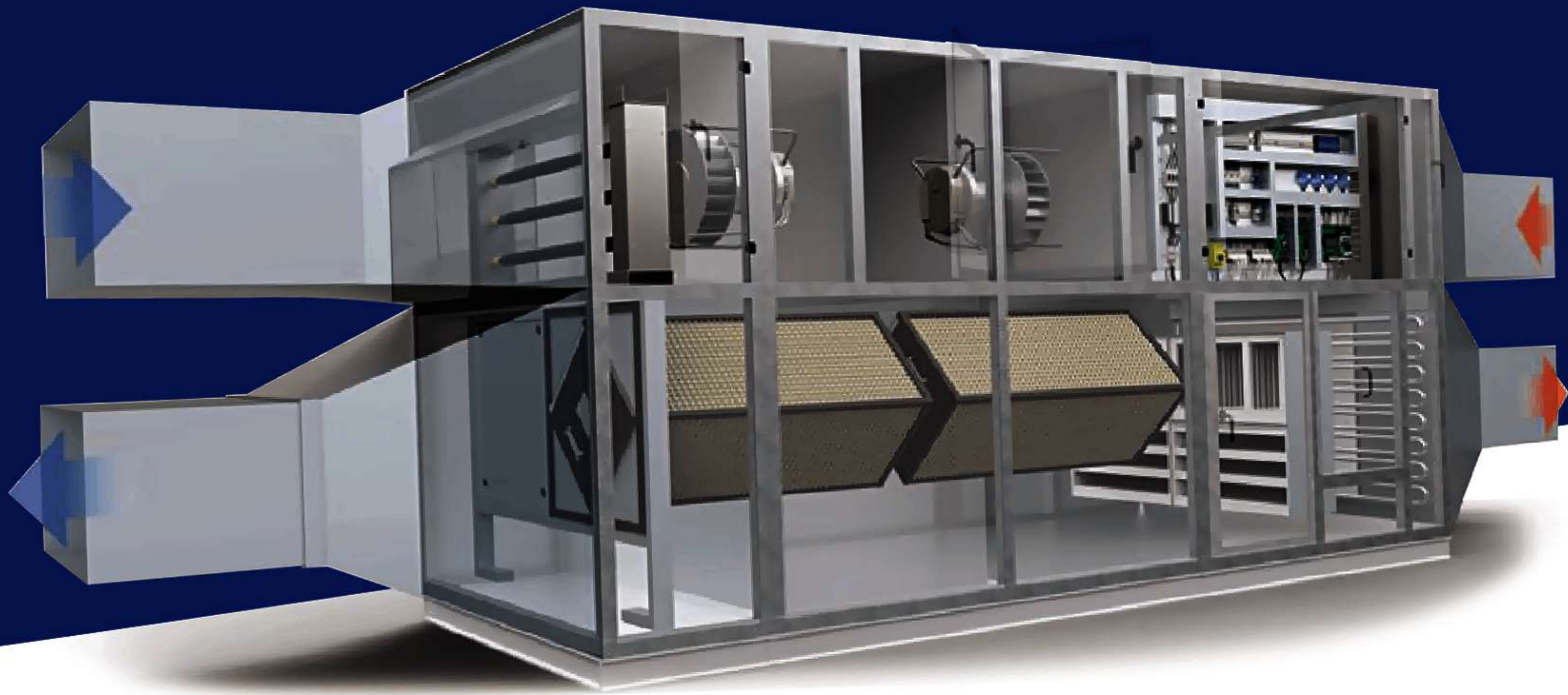


AIR HANDLING UNIT- AHU



Standard and hygienic models

High efficiency with low noise & dimensions

Options and additional features

In air handling units could be incorporated also:

