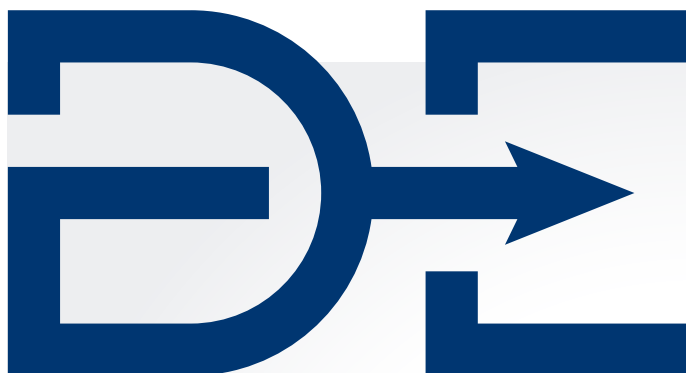


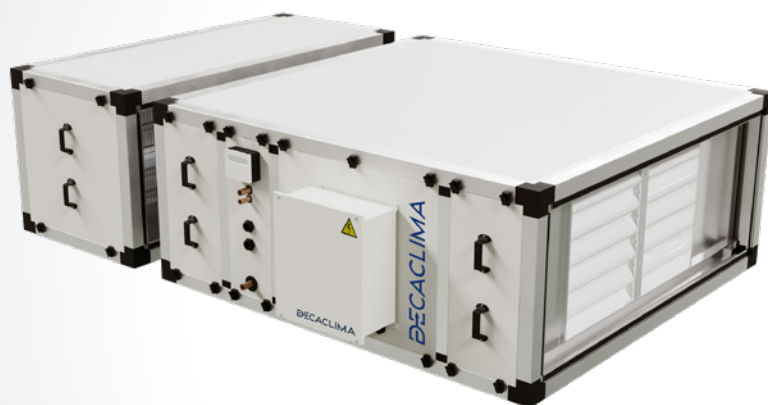
COMPACT air conditioning units that are small-size, Plug&Play and with a hygienic construction



LOW PROFILE UNITS
ACB / ACBV

ROOF-TOP UNITS
ACCI / ACCE

VERTICAL UP-FLOW UNITS
ACV UP-FLOW





DECACLIMA

AIR CONDITIONING SOLUTIONS

Company specialised in air conditioning equipment and solutions as well as air treatment and purification for clients requiring personalised solutions and with high technical requirements; especially air treatment units for applications in highly demanding sectors such as the healthcare, pharmaceutical and food sectors as well as automotive industry and other similar types of industries.

HIGH-LEVEL EQUIPMENT

High-level equipment for critical applications that integrate specific filtration requirements, including HEPA in the same unit, constant flow rate control, temperature control of air supply or return, control of humidity and built using stainless ASI 314/316 steel and fully compatible with VRF solutions on the market.

PLUG&PLAY

Our units are designed as PLUG&PLAY, making them easy to connect and unifying all the control systems required **for any application or overall solution**. Our units also use known communication protocols such as Modbus, BACnet, KNX, LonWorks, and others.

Our **commitment** towards overall sustainability, excellence and innovation are the three essential pillars we use to manage our future as a company at the service of our clients.



SUSTAINABILITY

At DECACLIMA, our commitment towards sustainability can be seen in how our products are designed to consume the minimum amount of natural resources and in our work on environmental projects to achieve global wellness and a circular economy.



EXCELLENCE

Excellence is a set of concepts to achieve maximum efficiency in each of the projects we work on with our clients, including entrepreneurial excellence, which is DECACLIMA's main objective.



INNOVATION

Our Focus on customer service, our commitment towards environmental sustainability and excellence in our projects makes innovation the main resource of DECACLIMA for creating new projects and technological solutions within and outside our company.

QUALITY

DECACLIMA is a young services company with its own technical team that is highly experienced in the air conditioning sector. Their clear focus on the client is noteworthy, providing value, innovation and efficiency to each one of the designs and units.



