

# Compact air treatment units

## Small air conditioners

### GC BS B

Horizontal low-profile air conditioners

### GC BS V

Vertical low-profile air conditioners

### GC BS U

Vertical UP-FLOW air conditioners

### GC BS B

series

### GC BS V

series

### GC BS U

series



## Compact air conditioners with small dimensions and hygienic construction

### GC BS B series – GC BS V series – GC BS U series

This compact series of air conditioners is manufactured according to high-quality hygienic construction standards and with a built-in control compatible with any standard BMS protocol on the market. 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.



#### Configurations

- GC BS B: Horizontal low profile units
- GC BS V: Vertical low profile units
- GC BS U: Bi-directional vertical UP-FLOW units

#### Versions

- For direct expansion and VRF
- For water

#### Main characteristics

- Hygienic construction in accordance with UNE/EN 13053, DIN 1946-4 and ASHRAE 170
- Double filtration stage
- Dirty filter pressure switch
- Plug Fan EC fans with flow regulator or constant pressure
- Extruded aluminium profile with thermal bridge break
- AISI 304 stainless steel condensates tray
- Double sided panels with a 25 mm interior thermal insulation
- Smooth interior
- Low noise level

#### Standard finishes

- Galvanised steel interior
- Lacquered sheet exterior
- Modular aluminium structure
- Sanitation baseboard

#### Options

- HEPA filtration module
- Humidifier module
- UVc germicidal chamber
- AISI 304 stainless steel interior
- Panel with 50 mm insulation
- Canopy for use outdoors
- Other configurations in accordance with the requirements
- Plug&Play control panel
- PLC that can be connected to different BMS protocols
- Option of dividing the coil into modules
- Option of heat recovery coils

## 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 ventilation
- Dirty filter indication
- 3-way valve outlet or integration in VRF units
- Communication for connection to a BMS



### 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, isolation rooms, etc.

- ON / OFF
- Operating mode selection
- Temperature setting
- Constant flow ventilation
- Outlet for extraction
- Outlet for exterior air mixture gates
- Speed settings
- Pressure and CO<sub>2</sub> probe inlet
- Dirty filters indication
- 3-way valve outlet or integration in VRF units
- Communication for connection to a BMS



### ENVIRONMENTAL CONTROL

Control based on an open programming PLC to control the temperature and humidity of the room to achieve thermal stability inside the room regardless of the condition of the exterior air that is entering the room.

Specifically designed for laboratories, operating rooms, data centres, document files, museums or locations that require very stable environmental conditions.

- ON / OFF
- Operating mode selection
- Temperature setting
- Humidity setting
- Constant flow ventilation
- Outlet for extraction
- Outlet for exterior air mixture gates
- Air supply T/H limiting probe
- Flow rate adjustment
- Pressure and CO<sub>2</sub> probe inlet
- Dirty filters indication
- Modulating 3 way valves outlet with 2 and 4 ducts
- Modulating outlet to humidifier
- Communication for connection to a BMS

## Low-profile air conditioners GC BS B series – GC BS V series

Low-profile air conditioners with a horizontal construction GC BS B or vertical construction GC BS V, to be installed in compact areas such as false ceilings. The adaptation of the manufacturing to the client's project allows manufacturing units tailored to each need.



### Technical characteristics

Model		GC 1.5 BS B GC 1.5 BS V 1.07 19 DX/Ho	GC 1.5 BS B GC 1.5 BS V 1.5 9 19 DX/Ho	GC 3.0 BS B GC 3.0 BS V 3.0 20 19 DX/Ho	GC 4.5 BS B GC 4.5 BS V 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	m³/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

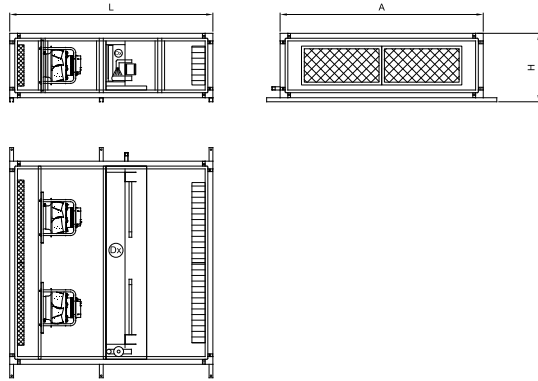
\* Noise levels calculated at 1 m from the free discharge and suction unit for the indoor unit.

Data subject to modifications due to adjustments to the designs without prior notice.

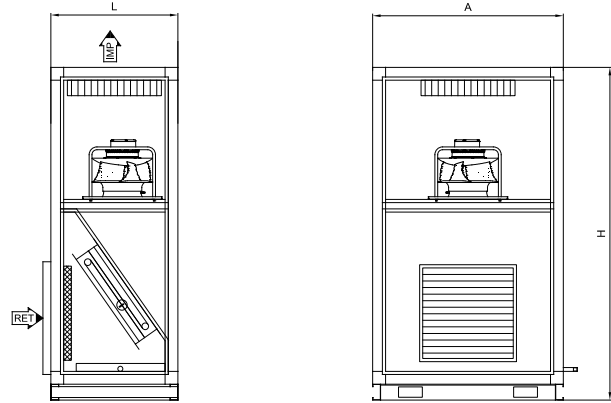
The nominal cooling capacities under conditions: Return 27 CBS/19 CBH, outdoor temperature 35 CBS. The nominal heating capacities under conditions: Return 20°CBS, outdoor temperature 7°CBS/6°CBH. Range in indoor operating conditions: Cooling 17°CBS to 32°CBS heat 10 CBS to 28 CBS. Range in outdoor operating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

