



## ROOM HYGROSTATS

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	RANGE r.h.	HYSTERESIS IN THE STAGE r.h.	PROTECTION
DBZH-101	35...100%	4%	IP30
DBZH-101U	35...100%	4%	IP30

U knob under the cover

### TECHNICAL FEATURES

<b>Sensitive element:</b>	several synthetic fabric bands.
<b>Contacts:</b>	dust-tight microswitches with SPDT contacts
<b>Switch capacity:</b>	(lifetime 50.000 cycles)
<b>resistive load</b>	humidify: 2 A, 250 Vac dehumidify: 5 A, 230 Vac
<b>Inductive load</b>	cos $\phi$ = 0.8: 0.2 A, 230 Vac
<b>Inductive load</b>	L/R = 3 ms: 1 A at 50 Vdc 0.5 A at 75 Vdc
<b>Hysteresis and differentials:</b>	see schedule
<b>Working temp.:</b>	0...+60 °C < 95% r.h. (without condensing)
<b>Storage:</b>	-20...+70 °C < 95% r.h.
<b>Temp. coeff.:</b>	see schedule under
<b>Max air speed:</b>	15 m/s
<b>t<sub>0.5</sub> at 2 m/s:</b>	1.2 min
<b>Housing:</b>	ABS
<b>Protection:</b>	IP20, class II
<b>Size:</b>	115 x 70 x 35 mm
<b>Weight:</b>	130 g

### NOTE

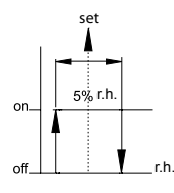
The hygrostats must not be in direct contact with water and should be exposed to air flow.

Not suitable for aggressive media.

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

### LOGIC OF OUTPUTS

DBZH-101/101U



r.h. > set ↔ r.h. < set

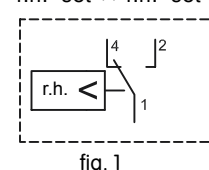


fig. 1

### 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)