SERVICE

We tailor the service to each of our client's needs and we accompany them throughout the entire process; from the start of the design, to the commissioning of the installation.



ENGINEERING

We are specialised in designing and manufacturing solutions and tailor made equipment. Our products integrate the most innovative and efficient equipment to achieve the best possible result.



CONSTRUCTION

At DECACLIMA we use the best construction systems to guarantee an improved operation and finish of our equipment. An illustrative example is the construction of the AHU (Air Handling Unit).



STRUCTURE

Built using aluminium sections with sanitation baseboard. A closed-cell neoprene seal is installed on the section to guarantee the water-tightness of the union with the panels.

The union between sections is carried out using pressure cast angled nylon joints.

Available as an optional treatment for corrosive environments and interior and exterior stainless steel finishes.

SUPPORT BRACKETS AND FRAMES

We adapt the supporting structures to the needs of the client, occasionally manufacturing supporting structures such as feet supports, Omegas or perimeter frames depending on the fixing needs of each installation. The frames can be made of a UPN profile forming a self-supporting base.



CASING

The standard panels are 25 to 45 mm thick sandwich type with a lacquered panel.

On special order, we can supply units with up to a 100 mm thick panel and a galvanised or stainless steel interior finish. We also have acoustic interior panels for low noise level units.





INSPECTION DOORS

Inspection doors that facilitate conducting maintenance on the unit and ensure water-tightness under overpressure as well as low pressure conditions.

We also manufacture units with water-tight doors with interior locks made of aluminium or with a pressurised perimeter for applications that require it.

TRAYS AND HATCHES

Manufactured in stainless AISI304 steel and with a drop to collect condensates as standard. The outlet tube provides 3/4" with a 20 mm outer thread to connect with the drain system. Thermal insulation is installed on the outside.



WATER-TIGHT SEAL

The regulation hatches are entirely manufactured using extruded aluminium with aerodynamic mobile slats and a water-tight seal.



GEAERS WITH SHAFT

Movement is transmitted using gears with a shaft ready to install actuators or manually actuated handles. These handles can be supplied in steel or aluminium.



DECACLIMA



COMPACT
 air conditioning units that are small-size, Plug&Play and with a hygienic construction



**SMALL SIZE PLUG&PLAY AIR
 CONDITIONING UNITS
 ACB / ACBV**



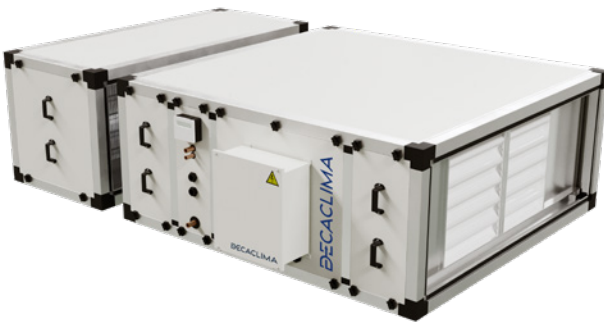
**ROOF-TOP UNITS
 ACCI / ACCE**



**VERTICAL UP-FLOW UNITS
 ACV**

COMPACT air conditioning units that are small-size, Plug&Play and with a hygienic construction

The COMPACT series of air conditioning units are manufactured using high quality hygienic construction standards, a Plug&Play operation and built-in control compatible with any standard BMS protocol on the market. These units are ideal for air conditioning critical areas such as hospitals, clean rooms, laboratories or for health applications. The units can be connected to coolers, direct expansion or VRF units on the market.



MAIN CHARACTERISTICS

- Hygienic construction in accordance with UNE/EN 13053, DIN 1946-4 and ASHRAE 170.
- G4 and F9 filtering.
- Dirty filter pressure switch.
- Plug Fan EC fans with flow rate regulator or constant pressure.
- AISI 304 stainless steel condensates tray.
- Double sided panels with a 30 mm interior thermal insulation.
- Smooth interior.
- Plug & Play control panel.
- PLC that can be connected to different BMS protocols.
- Low noise level.

