

Ultrasound for energy-saving air humidification – ahead of time!

- progressive technology
- universal application
- economical operation

all go to distinguish today's humidification technology.

This is why air humidification has gained considerable importance in recent years and unfurled new applications to convince the ventilation and air-conditioning expert.

Employing the ultrasound principle and using only approx. 0.092 kW/h of electrical power for a humidifying capacity of 1 kg/h, **AIRWIN RB/P** and **RB/P-D** come out on top in terms of operating efficiency.

The energy saving over isothermal humidification systems with simultaneous humidification and cooling (adiabatic or evaporative cooling) is particularly striking.

The **AIRWIN RB/P** and **RB/P-D** ultrasonic humidifier will pay for themselves in next to no time owing to the electrical energy saving.

In connection with our disinfection program **Contra-Keim** it is also possible to disinfect the room air or surfaces.



View inside Munich's ATRIUM-HAUS. The ultrasonic air humidifiers that are integrated in the balustrade ensure adequate humidity for the 18.5m tall bamboo plants..

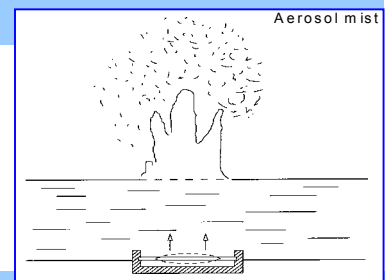
AIRWIN - ahead of time!

SPECIFICATIONS

Type	Capacity	AIR flow rate m ³ /h	Power consumption watts	weight kg	Length mm	Dimensions	
	Kg/h					Height mm	Depth mm
RB/P2	1	100	110	6	260	180	290
RB/P4	2	100	180	8	340	180	290
RB/P6	3	200	240	10	460	180	290
RB/P8	4	200	300	12	550	180	290
RB/P10	5	200	360	14	640	180	290
RB/P16	8	400	620	20	910	180	290
RB/P-D4	2	100	190	9	340	180	290
RB/P-D6	3	200	250	11	460	180	290
RB/P-D8	4	200	310	13	555	180	290
RB/P-D10	5	200	370	15	640	180 <td 290	
RB/P-D16	8	400	630	21	910	180	290

FUNCTION

AIRWIN RB room humidifiers work on the ULTRASOUND PRINCIPLE. Operating at an excitation frequency of 1,7 MHz, the humidification water at the WATER/AIR boundary layer is broken up into extremely fine aerosols – 1µmm – without giving off any significant amount of heat. The flow of air in the air duct conveys the aerosol vapour into the area to be humidified. In accordance with the Brownian molecular theory, the degree of aerosol fineness guarantees a completely uniform distribution of humidity throughout the entire air cross section.



DEVICE DESCRIPTION

AIRWIN RB/P and RB/P-D are made of corrosive-resistant materials (stainless steel housing, plastic parts). Dry-running protection, thermal protection, overrunning protection and voltage peak protection are part of the basic equipment. AIRWIN RB/P and RB/P-D operate with low voltage 48VAC. The necessary transformers are part of our delivery range.

The RB/P ultrasonic humidifiers are ready for connection to the control signal 0...10VDC. A hygrostat can also be directly connected.

The RB/P-D ultrasonic humidifiers come with the hygiene management AquaDrain®. Therefore they are particularly suitable for extremely demanding hygienic applications. AquaDrain is a system that flushes the water supply line to the humidifier according to diverse parameters and empties the water reservoir of the RB/P-D humidifier in certain intervals. AquaDrain is controlled by a software program and a combination of magnetic valves. In addition, AquaDrain prevents compensation of the water level, which is reduced by evaporation, in passive operating mode of the RB/P-D humidifier.



CONTROL

RB/P

- two-step control with hygrostat (50%, 100%)
- continuous control for all ordinary signals
- operation-controlled
- external safety chain can be connected

RB/P-D

- two-step hygrostat (50%, 100%)
- continuous control for all ordinary control signals
- operation-controlled
- external safety chain can be connected
- AquaDrain®

HYGIENE

AquaDrain flushes the water supply line, empties the water reservoir of the RB/P-D in intervals, empties the water reservoir after short periods of "non-humidification" and in case of a power failure.

AquaDrain is a program developed by BOGA GMBH which provides hygienic safety in connection with the massively germ-killing effect of the high-frequency ultrasound system.

Subject to technical modifications / Date of issue 05.2005

Distribution and service by: