



Refrigeración Evaporativa



The natural cooling

When the air comes into direct contact with water, part of this evaporates, absorbing energy in the form of heat, and this air it cools. This is natures way of cooling.

This phenomen, incorporated in properly designed equipments, provides a low cost cooling system, installation and power consumption, in buildings has added value of bringing a good cooling and a propper ventilation.

HUMIBAT® System

The evaporative cooling units manufactured by Control y Ventilación, S.L., under the trademark **HUMIBAT**®, are designed to have a long lifetime and easy maintenence.

Therefore the **HUMIBAT®** units are made from the best quality materials (reinforced casing made from polyester and fiber glass, filled with a high-density polyethylene mesh, PVC distribution system, and a stainless steel pump).

The **HUMIBAT®** system rejects the traditional contact surfaces such as wood shavings and cellulose plates. In opposition, the flexible pad with a polythylene mesh, basic component of **HUMIBAT®**, adds, its incomparable long lifetime, difficult clogging and structured consistence, keeping the thermal conditions and constant high performance. It's main caracteristics are:





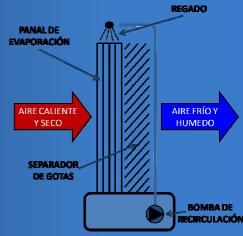
Our **ADVANTAGES**Our **DIFFERENCES**

- Pad of synthetic material not blockable of long life
- Low maintenance cost
- Cosistant performance
- Easy cleaning
- Corrosion resistant
- Low pressure drop
- Low power comsumption
- Environmentally friendly

- Hight density surface contact between water and air with a minimum aerodinamic resistence of the air flow,
- ❖ Hight retention of drops, giving a moist air and avoids the contamination problems,
- ❖ High support capacity of solids deposits (lime, salt, dust, mud...) without any modifying any of its benefits .

The **HUMIBAT®** system is very adaptable and can be adapted to just about any type of installation and covers models that work with depression as well as overpressure.

In the first case the **HUMIBAT**® incorporates the body contact water-air pad and the motor driven ventilator, going through it the air cooled that later exits through the windows, doors,... To the outside.

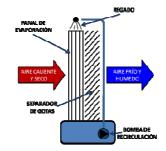


This will prevent leakage through cracks or defected sealing.

In the configuration with depession, the air is sucked in through extracting ventilators and enters into the building via the **HUMIBAT**® units, which in this case do not have a built-in motor-ventilator.









UNITS WITH FAN

•	AIR FLOW	DIMENSIONS	FAN	PUMP
TYPE	m³/h	mm (X x Y x Z)	Kw	Kw
P10	10.000	1.000 X 1.400 X 915	1,17	0,25
P20	20.000	1.500 X 1.900 X 1.020	1,45	0,25
P40	40.000	2.000 X 2.400 x 1.100	1,10	0,25
T10	10.000	1.000 X 1.750 X 1.550	0,71	0,25
C-10/11/1.1	9.000	1.000 X 1.250 X 1.850	1,10	0,38
C-10/15/2.2	11.000	1.000 X 1.250 X 1.850	2,20	0,38
C-20/22/1.5	16.000	1.500 X 1.750 X 1.850	1,50	0,38
C-20/22/3.0	20.000	1.500 X 1.750 X 1,850	3,00	0,38
C-20/22/5.5	25.000	1.500 X 1.750 X 1.850	5,50	0,38
C-40/25/4.0	35.000	2.000 X 2.250 X 1.850	4,00	0,55
C-40/30/5.5	40.000	2.000 X 2.250 X 2.450	5,50	0,55
C-40/30/7.5	45.000	2.000 X 2.250 X 2.450	7,50	0,55

UNITS WITH OUT FAN

	AIR FLOW	WINDOW DIMENSIONS	
TYPE	m³/h	mm (X x Y x Z)	
F5	5.000	1.500 X 500 X 440	
F10	10.000	2.250 X 600 X 440	
F20	20.000	2.250 X 1.200 X 440	
F30	30.000	2.250 X 1.800 X 440	
F40	40.000	2.250 X 2.400 X 440	
L5	5.000	1.000 X 500 X 650	
L10	10.000	2.000 X 500 X 650	
L20	20.000	2.000 X 1.000 X 650	
S10	10.000	1.000 X 1.000 X 650	
S20	20.000	1.500 X 1.500 X 650	
S40	40.000	2.000 X 2.000 X 650	
SF10	10.000	1.000 X 1.000 X 540	
SF20	20.000	1.500 X 1.500 X 540	
SF40	40.000	2.000 X 2.000 X 540	



TEMPERATURE TABLE

HUMDITY	AIR OUTPUT TEMPERATURES (°C)						
(%)	20	25	30	35	40	45	
10	9,80	13,20	16,30	19,60	22,60	25,80	
20	11,20	14,80	18,40	22,00	25,60	29,20	
25	11,90	15,60	19,40	23,20	26,90	30,80	
30	12,60	16,40	20,30	24,20	28,20	32,20	
35	13,20	17,20	21,20	25,20	29,30	33,40	
40	13,80	17,90	22,00	26,20	30,40	34,60	
45	14,40	18,60	22,80	27,20	31,40	35,70	
50	15,00	19,20	23,60	28,00	32,40	36,80	
55	15,50	19,90	24,30	28,80	33,20	37,80	
60	16,10	20,50	25,00	29,60	34,10	38,80	
65	16,60	21,20	25,70	30,40	35,00	39,70	
70	17,10	21,70	26,40	31,20	35,80	40,50	

HUMIBAT® TYPE "P"



Units designed to work by overpressure. They are installed on the walls of the building, and introduce the cooled air horizontally. Each unit incorporates its own motor-ventilator equipment.

HUMIBAT® TYPE "T"



Units designed to work by overpressure. They are installed on the roof of the building and introduce the cooled air vertically. Each units incorporates its own motor-ventilator equipment.

HUMIBAT® TYPE "F", "L", "S", y "SF"



Units non-autonomous.

Units without motor-ventilator, They are installed on the walls of the building introduce the colled air throw them and work by depression caused by extracting ventilator.

HUMIBAT® TYPE "C"



Units designed for large buildings via distribuiton tubes. Each unit is equipped with a motor-driven centrifugal ventilator. They can be installed either on the walls of the building or on the roof. The air is conducted and introduced via distribution tubes, driven by its centrifugal ventilator









