

UB1...4 CT

Ultrasonic Universal Humidifier + Micro Processor Control CT + AquaDrain

*universal application – state-of-the-art technology
extremely hygienic–exceptionally quiet- very economical
excellent control features*

Dry and warm air quickly disappears with AIRWIN® UB1...4CT because the air is humidified effectively and refreshingly. The set desired value is reached quickly and kept permanently. This is why the UB1...4CT is especially suitable for applications needing precise humidity values in tight tolerances.

Applications are for example laboratory technology and pipetting devices (nano plotters).

Humidification by ultrasound has become more and more important in the last few years and new applications have been developed. Airwin humidifiers are not only used for air conditioning but also in industry and trade with great success, especially in the sectors where technical processes and storage of sensitive goods require specific humidification with restricted tolerances.

The formation of mineral deposits is prevented by using fully demineralised water.

Due to its innovative technology it can be used for numerous applications and is very economical to run - only ~98W/h of electrical input for 1kg of humidity. The adiabatic humidification principle receives energy from the warm air and cools the object to be humidified (cooling by evaporation) with simultaneous reduction of the operating time of the cooling units. Both factors ensure that the UB1...4CT pays for itself in a very short time.



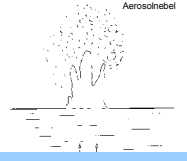
TECHNICAL SPECIFICATIONS

Specification	Unit	UB1CT	UB2CT	UB3CT	UB4CT
Output humidifier *	kg/h	0.5	1.0	1.5	2,0
US generator	item	1	2	3	4
Output fan	m³/h	49	49	49	49
Uptake performance	VA	105	135	165	195
Electricity supply	U		230V/50Hz		
Fuse	A		1.6T		
Control			microprocessor control CT1		
Humidity transmitter			room humidity transmitter BO-FK-120J		
Weight	kg	7.5	7.7	7.9	8.1
Dimensions	height		179,5		
	depth		253,0		
	width		274,0		
Order no.		79 00018-1	78 000 18-2	79 000 18-3	79 000 18

*The performance of the humidifier depends on the length and the cross section of the hoses/pipes used. It has to be ensured that the length of the hoses/pipes is not > than 1.5m per exit and the cross section of the hoses/pipes is not < than 40mm.

OPERATION SPECIFICATIONS

Water is nebulised by ultrasonic oscillations of 1.7 MHz into aerosols of ~ 1µm and transported in the air flow which is produced by a built-in radial fan, to the fresh goods. There the aerosol mist (cold steam) quickly mingles with the ambient air and evaporates completely.



DEVICE DESCRIPTION

AIRWIN® UB1..4CT is made of corrosion-resistant stainless steel. It is wired ready for operation ex works. Only water and electrical energy supplies have to be provided on the spot. It comes with the safety devices thermal protection, overflow protection and dry running protection.

CONTROL

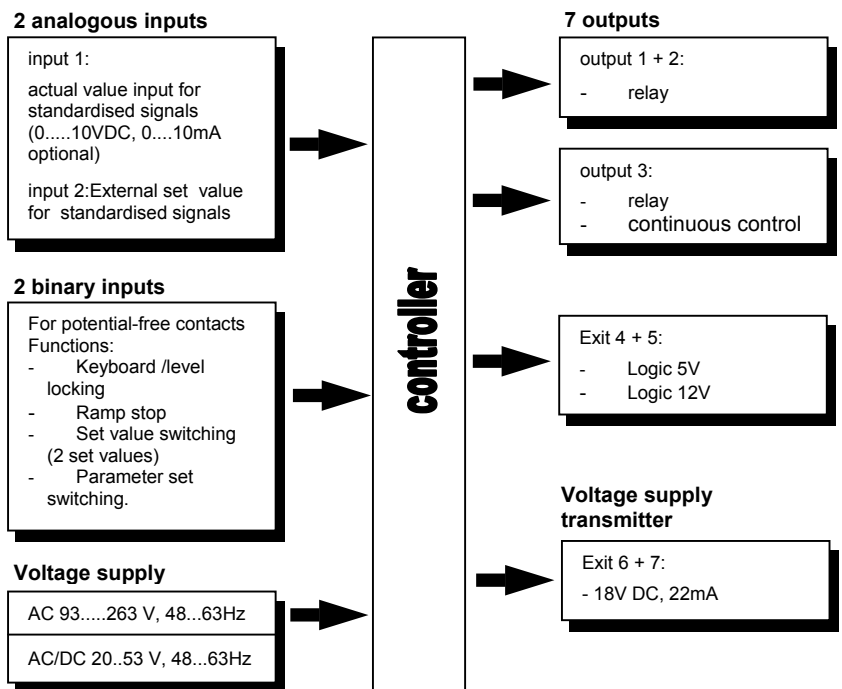
The ultrasonic humidifier Airwin® UB1..4CT starts and stops immediately when required. It can be operated by either a hygrostat or a built-in microprocessor control or by both. There are various possibilities of control and the variety is unique.

By using highly integrated technology (SMD technology, mask programmed CPU, multilayer technology etc.) the microprocessor CT1 obtains extremely variable functionality and operating safety.

Freely adjustable are:

- control
- control settings (with auto optimisation)
- type of operating output
- measuring transducer and control range
- type and function of alarm contacts

The compact microprocessor controls type CT1 with the front frame dimensions 48mm x 96mm (H/B) and pluggable control insert are especially suitable for ultrasonic humidifiers. The controls have two 4-digit 7-segment displays for actual value (red) and set value (green). During programming the displays are used to show the settings. The controls can be programmed as two point, three point or continuous control with the usual control structures. They also have two limit comparators that can be attributed to the input signals.



8 different limit comparator functions can be selected. A ramp function with adjustable gradients and auto optimisation are available. A voltage output with 18VDC / 22mA for energy supply of the humidity transmitters is also included.

OPERATION

For easy programming and operation the control parameters and configuration data are attributed to different levels. Foil keys provide easy operation. The two LED displays show the parameter icons and the respective values and make operation transparent.



HYGIENE

AquaDrain® drains the water feed line, empties the water tank of the UB in cycles after short periods of "non humidification" and in case of power failures. The compact fan only works when humidification is requested. AquaDrain® is a programme developed by BOGA GMBH, providing hygienic safety in connection with the massive germ-killing effect of high frequency ultrasound.

The ultrasonic humidification system AIRWIN® is for sale in many different designs for various applications.
Subject to technical modifications / Edition 05.2005

The innovative humidification system!