**Dimensions mm**

**GC BS B**



**GC BS V**



GC BS B	Model		GC 1.5 BS B 1.0 7 19 DX/Ho	GC 1.5 BS B 1.5 9 19 DX/Ho	GC 3.0 BS B 3.0 20 19 DX/Ho	GC 4.5 BS B 4.0 28 19 DX/Ho
LENGTH (L)	mm		1600	1600	1600	1700
WIDTH (A)	mm		1050	1050	1504	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
DAMPER MODULE	Kg		300	300	300	300

GC BS V	Model		GC 1.5 BS V 1.0 7 19 DX/Ho	GC 1.5 BS V 1.5 9 19 DX/Ho	GC 3.0 BS V 3.0 20 19 DX/Ho	GC 4.5 BS V 4.0 28 19 DX/Ho
LENGTH (L)	mm		1050	1050	1504	1950
WIDTH (A)	mm		475	475	504	504
HEIGHT (H)*	mm		1800	1800	1800	1900
WEIGHT	Kg		120	120	157	183
HEPA MODULE	Kg		400	400	400	400
HUMIDIFIER MODULE	Kg		300	300	300	300
DAMPER MODULE	Kg		300	300	300	300

\*Modules length to be added to the unit length.  
 \* Height (H): it varies depending on the supporting system. Guides to hang it from the ceiling Height + 30mm. Bench Height + 50mm.  
 \* The vertical version GC BS V does not allow the installation of the Humidifier 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.

## Vertical UP-FLOW air conditioners GC BS U series

Bidirectional vertical air conditioners with a hygienic construction for UP-FLOW operation and especially designed to be easily transported using lifts, hoists or through 80 cm doors, ideal for use during building renovations. It is possible to configure these units with lower or upper supply and return.



GC BS U series

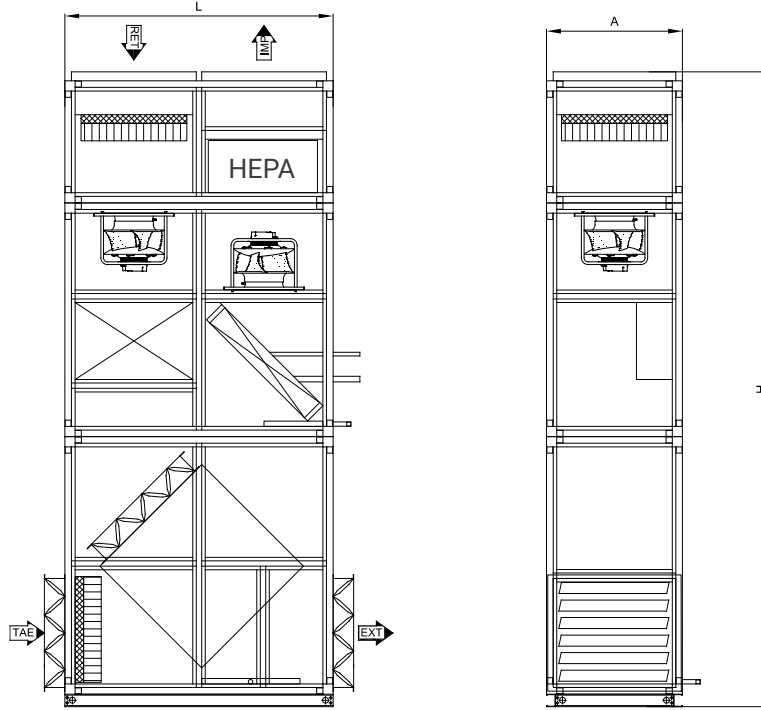
### Technical characteristics

Model		GC 1.5 BS U 2.0 14 18 DX/Ho	GC 3.0 BS U 3.0 20 18 DX/Ho	GC 4.5 BS U 4.0 26 18 DX/Ho	GC 4.5 BS U 4.5 30 18 DX/Ho
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 <sup>3</sup> /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
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 suction unit for the indoor unit.

\* Pressure available with a single coil and G4 (ISO COARSE 60%) + F8 filtering (ePM1 70%). \*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. Data subject to modifications due to adjustments to the designs without prior notice.

Dimensions mm



MAIN MODULE		GC 1.5 BS U 2.0 14 18 DX/Ho GC 3.0 BS U 3.0 20 18 DX/Ho	GC 4.5 BS U 4.0 26 18 DX/Ho GC 4.5 BS U 4.5 30 18 DX/Ho
LENGTH (L)	mm	1500	2150
HEIGHT (H)	mm	1500	1500
WIDTH (A)	mm	760	760

FILTER MODULE		GC 1.5 BS U 2.0 14 18 DX/Ho GC 3.0 BS U 3.0 20 18 DX/Ho	GC 4.5 BS U 4.0 26 18 DX/Ho GC 4.5 BS U 4.5 30 18 DX/Ho
LENGTH (L)	mm	1500	2150
HEIGHT (H)	mm	550	550
WIDTH (A)	mm	760	760

EXCHANGER MODULE		GC 1.5 BS U 2.0 14 18 DX/Ho GC 3.0 BS U 3.0 20 18 DX/Ho	GC 4.5 BS U 4.0 26 18 DX/Ho GC 4.5 BS U 4.5 30 18 DX/Ho
LENGTH (L)	mm	1500	2150
HEIGHT (H)	mm	1370	1550
WIDTH (A)	mm	760	760