STANDARD FINISHES

- Galvanised interior / painted exterior.
- Aluminium structure with thermal bridge.

OPTIONS

- HEPA filtration module.
- Humidifier module.
- UVc germicidal chamber.
- PID temperature and humidity control.
- AISI 304 stainless steel interior.
- Panel with 50 mm insulation.
- Canopy for use outdoors.
- Other configurations in accordance with the requirements.

CONFIGURATIONS

- ACB: Horizontal low profile units.
- ACBV: Vertical low profile units.
- ACCI: Roof-top units for installation indoors.
- ACCE: Roof-top units for installation outdoors.
- ACV UP-FLOW: Bi-directional vertical UP-FLOW units.

VERSIONS

- For direct expansion and VRF.
- For water.



Operation

For an easy installation and operation of all COMPACT series equipment, they may be equipped with specific controls that integrate the processes required by the air conditioning unit and establish communications with the building's BMS via any communications protocol.

Different versions of control exist for the most common applications, thus facilitating the integration of the project:



BASIC CONTROL

Designed for basic applications that do not require a strict control of the settings; ideal for use in comfort areas.

- ON / OFF
- Operating mode selection
- Temperature setting
- Constant flow rate ventilation
- Dirty filter indication
- 3 way valves outlet ON/OFF with 2 and 4 ducts
- Modbus RTU communication



LABORATORY CONTROL

Fully programmable control with functions that can be adapted to the needs of the client's project and especially designed for rooms requiring a control that is configurable and adaptable to the process such as operating rooms, clean rooms or isolation rooms.

- ON / OFF
- Operating mode selection
- Temperature setting
- Constant flow rate ventilation
- Outlet for extraction
- Outlet for exterior air mixture hatches
- Speed settings
- Pressure and CO₂ probe inlet
- Dirty filters indication
- Modulating 3 way valves outlet with 2 and 4 ducts
- Modbus RTU communication

ENVIRONMENTAL CONTROL

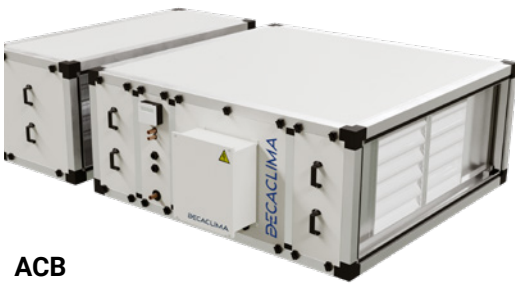
Control based on an open programming PLC to control the temperature and humidity of the room as well as settings to achieve a thermal stability inside the room regardless of the condition of the exterior air that is entering the room. Specifically designed for laboratories, surgery rooms, document files, museums or locations that require very stable environmental conditions.

- ON / OFF
- Operating mode selection
- Temperature setting
- Humidity setting
- Constant flow rate ventilation
- Outlet for extraction
- Outlet for exterior air mixture hatches
- Air supply T/H limiting probe
- Speed settings
- Pressure and CO₂ probe inlet
- Dirty filters indication
- Modulating 3 way valves outlet with 2 and 4 ducts
- Modulating outlet to the dehumidifier
- Modbus RTU communication

Low profile units

ACB / ACBV

Low profile air conditioning units with a horizontal construction (ACB) or vertical construction (ACBV) to be installed in tight areas such as technical ceilings. The adaptation of the manufacturing to the client's project allows manufacturing units tailored to each need.



