

SBH

Swimming pool dehumidifiers



R407C

Series SBH dehumidifier are expressly designed for use in swimming pools where humidity should be closely controlled in order to guarantee optimal comfort. This series comprises four models which cover a capacity range from 75 to 200 l/24h. SBH units are designed for easy maintenance and service, each part being readily accessible and, when required, easily replaceable thus reducing service and maintenance costs.

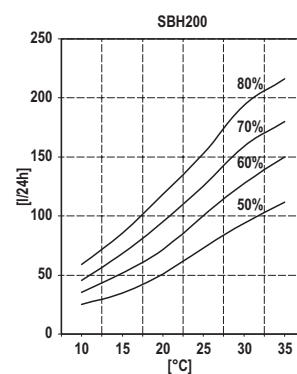
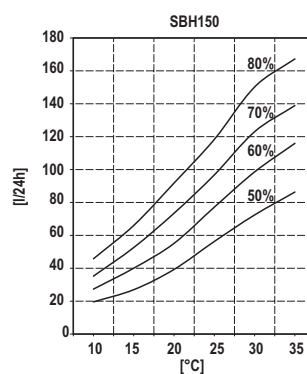
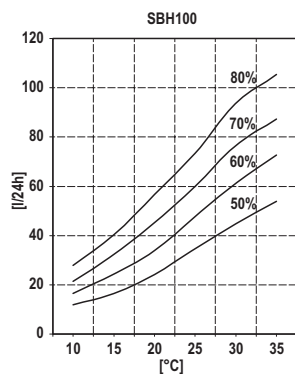
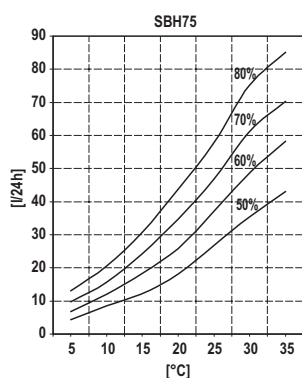
VERSIONS

- Version with cabinet (A).
- Ductable units (P).

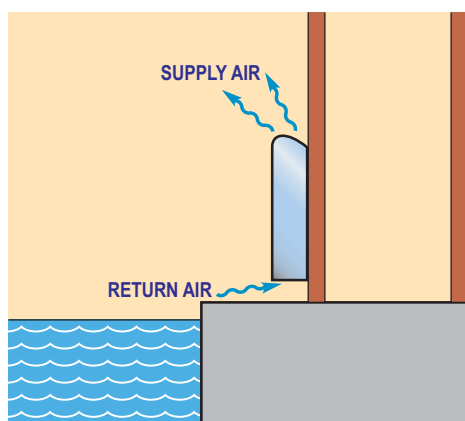
ACCESSORIES

- Hot water coil
- Electric heater kit
- Built-in electronic hygostat with display
- Remote mechanical hygostat
- Remote mechanical hygostat + thermostat
- On/Off 3 way valve kit installed
- Delivery and return plenum 90° (2 pieces)
- Louver kit and case for ducted version
- Feet

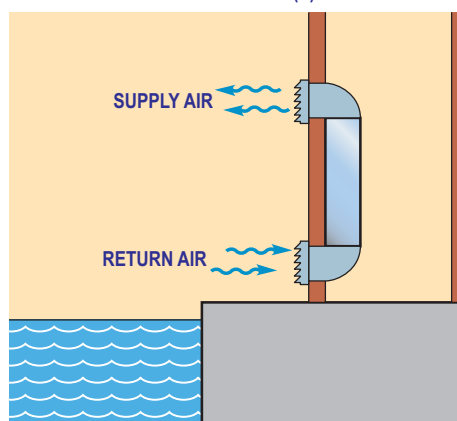
Mod.		SBH75	SBH100	SBH150	SBH200
Moisture removed ⁽¹⁾	l/24h	77	104	151	192
nominal input power ⁽¹⁾	kW	1,5	1,8	2,9	3,2
Maximum input power ⁽²⁾	kW	1,7	2	3,2	3,5
Nominal input power ⁽¹⁾	A	5,9	8,4	13,7	15,2
Maximum input power ⁽²⁾	A	7,4	9,1	15,2	16,2
Hot water coil ⁽³⁾	kW	8,6	8,6	15	15
Air flow	m³/h	1000	1000	1800	1800
Available static pressure	Pa	40	40	40	40
Refrigerant		R407C	R407C	R407C	R407C
Sound pressure ⁽⁴⁾	dB(A)	50	50	52	54
Temperature operating range	°C	10-36	10-36	10-36	10-36
Humidity operating range	%	50-99	50-99	50-99	50-99
Weight	Kg	49	55	72	78
Power supply	V/Ph/Hz	230/1~/50			



STANDARD VERSION (A)



DUCTED VERSION (P)



¹⁾ Performances refer to the following conditions: room temperature 30°C; relative humidity 80%.
²⁾ Performances refer to the following conditions: room temperature 35°C; relative humidity 80%.
³⁾ Performances refer to the following conditions: room temperature 32°C; water temperature 80/70°C.
⁴⁾ Sound pressure level measured at 1 mt from the unit in free field conditions according to ISO 3746.

