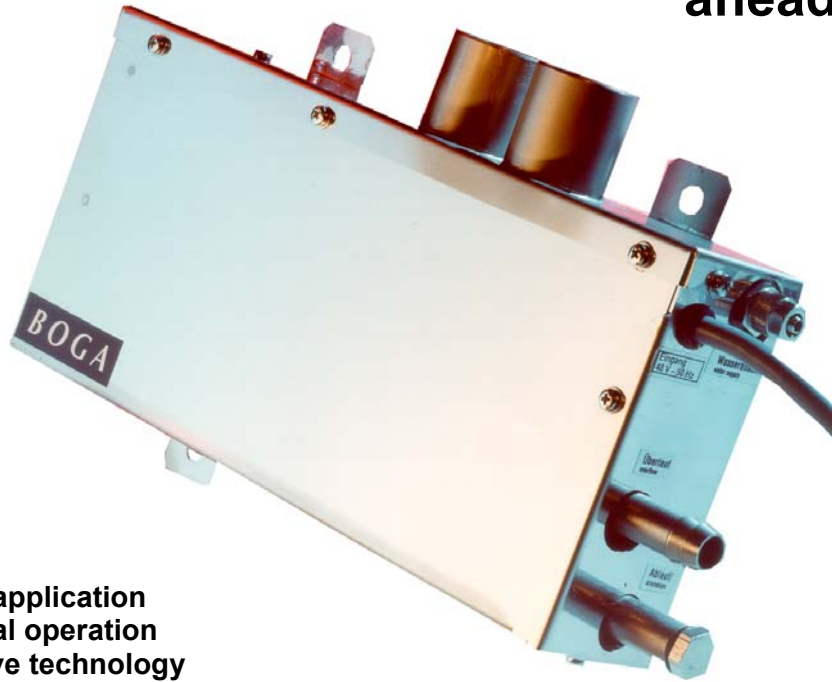


Ultrasound for energy-saving air humidification –

ahead of time!



- universal application
- economical operation
- progressive technology

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.

The KMB humidifier is the ideal humidifier for air conditioning consoles, fan convectors, small and extremely small spaces (e.g. tobacco closets). Due its the energetically extremely favourable adiabatic humidification system, it is particularly suited for simultaneous humidification and cooling. In connection with our disinfection program **Contra-Keim** room air and surface disinfection is also possible.

AIRWIN® humidifiers are used successfully not only in the field of ventilation and air-conditioning but also in trade and industry. It is precisely here that technical processes and the storage of sensitive goods demand humidity levels within close tolerances. This equipment operates with completely softened water to prevent the accumulation of mineral deposits.

By using the ultrasonic principle AIRWIN® has become an economical product of premium quality. Electrical power consumption for a humidification capacity of 1kg/h is only ~ 0,052 KW/h.

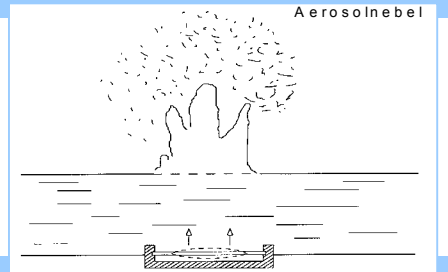
Compared to isothermal humidification systems it helps to save enormous amounts of energy offering cooling and humidification at the same time (adiabatic or evaporation cooling).

TECHNICAL DATA

model	capacity kg/h	power consumption Watts	ultrasonic generators piece	weight Kg	dimensions		
					length mm	height mm	depth mm
TKB	0,44	50	1	~ 2	280,5	141	50

OPERATION

Water is atomised into aerosols of $\sim 1\mu\text{m}$ by ultrasonic vibrations of 1.7 MHz and transported through the aerosol distributor to the humidification objects with the air flow which is produced by the incorporated ventilator. There the aerosol mist (cold steam) is quickly absorbed by the surrounding air and completely evaporates.



EQUIPMENT DESCRIPTION

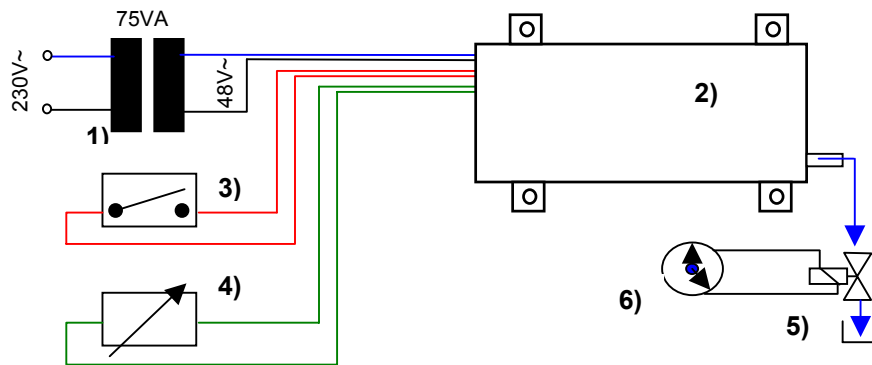
The AIRWIN KMB is made of non-corrosive high-quality steel. It is ready for operation. Only water and electrical energy services have to be connected on the spot. The basic safety equipment includes thermal protection, overflow and dry-running protection and peak voltage protection. AIRWIN[®] KMB operates with low voltage 48V/50 Hz. The required transformer is included in the delivery volume. The small compact construction makes installation possible even where space is very limited – through air hoses inside or outside the room.

CONTROL

- Two step hygrostat control
- Potentiometer

Humidification requirement at the TKB humidifier is controlled by an ON/OFF hygrostat. The humidification capacity between a maximum of 0,44kg/h and $> 0\text{kg/h}$ can be controlled by a potentiometer. Therefore even smallest humidification amounts can be obtained safely and precisely within close tolerances.

PLAN



- 1) transformer primary: 230VAC, secondary: 48VAC, power: 75VA, 2) KMB Ultrasonic humidifier
 3) hygrostat 4) potentiometer 5) magnetic drainage valve 6) interval timer

ACCESSORIES:

- Room- and duct hygrostat
- AquaDrain[®]-KMB // magnetic drainage valve and interval timer
- Rotatable potentiometer for capacity control to be built in, 10.5mm holes
- Water treatment