ACB



ACBV

Technical characteristics

Model		ACB ACBV 1.0 7 19 DX/Ho	ACB ACBV 1.5 9 19 DX/Ho	ACB ACBV 3.0 20 19 DX/Ho	ACB ACBV 4.0 28 19 DX/Ho
COOLING CAPACITY	kW	7.1	9	20	28
	TR	2	2.6	5.7	8
HEATING CAPACITY	kW	8.2	10.5	22	31
	KCAL	7052	9030	18920	26660
FLOW RATE	m ³ /h	1000 (800-1000)	1500 (1100-2000)	3000 (2300-3500)	4000 (3600-4500)
	CFM	590	880	1800	2350
NOISE LEVEL	DB A	42	42	47	49
STATIC PRESSURE	PA	450	450	450	450
POWER SUPPLY	V	1x200-230 V 50/60 Hz	1x200-230 V 50/60 Hz	1x200-230 V 50/60 Hz	1x200-230 V 50/60 Hz
FAN	TYPE	PLUG FAN EC	PLUG FAN EC	PLUG FAN EC	PLUG FAN EC
	kW	0.9	1.15	1.44	2.03

*Noise levels calculated at 1 m from the free discharge and inlet unit for the indoor unit.

Dimensions mm

Model		ACB ACBV 1.0 7 19 DX/Ho	ACB ACBV 1.5 9 19 DX/Ho	ACB ACBV 3.0 20 19 DX/Ho	ACB ACBV 4.0 28 19 DX/Ho
LENGTH (L)	mm	1600	1600	1600	1700
WIDTH (W)	mm	1050	1050	504	1950
HEIGHT (H)*	mm	475	475	504	504
WEIGHT	kg	115	115	152	178
HEPA MODULE	kg	400	400	400	400
HUMIDIFIER MODULE	kg	300	300	300	300
HATCHES MODULE	kg	300	300	300	300

*Modules add to the total length of the air conditioning unit.

*HEIGHT (H): varies depending on the mounting method. Guides for suspending the unit from the ceiling Height + 30 mm. Frame height + 50 mm.

*The ACB V vertical version does not allow installing the dehumidifier module.

The nominal cooling capacities under conditions: Return 27° CBS/19° CBH, outdoor temperature 35° CBS. The nominal heating capacities under conditions: Return 20° CBS, outdoor temperature 7° CBS/6° CBH. Range in indoor operating conditions: Cooling 17° CBS to 32° CBS heat 10° CBS to 28° CBS. Range in outdoor operating conditions: Cooling 10°C to 45°C Heat -7°C to 24°C.

Roof-top units

Air conditioning units designed to be installed on the roof-tops of buildings and can also be installed indoors (ACCI) as well as outdoors (ACCE).

ACCI / ACCE



ACCI

Technical characteristics

Model		ACCI ACCE 3.0 20 19 DX/Ho	ACCI ACCE 4.5 28 19 DX/Ho	ACCI ACCE 6.0 33.5 19 DX/Ho	ACCI ACCE 9.0 56 19 DX/Ho	ACCI ACCE 12.0 67 19 DX /Ho
COOLING CAPACITY	kW	20	28	35	56	67
	TR	5.7	8.0	10.0	15.9	19.1
HEATING CAPACITY	kW	22.5	28.5	45	61	71
	KCAL	19350	24510	38700	52460	61060
FLOW RATE	m ³ /h	3000 (2500-3500)	4500 (3500-5000)	6000 (5000-6500)	9000 (8000-9500)	12000 (10000-13000)
	CFM	1800	2700	3500	5300	7000
NOISE LEVEL	DB A	52	52	56	56	61
STATIC PRESSURE	PA	350	350	400	400	400
POWER SUPPLY	V	3x380-415 V 50/60 Hz	3x380-415 V 50/60 Hz	3x380-415 V 50/60 Hz	3x380-415 V 50/60 Hz	3x380-415 V 50/60 Hz
REFRIGERANT	-	R410A/R32	R410A/R32	R410A/R32	R410A/R32	R410A/R32
FAN	TYPE	PLUG FAN EC	PLUG FAN EC	PLUG FAN EC	PLUG FAN EC	PLUG FAN EC
	kW	1.63	2.49	3.25	5.08	6.61

*Noise levels calculated at 1 m from the free discharge and inlet unit for the indoor unit.

