

<80%
Consumption
compared to
AC Standards



CAT10 EN

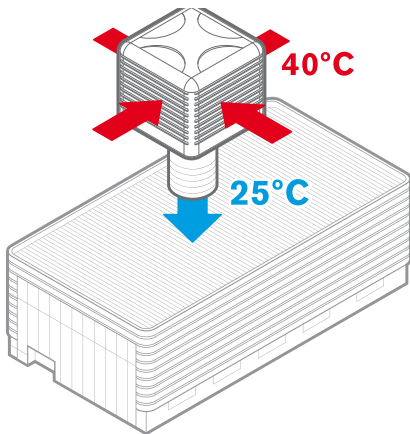
BIOCOOLER

SMART MODELS

100% NATURAL COOLING



A compact and “smart” solution for effective cooling inside any kind of building, from houses to warehouses and factories. Cools blowing fresh air and expelling stale air, heat sources, harmful gases, particles, pollen etc. When installing Biocooler Smart you have the guarantee to: cool, purify, ventilate and extract stale air by pressure and heat sources.



Operating scheme

Biocooler Operation

These devices use a simple yet sophisticated cooling technique by evaporation, in which a certain volume of air is blown inside buildings, replacing the warm exhaust air which previously existed there, leading to a comfort that would otherwise be virtually impossible to get. The Biocooler Smart transfers purified air and cooled to a location, obtaining a lighter and more comfortable environment.

Installation economy

Due to its quick and easy installation and its low cost.

Operating economy

Low power consumption, 18.000 m3/h of cooled air = 1.1 Kwh

Maintenance economy: Smart

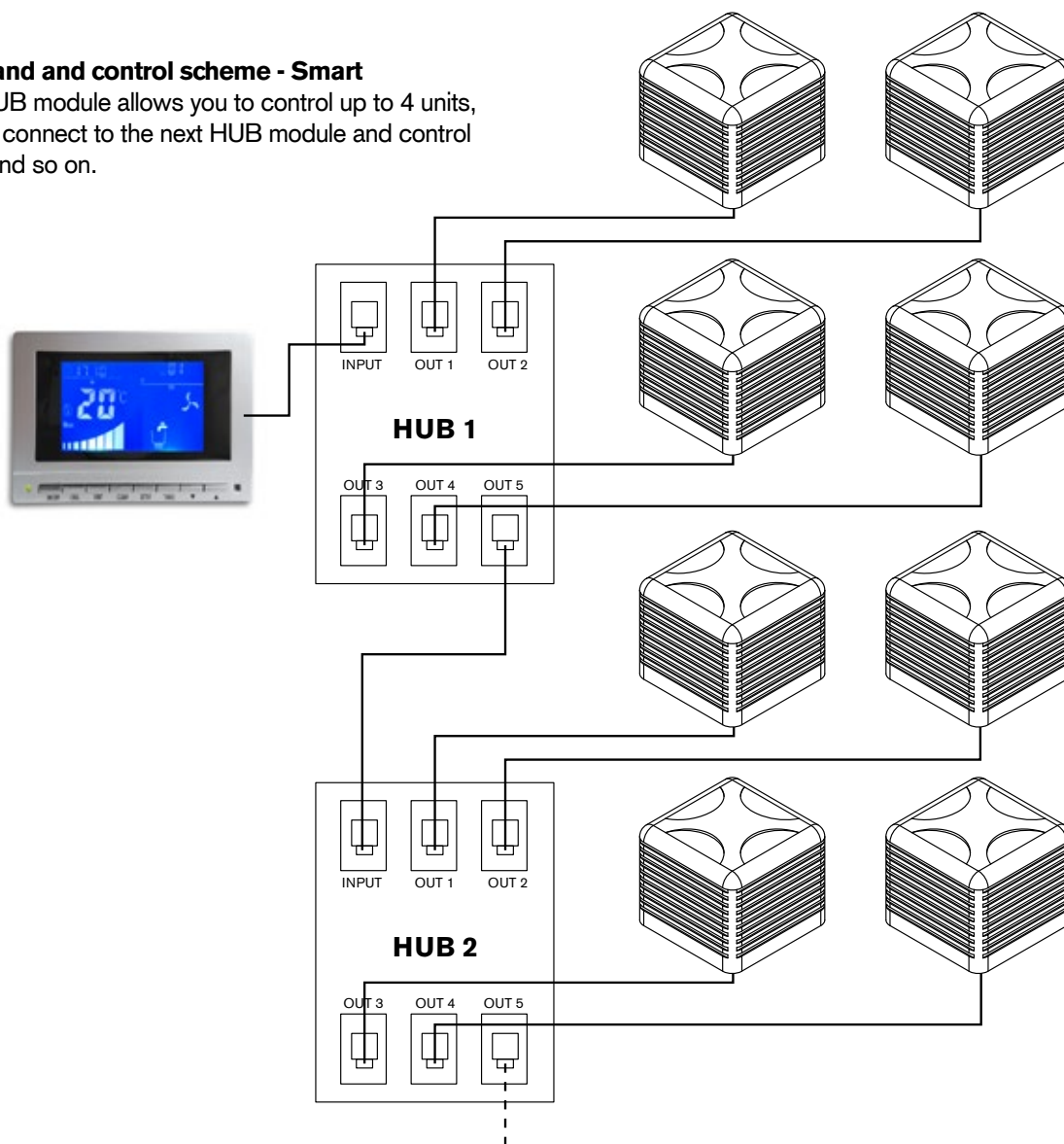
It is possible to schedule automatic cleaning units, thus avoiding hand costs of labor and / or technical assistance.

