

Water is formed into an 1µm aerosol-shaped particle with an ultrasonic vibration of 1.7 mhz. The device's wafer tank has special ceramic parts called "pieso-ceramics" and the components make a 1.7 mhz vibration when 48 V power is supplied. The water is divided into 1µm particles with a vibration size of 1.7 MHz and these particles are distributed to the environment by the air flow created by the fan. In the area, this particle mist (cold vapor) is quickly absorbed and destroyed. In these models, there is a hygiene control system called "Aqua drain" which periodically flushes the water supply line and discharges the water in the tank. This feature is an important system that minimizes the risk of bacteria growth.



Duct Type Ultrasonic Humidifier

The AIRWIN N—KBD humidifier, which is used as duct type and air conditioning systems, meets all efficiency requirements. Because it humidifies air with energy gain hygienic and safe way.

Atomization by ultrasound has become more and more important in the last few years and new fields of application have opened. In the sectors of trade, service and industry humidification has become a decisive part of optimal air-conditioning. In these sectors technical processes and storage of perishable goods demand humidification within close tolerance limits.

Progressive technology makes universal application and economical operation possible - only -52W/h of electrical power input for 1kg of humidity. AIRWIN-humidifiers are particularly suitable for simultaneous humidification and cooling. For these applications much more electrical energy (up to 93%) can be saved compared with isothermal humidification systems.

Mineral deposits are prevented using fully demineralised water.

Features

Operation

Water is atomized into aerosols of - 1µm by ultrasonic vibrations of 1.7 MHz the air flow in the air duct transports the aerosol mist out of the humidifier into the air duct. There it is soon absorbed as humidity by the air.

Equipment Description

The AIRWIN N-KBD is made of non-corrosive high-quality steel. It is ready for operation. Only water and electrical energy lines must be connected at the place of installation. Safety equipment includes thermal protection, overflow and dry-running protection and protection against voltage peaks. For the connection to BMS (building management system) or similar systems the N-KBD is equipped with a corresponding potential-free exit.

Control

AIRWIN ultrasonic humidifiers are controllable without starting delay or overrun.

- * 2-stage control with 1-step hygostat
- * 2-stage control with 2-step hygostat
- * Continuous control with built-in signal adapter

Hygiene

Aqua Drain drains the water in the N-KBD at a certain period, when the energy is cut off or there is no demand for humidification.

Aqua Drain is a program developed by Boga that guarantees hygienic safety.

Hygienic

Aqua Drain flushes the water supply line, empties the water reservoir of the N-KBD in cycles as well as the water reservoir after short periods of "non-humidification" and power failures. Aqua Drain is a programmed developed by BOG A GMBH, which guarantees hygienic safety in connection with the benefits of high frequency ultrasound for germ control.

Capacities, Electrical Specification, Dimensions and Weights



Model	Capacity (kg/hour)	Voltage (V/Hz)	Power consumption (VA)	Weight (kg)	Dimensions H/L/W (mm)	Code
N-KBD6	3.6	48/50	185	6.0	177.5/285/260.5	40104206
N-KBD12	7.2	48/50	375	7.7	177.5/ 435/260.5	40104212
N-KBD18	10.8	48/50	555	9.5	177.5/585/260.5	40104218
N-KBD24	14.4	48/50	735	117	177.5/735/260.5	40104224
N-KBD30	18.0	48/50	915	137	177.5/885/260.5	40104230
N-KBD36	21.6	48/50	1095	15.2	177.5/1035/260.5	40104236
N-KBD42	25.2	48/50	1275	17.2	177.5/1185/260.5	40104242
Mounting foot	Stainless steel is used for ideal duct mounting.			0.05		40104201

Accessories	Code
Hygostat	40104280
Transformer	See page 111.