Dimensions mm

Model		ACCI ACCE 3.0 20 19 DX/Ho	ACCI ACCE 4.5 28 19 DX/Ho	ACCI ACCE 6.0 33.5 19 DX/Ho	ACCI ACCE 9.0 56 19 DX/Ho	ACCI ACCE 12.0 67 19 DX /Ho
LENGTH (L)	mm	2000	2000	2000	2000	2000
WIDTH (W)	mm	900	1200	1500	1500	1600
HEIGHT (H)*	mm	920	920	460	460	580
WEIGHT	kg	330	330	460	460	580
HEPA MODULE	kg	600	600	600	800	800
HUMIDIFIER MODULE	kg	600	600	600	800	800
HATCHES MODULE	kg	400/300 (WITH INDOOR/OUTDOOR HATCH)				

*Modules add to the total length of the air conditioning unit.

Vertical UP-FLOW units

ACV UP-FLOW

Bidirectional vertical air conditioning units with a hygienic construction for UP-FLOW operation and especially designed to be easily transported using lifts, hoists or through 80 cm doors, making them ideal for use during building renovations. These units may be configured with a bottom or top supply and return.

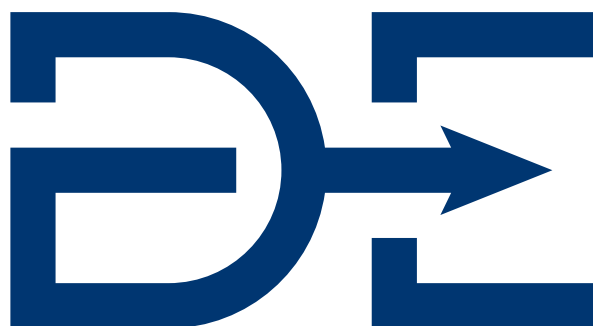


Technical characteristics

Model		ACV UP-FLOW 2.0 14 18 DX T	ACV UP-FLOW 3.0 20 18 DX T	ACV UP-FLOW 4.0 26 18 DX T	ACV UP-FLOW 4.5 30 18 DX T
COOLING CAPACITY	kW	13.17	19.74	26.53	29.91
	TR	3.7	5.6	7.5	8.5
HEATING CAPACITY	kW	12.31	18.46	24.61	27.69
	KCAL	10587	15876	21165	23813
FLOW RATE	m ³ /h	2000	3000	4000	4500
	CFM	1176	1765	2353	2647
CONSUMPTION	W	763	1217	1384	1572
	A	1.29	2.1	2.3	2.7
NOISE LEVEL	DB A	42	46	43	46
STATIC PRESSURE	PA	400*	400*	400*	400*
POWER SUPPLY	V	3x380-415 V 50/60 Hz	3x380-415 V 50/60 Hz	3x380-415 V 50/60 Hz	3x380-415 V 50/60 Hz
REFRIGERANT	-	R410A / R32	R410A / R32	R410A / R32	R410A / R32
FAN	TYPE	PLUG FAN EC	PLUG FAN EC	PLUG FAN EC	PLUG FAN EC

*Noise levels calculated at 1 m from the free discharge and inlet unit for the indoor unit.

*Pressure available with a single battery and G4+F8 filtering. *Considered air supply temperature 12.5°C and 38°C. The nominal cooling capacities under conditions: Return 27° CBS/19° CBH, outdoor temperature 35° CBS. The nominal heating capacities under conditions: Return 20° CBS, outdoor temperature 7° CBS/6° CBH.



INNOVATION IN AIR CONDITIONING
AND AIR QUALITY EQUIPMENT

DECACLIMA

DECACLIMA COMFORT SOLUTIONS, S.L.
Avda. del Castell, 31
08570 Torelló (Barcelona)
Tel. +34 930 130 703
info@decaclima.com
www.decaclima.com

SODECA Group