



## ROOM HUMIDISTATS

DBZH

### FUNCTION

Relative humidity room control with:  
 - setpoint adjustment by knob;  
 - control of 1 or 2 stage humidifiers and dehumidifiers.

### APPLICATIONS

Well-suited in domestic, commercial and industrial areas with light pollution for various applications in air conditioning field:  
 - office and computer rooms;  
 - foodstuffs storehouse;  
 - greenhouses;  
 - textile, paper and printing industries;  
 - swimming pools.

TYPE	SETPOINT	DIFFERENTIAL
DBZH-101	30...100%	3...5% RH
DBZH-101U	30...100%	3...5% RH

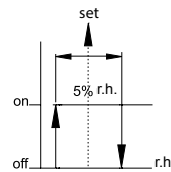
U models with range under the cover

### TECHNICAL DATA

**Sensitive element:** several synthetic fabric bands.  
**Contacts:** dust-tight microswitches with SPDT contacts  
**Switch capacity:**  
**resistive load** (lifetime > 6000 cycles)  
 humidify: 0,1...2 A, 230 Vac  
 dehumidify: 0,1...5 A, 230 Vac  
 $\cos\phi = 0.7$ : 0,1...1 A, 230 Vac  
**inductive load** see schedule  
**Differential:**  
**Working temp.:** 0...+60 °C  
 < 95% r.h. (without condensing)  
 In the case of the voltage below 48V, the humidistat can be used up to 100% r.h.  
**Storage:** -20...+60 °C  
 < 95% r.h.  
**Temp. coeff.:** see schedule under  $\pm 0,2\%$  r.h./K at 23 °C  
**Max air speed:** 0,2...8 m/s  
**Time constant**  
 $t_{50}$  at 2 m/s: 72 sec  
**Housing:** ABS  
**Protection:** IP20, class II  
**Size:** 115 x 70 x 35 mm  
**Weight:** 130 g

### LOGIC OF OUTPUTS

DBZH-101/101U



r.h. > set ↔ r.h. < set

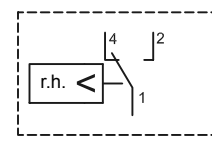
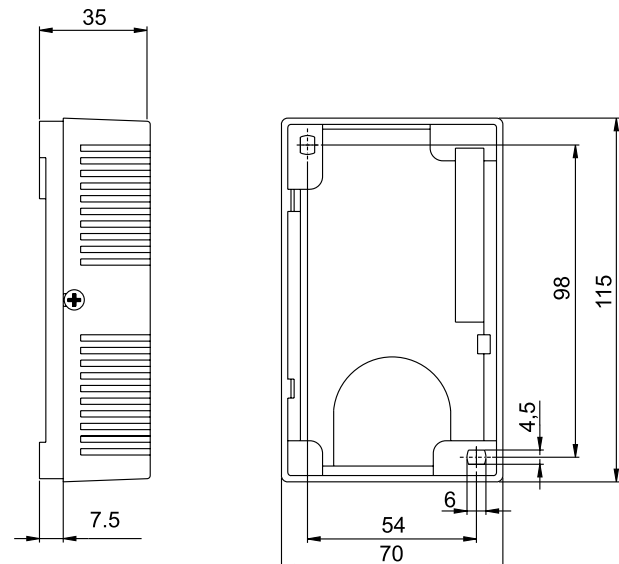


fig. 1

### WIRING DIAGRAM

The contact 1 - 2 closes and 1 - 4 opens when the relative air humidity drops below the setpoint (see fig.1).

### DIMENSIONS (mm)



### NOTE

The hygrostats must not be in direct contact with water and should be exposed to air flow.  
 Not suitable for aggressive media.

	10 °C	20 °C	30 °C	50 °C
10% r.h.	±0,7% r.h.	±0,6% r.h.	±0,6% r.h.	±0,5% r.h.
50% r.h.	±3,5% r.h.	±3,2% r.h.	±3,0% r.h.	±2,6% r.h.
90% r.h.	±6,3% r.h.	±5,7% r.h.	±5,4% r.h.	±4,6% r.h.

