



AIR DUCT HUMIDISTAT

DBKH

FUNCTION

Relative humidity duct control in air conditioning systems with:
 - setpoint adjustment with knob;
 - control of 1 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
DBKH-10	30...100%	5% RH
DBKH-10U	30...100%	5% RH

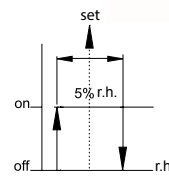
U models with range under the cover

TECHNICAL DATA

Sensitive element: several synthetic fabric bands
Contacts: dust-tight microswitches with SPDT contacts
Switch capacity:
resistive load 15 A, 230 Vac
inductive load $\cos\phi = 0.7$: 2 A, 230 Vac
DC current 0,25 A, 230 Vdc
min. load 0,1 A, 125 Vac
Differentials: see schedule
Working: 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: -30...+60 °C
 < 95% r.h.
Temp. coeff.: see schedule on the right $\pm 0,2\%$ r.h./K at 20 °C and 50% r.h.
Max air speed: 8 m/s
Time constant
 t_{63} at 2 m/s: 120 sec
Accuracy: >50% r.h. $\pm 3\%$ r.h. <50% r.h. $\pm 4\%$ r.h.
Housing: ABS
Protection: DBKH-10: IP54, class I
 DBKH-10U: IP65, class I
Tube: nickel-plated brass perforated, 220 mm
Size: 108 x 70 x 72 mm
Weight: 480 g

LOGIC OF OUTPUTS

DBKH-10/10U



r.h. > set \leftrightarrow r.h. < set

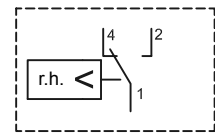


fig. 1

WIRING DIAGRAM

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

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

NOTE

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

DIMENSIONS (mm)