Installation Requirements:

- Support structure
- Required electrical installation according to the voltage and power consumption in kW.
- Water supply to the place of installation.

Command and control scheme - Smart

Each HUB module allows you to control up to 4 units, you can connect to the next HUB module and control over 4 and so on.



Technical information

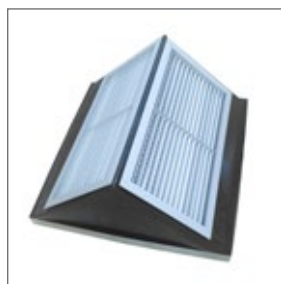
Model	AE - 18V Smart	AE - 18VS Smart	AE - 18H Smart	AE - 30V Smart	AE - 30VS Smart	AE - 30H Smart
Flow (m ³ /h)	18000	18000	18000	30000/20000	30000/20000	30000/20000
Pressure (pa)	190	190	190	366/160	366/160	366/160
Power (w)	1.1Kw	1.1Kw	1.1Kw	3.0/1.0 Kw	3.0/1.0 Kw	3.0/1.0 Kw
Voltage	200-277 V	200-277 V	230 V	400 V AC	400 V AC	400 V AC
Fan type	Axial	Axial	Axial	Axial	Axial	Axial
Engine type	Brushless DC Motor	Brushless DC Motor	Single-phase various speed	3-phase, 2 speed	3-phase, 2 speed	3-phase, 2 speed
Noise (dBA)	≤69	≤69	≤76	≤80	≤80	≤80
Dimensions LxWxH (mm)	1150*1150*982	1150*1150*982	1150*1150*950	1350*1350*1426	1350*1350*1426	1350*1350*1426
Air outlet (LxH)(mm)	650*650	650*650	647*647	765*765	765*765	730*730
Weight (kg)	77	77	100	125	152	161
Weight with water (kg)	107	107	130	180	207	216
Self-cleaning	√	√	√	√	√	√
Protection against lack of water	√	√	√	√	√	√
Water capacity (L)	30	30	30	55	55	55
Type of control	Intelligent LCD Control	Intelligent LCD Control	Intelligent LCD Control	Intelligent LCD Control	Intelligent LCD Control	Intelligent LCD Control