SBH

FRAME

All SBH units are made from hot-galvanised thick sheet metal, painted with polyurethane powder enamel at 180°C to ensure the best resistance against the atmospheric agents and to operate in aggressive environments. The frame is self-supporting with removable panels. A PVC drip tray is installed on all units. The colour of the unit is RAL 9010 both for the base and for the frontal panel.

REFRIGERANT CIRCUIT

The refrigerant circuit is made by using international primary brands components and according to ISO 97/23 concerning welding procedures. The refrigerant gas used in these units is R407C. The refrigerant circuit includes: capillary tube, Schrader valves for maintenance and control, pressure safety device (according to PED regulation).

COMPRESSOR

The compressors are rotative type, with thermal overload protection by a klixon embedded in the motor winding. The compressor is mounted on rubber vibration dampers and it is supplied, standard, with sound-proof cover to reduce noise emission. The inspection is possible through the frontal panel of the unit that allows the maintenance of the compressor.

CONDENSER AND EVAPORATOR

Condensers and evaporators are made of copper pipes and aluminium fins. All evaporators are painted with epoxy powders to prevent corrosion problem due to their use in aggressive environments. The diameter of the copper pipes is 3/8" and the thickness of the aluminium fins is 0,15 mm. The tubes are mechanically expanded into the aluminium fins to improve the heat exchange factor. The geometry of these heat exchangers guarantees a low air side pressure drop and then the use of low rotation (and low noise emission) fans. All units are supplied, standard, with a PVC drip tray and all evaporators are supplied with a temperature sensor used as automatic defrost probe.

FAN

The fans are made of galvanized steel, centrifugal type. It is statically and dynamically balanced and supplied. The electric motors

are directly connected to the fan; they are all at 3 speeds, with integrated thermal protection. The protection class of the motors is IP 54.

AIR FILTER

It is made of synthetic filtering media, ondulated type, without electro-static charge; they are all removable for differential disposal. Efficiency class G2, according to EN 779:2002.

MICROPROCESSOR

All SBH units are supplied standard with microprocessor controls. The microprocessor controls the following functions: regulation of the water temperature, antifreeze protection, compressor timing, compressor automatic starting sequence, alarm reset, potential free contact for remote general alarm, alarms and operation leds.

ELECTRIC BOX

The electric switch board is made according to electromagnetic compatibility norms CEE 73/23 and 89/336. The accessibility to the board is possible after removing the front panel of the unit and the OFF positioning of the main switch. If the unit is endowed of cabinet, after its removal.

CONTROL AND PROTECTION DEVICES

All units are supplied with the following control and protection devices: defrost thermostat, which signals to the microprocessor control that a defrost cycle is needed and controls its termination, high pressure switch with automatic reset, compressor thermal overload protection, fans thermal overload protection.

TEST

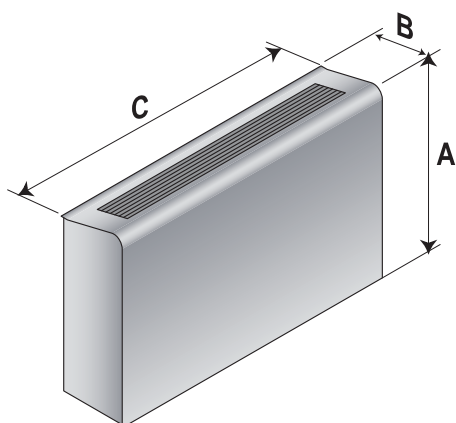
All the units are fully assembled and wired at the factory, carefully evacuated and dried after leak tests under pressure and then charged with refrigerant R407C. They are all fully operational tested before shipment. They all conform to European Directives and are individually marked with the CE label and provided with Conformity Declaration.

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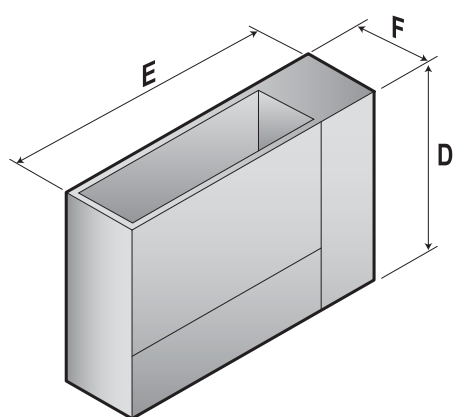
SBH

Mod.	SBH75A	SBH75P	SBH100A	SBH100P	SBH150A	SBH150P	SBH200A	SBH200P
Hot water coil	○	○	○	○	○	○	○	○
Electric heater kit	○	○	○	○	○	○	○	○
Built-in electronic hygrostat with display	○	○	○	○	○	○	○	○
Remote mechanical hygrostat	○	○	○	○	○	○	○	○
Remote mechanical hygrostat + thermostat	○	○	○	○	○	○	○	○
On/Off 3 way valve kit installed	○	○	○	○	○	○	○	○
Delivery and return plenum 90° (2 pieces)	–	○	–	○	–	○	–	○
Louver kit and case for ducted version	–	○	–	○	–	○	–	○
Feet	○	–	○	–	○	–	○	–

● Standard, ○ Optional, – Not available.



Mod.	A (mm)	B (mm)	C (mm)
75	750	260	1060
100	750	260	1060
150	750	310	1310
200	750	310	1310



Mod.	D (mm)	E (mm)	F (mm)
75	680	1006	250
100	680	1006	250
150	770	1255	300
200	770	1255	300