AIR DUCT THERMOSTAT, IP65 DBTZ

FUNCTION

Temperature monitoring in air or non aggressive gas ducts. Models with setpoint adjustment by knob on or under the cover and range calibration.

APPLICATIONS

Well-suited for general applications in strong polluted domestic and industrial areas.

TYPE	RANGE °C	STAGES	DIFFERENTIAL IN THE STAGE K	DIFFERENTIAL BETW. THE STAGES K	MAX. BULB TEMP. °C	SPRING LENGTH mm
DBTZ-2U	-30...+30	1	1		60	200/Ø21
DBTZ-7	0...+60	1	2...20		75	200/Ø21
DBTZ-7/2	0...+60	2	1	2...5	75	200/Ø21
DBTZ-8	0...+60	1	1		75	200/Ø21
DBTZ-12U	+50...+120	1	ST		140	200/Ø21
Accessory	DBZ-25 - Spiral protection bracket for capillary					

Note: the thermostats are supplied with spiral protection bracket model DBZ-25
U models with range under the cover
ST manual maximum reset

TECHNICAL DATA

Sensitive element: liquid-filled coiled copper bulb with 200 mm protection spring and mounting bracket
Contacts: dust-tight microswitches with SPDT contacts (heat/cool)
Switch capacity: 15 (8) A, 24...250 Vac
Differential: see schedule
Working: -35...+65 °C
10...90% r.h. (without condensing)
Storage: -40...+70 °C
< 95% r.h.
Housing: Bayblend base, ABS cover
Protection: IP65, class I
Size: 108 x 70 x 72 mm
Weight: 690 g

Note

The range may be calibrated by tuning carefully the hexagon nut under the knob (fig. 1).
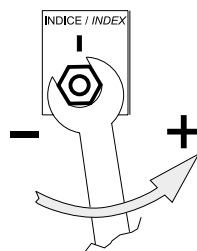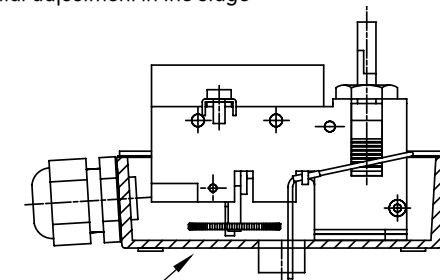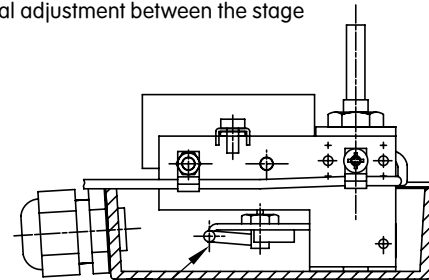

fig. 1

DIFFERENTIAL ADJUSTMENT

Differential adjustment in the stage

regulation from 2...20 K

Differential adjustment between the stage

regulation from 2...5 K

WIRING DIAGRAM

Single-stage models:

Heating
Connect to red and to blue terminal; the contact opens during the temperature rising (fig. 2).

Cooling
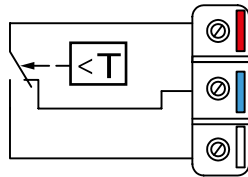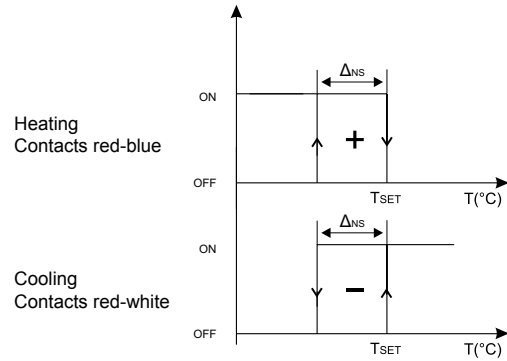Connect to red and to blue terminal; the contact opens during the temperature droping (fig. 2).

fig. 2

Logic activation single-stage models:

Heating
Contacts red-blue

Cooling
Contacts red-white

Δ_{NS}: differential in the stage
T_{SET}: setting setpoint
ON: closed contact
OFF: open contact

Two-stage models:

Heating
Connect to red and to blue terminal; the contact opens during the temperature rising (fig. 3), see logic activation.

Cooling
Connect to red and to blue terminal; the contact opens during the temperature droping (fig. 3), see logic activation.
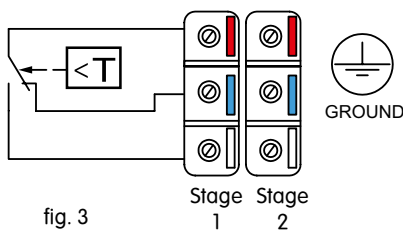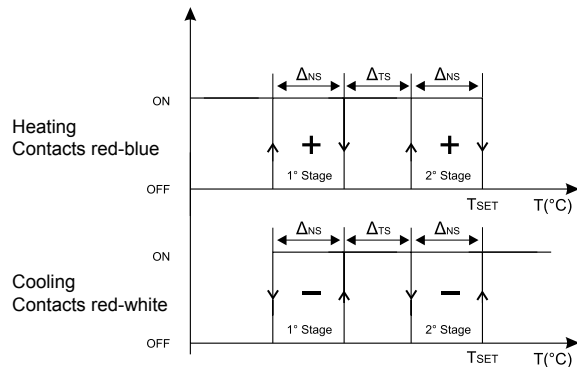
GROUND

fig. 3

Stage 1   Stage 2

Logic activation two-stage models:

Heating
Contacts red-blue

1° Stage   2° Stage

Cooling
Contacts red-white

1° Stage   2° Stage

Δ_{NS}: differential in the stage
Δ_{TS}: differential between the stage
T_{SET}: setting setpoint
ON: closed contact
OFF: open contact

DIMENSIONS (mm)

108

138
120
70

ø5

ø6,5(2x)

271
72
200
98

M20