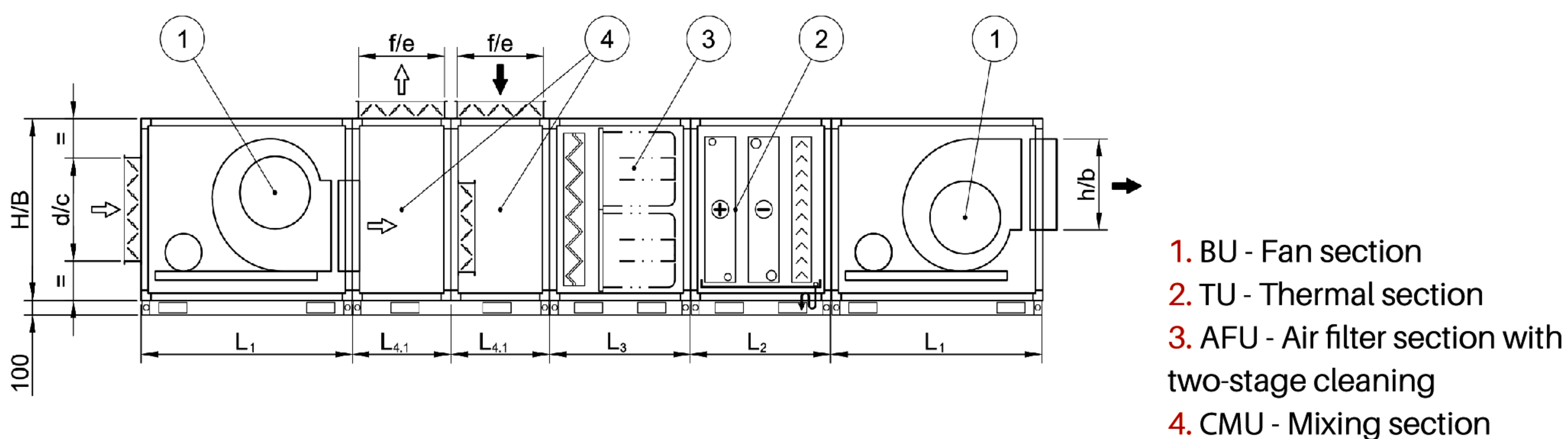
- Fans with 2-speed motors
- Fans with direct-drive motors and inverter
- Heating section with working fluid – steam
- Steam humidifier

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 board for control and automation



Model	Air flow V [m³/h]	B [mm]	H [mm]	L ₁ [mm]	L ₂ [mm]	L ₃ [mm]	L _{4.1} [mm]	b=h [mm]	c [mm]	d [mm]	e [mm]	f [mm]
AHU 06	3000÷6500	1350	950	1300	800	1000	600	450	800	400	800	300
AHU 09	5000÷9500	1600	1050	1400	800	1000	600	500	1000	500	900	400
AHU 12	6800÷12500	1850	1150	1500	1000	1000	600	570	1200	500	1200	400
AHU 16	9000÷16500	2100	1250	1500	1000	1000	700	640	1200	700	1300	500
AHU 20	11000÷21000	2360	1350	1700	1000	1000	800	720	1400	800	1400	600
AHU 24	14000÷25000	2360	1500	1800	1000	1200	800	800	1600	800	1600	600
AHU 30H	17000÷31000	2360	1700	1900	1200	1200	1000	900	1600	1000	2000	600
AHU 36H	20000÷37000	2360	1900	2100	1200	1200	1000	1000	1600	1200	2000	700
AHU 45H	23000÷48000	2360	2300	2400	1200	1200	1000	1300	1800	1200	2200	800

Features

- From 2000 to 50000 cfm
- Available in Several type and model
- High efficiency
- High quality
- low noise
- super silence
- heat recovery section
- compact dimensions
- multi sections and double
- bms
- Easy to install, use and maintain

Description

Construction

Supporting frame made of special aluminium profiles, connected with aluminium corners. Construction sides are closed with thermo and acoustic insulated panels. In this structure (UU universal section) are incorporated all 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 AHU 06, AHU 09, AHU 12

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 bag 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%.