Temperatures table

Example for a panel thickness of 100mm and a suction speed of 1.5

	Exterior relative humidity										Exterior temperature									
	18°C	20°C	22°C	24°C	26°C	28°C	30°C	32°C	33°C	34°C	35°C	36°C	37°C	38°C	39°C	40°C	42°C	43°C	44°C	45°C
20%	10,4°C	12,2°C	13,5°C	15°C	16,5°C	17,5°C	20,4°C	21,9°C	22,7°C	23,4°C	24,2°C	25,0°C	25,7°C	26,5°C	27,2°C	28,0°C	29,5°C	30,2°C	31,0°C	31,7°C
25%	11,4°C	13,2°C	14,5°C	16°C	17,4°C	19°C	21,2°C	23,0°C	23,5°C	24,3°C	25,1°C	25,9°C	26,7°C	27,5°C	28,2°C	29,0°C	30,6°C	31,4°C	32,2°C	33,0°C
30%	12,4°C	13,7°C	15,4°C	17°C	18,5°C	20,2°C	21,9°C	23,5°C	24,3°C	25,1°C	26,0°C	26,8°C	27,6°C	28,4°C	29,2°C	30,0°C	31,7°C	32,4°C	33,3°C	34,1°C
40%	13,5°C	15,5°C	17,2°C	19°C	20,7°C	22,4°C	23,3°C	25,0°C	25,9°C	26,7°C	27,6°C	28,4°C	29,3°C	30,1°C	31,0°C	31,8°C	33,6°C	34,4°C	35,3°C	36,1°C
50%	15,2°C	17,1°C	18,8°C	20,7°C	22,5°C	24,2°C	24,6°C	26,4°C	27,3°C	28,2°C	29,1°C	30,0°C	30,8°C	31,7°C	32,6°C	33,5°C	35,3°C	36,2°C	37,0°C	38,0°C
60%	16,8°C	18,7°C	20,5°C	22,4°C	24,3°C	26,1°C	25,9°C	27,7°C	28,6°C	29,5°C	30,4°C	31,3°C	32,3°C	33,2°C	34,1°C	35,0°C	36,8°C	37,8°C	38,7°C	39,6°C

Available diffusers cubes



Diffuser cube two-way



Diffuser cube four-way

Smart Command: Intelligent control of entire system

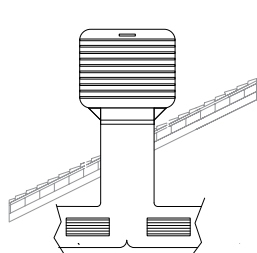


With a compact but intelligent Smart command, you can control various operating parameters of the unit Biocooler smart, from a weekly schedule programming clock, to the fan speeds from the control of self-cleaning time, s to display the temperature and humidity values concerning environment, everything can be programmed and displayed.

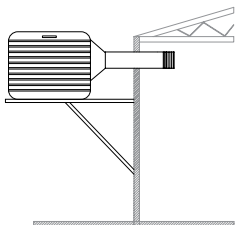
This command also has the advantage of being able to control an unlimited number of Biocooler smart units, using such modules "HUB".

Each HUB module allows you to control up to 4 units, you can connect to the next HUB module and control over 4 and so on.

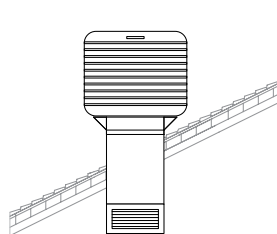
Installations examples



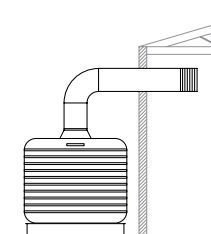
Roof installation with conduct and supply grids.



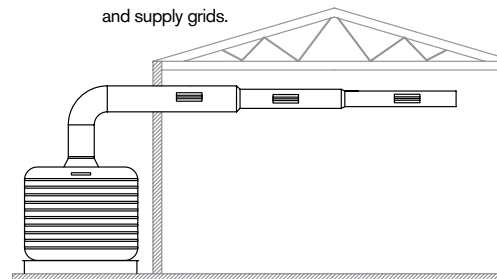
Wall installation with diffuser cube.



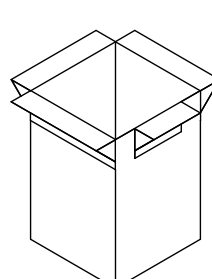
Roof installation with diffuser cube.



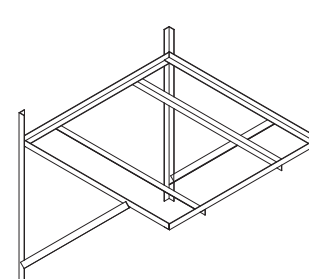
Installation on the floor with diffuser cube.



Installation on the floor with grids and supply ducts.



Standard support structure for the roof.



Standard support structure for the wall.



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