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	cosφ = 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 ±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. ±3% r.h. <50% r.h. ±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

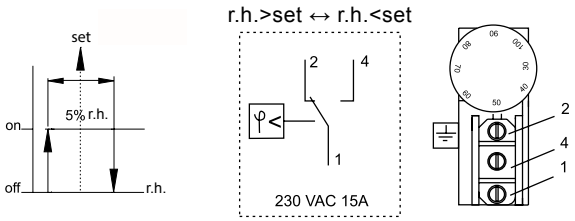

fig. 1

WIRING DIAGRAM

1-4: humidify
1-2: dehumidify (see fig.1).

	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.

NOTE

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

DIMENSIONS (mm)