



## CAPILLARY THERMOSTATS, IP65

**DBET**

### FUNCTION

Temperature control by independent loads with adjustable differential in:

- heating, cooling and air conditioning systems;
- heating and cooling systems.

Models with setpoint adjustment by knob on or under the cover and possible range calibration.

### APPLICATIONS

Well-suited for heating, cooling and air conditioning systems in strong polluted areas (dusty and damp): industrial areas, commercial buildings and sport halls, storage room and garages, machine rooms, factories, greenhouses and agricultural installations. The sensible element is suitable for the non aggressive liquids and gases control.

TYPE	RANGE °C	STAGES	DIFFERENTIAL IN THE STAGE K	DIFFERENTIAL BETW. THE STAGES K	MAW. BULB TEMP. °C	POCKET (*)
DBET-4	-30...+30	1	2...20		60	DBZ-01/02
DBET-4U	-30...+30	1	2...20		60	DBZ-01/02
DBET-4/2	-30...+30	2	1	2...5	60	DBZ-01/02
DBET-5	-30...+30	1	1		60	DBZ-01/02
DBET-5U	-30...+30	1	1		60	DBZ-01/02
DBET-6	-30...+30	1	FT		60	DBZ-01/02
DBET-7	0...+60	1	2...20		75	DBZ-01/02
DBET-7/2	0...+60	2	1	2...5	75	DBZ-01/02
DBET-8	0...+60	1	1		75	DBZ-01/02
DBET-16	+20...+90	1	2...20		100	DBZ-01/02
DBET-16U	+20...+90	1	2...20		100	DBZ-01/02
DBET-17	+20...+90	1	1		100	DBZ-01/02
DBET-18	+20...+90	1	ST		100	DBZ-01/02
DBET-10	+50...+120	1	2...20		150	DBZ-16/17
DBET-11	+50...+120	1	1		150	DBZ-16/17

Accessories	
	DBZ-01 - Brass pocket 120 mm, 12 x 1
	DBZ-02 - Stainless steel AISI 304 pocket 120 mm, 12 x 1
	DBZ-16 - Brass pocket 120 mm, 10 x 0.5
	DBZ-17 - Stainless steel AISI 304 pocket 120 mm, 10 x 0.5

**U** models with range under the cover

**FT** manual minimal reset

**ST** manual maximum reset

### TECHNICAL DATA

<b>Sensitive element:</b>	liquid-filled coiled copper bulb
<b>Dim. bulb:</b>	Ø 9.5 (Ø 8 for range +50...+120 °C)
<b>Dim. capillary:</b>	length 1,5 m
<b>Contacts:</b>	dust-tight voltage free microswitches with SPDT contacts (heat/cool)
<b>Switch capacity:</b>	15 (8) A, 24...250 Vac
<b>Differential:</b>	see schedule
<b>Working:</b>	-35...+65 °C 10...90% r.h. (without condensing)
<b>Storage:</b>	-40...+70 °C < 95% r.h.
<b>Housing:</b>	Bayblend base, ABS cover
<b>Protection:</b>	IP65, class I
<b>Dimensions:</b>	108 x 70 x 72 mm
<b>Weight:</b>	340 g

### NOTE

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

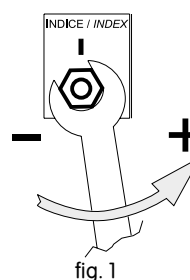


fig. 1



**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 dropping (fig. 2).

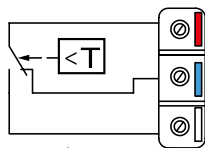


fig. 2

**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 dropping (fig. 3), see logic activation.

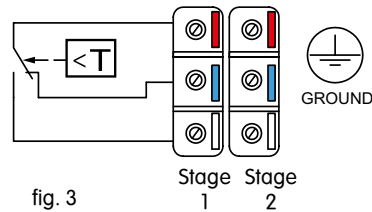
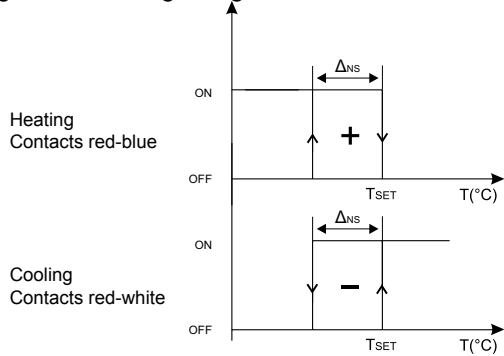


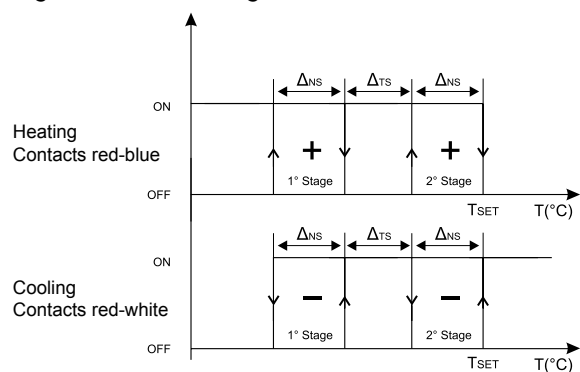
fig. 3

**Logic activation single-stage models:**



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

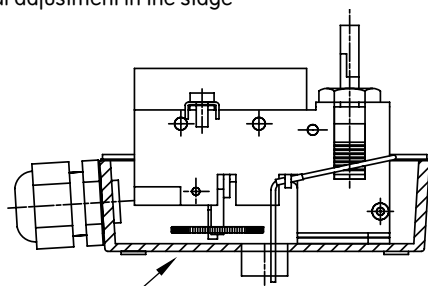
**Logic activation two-stage models:**



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

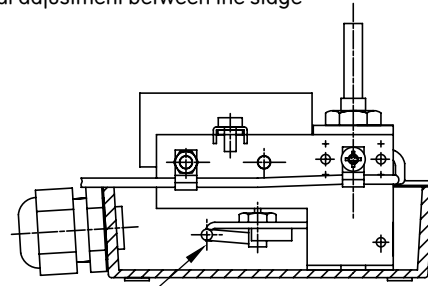
**DIFFERENTIAL ADJUSTMENT**

Differential adjustment in the stage



regulation from 2...20 K

Differential adjustment between the stage



regulation from 2...5 K

**DIMENSIONS (mm)**

