DBKH – duct hygrostats

Duct hygrostats for air ducts



The appearance of the product may differ from the illustration. Technical specifications are subject to change.

DBKH SERIES

APPLICATION AND USE

Relative humidity duct control in air conditioning systems with:

- setpoint adjustment with 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 storehouses,
- greenhouses,
- textile, paper and printing industries,
- swimming pools.

Type	Range [r.h.]	Stages	Hysteresis in the stage [r.h.]	Hysteresis between stages [r.h.]	Special versions
DBKH-10	30...100%	1	5%		U
DBKH-20	30...100%	2	5%	3...18%	U

U models with knob under cover

Technical data

Sensor:	several synthetic fabric bands
Contacts:	dust-tight microswitches with SPDT contacts
Switch capacity:	15 (8) A, 24...250 V_{AC}
Hysteresis:	see table
Working conditions:	-10...+65°C < 95% rh. (non condensing)
Storage:	-20...+70 °C < 95% r.h.
Temperature coefficient:	-0.2% r.h./K at 20 °C
Max air speed:	8 m/s
$t_{0\text{-}5}$ at 2 m/s:	1.2 min
Housing:	ABS
Protection:	IP65, class I
Tube:	nickel-plated brass perforated, 220 mm
Dimensions:	108 x **70 x 72** mm
Weight:	480 **g**

REMARK

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

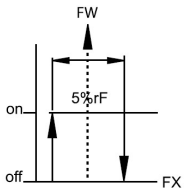
Not suitable for aggressive media.

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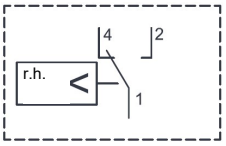
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LOGIC OF OUTPUTS

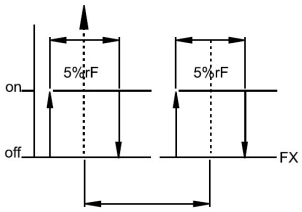
DBKH-101/101U



FX > FW ↔ FX < FW

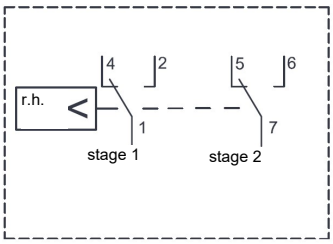


DBKH-102/102U



adjustable zone between the 2 stages

FX > FW ↔ FX < FW



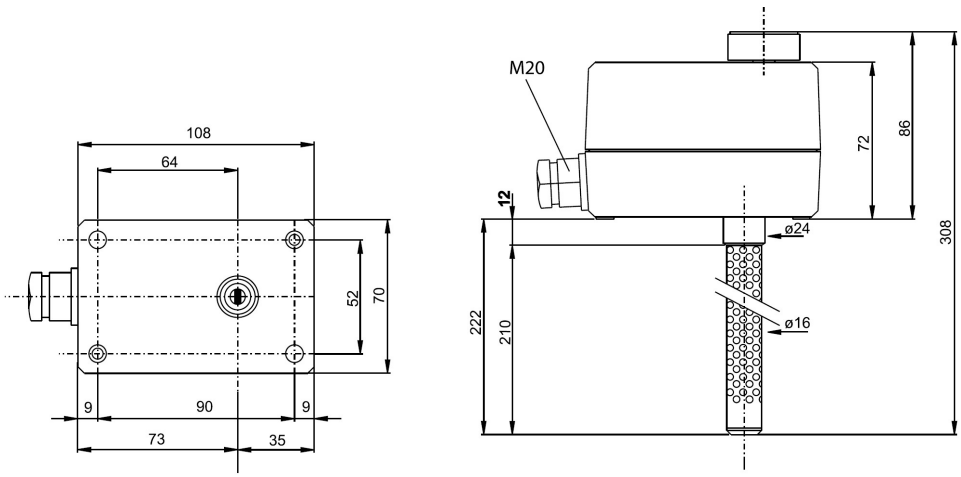
FX relative air humidity (actual value)
FW humidity value set with knob

ELECTRICAL WIRING

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

For the 2 stage version the contacts 1 - 2 and 6 - 7 close and the contacts 1 - 4 and 7 - 5 open when the relative air humidity drops below the setpoint (see figure).

DIMENSIONS [mm]



Due to continuous product improvement, specifications are subject to change without notice.

Nenutec Polska

00-236 Warszawa
ul. Świętojerska 5/7
tel.: +48-(0)-504-050225
nenutec@nenutec.pl