



# **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	STAGES	DIFFERENTIAL IN THE STAGE	DIFFERENTIAL BETW. THE STAGES	MAW. BULB TEMP.	POCKET
	°C		K	К	°C	(*)
DBET-4	-30+30	1	220		60	DBZ-01/02
DBET-4U	-30+30	1	220		60	DBZ-01/02
DBET-4/2	-30+30	2	1	25	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	220		75	DBZ-01/02
DBET-7/2	0+60	2	1	25	75	DBZ-01/02
DBET-8	0+60	1	1		75	DBZ-01/02
DBET-16	+20+90	1	220		100	DBZ-01/02
DBET-16U	+20+90	1	220		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	220		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			

models with range under the cover

manual minimal reset

**ST** manual maximum reset

# **TECHNICAL DATA**

Sensitive element: liquid-filled coiled copper bulb Dim. bulb: Ø 9.5 (Ø 8 for range +50...+120 °C)

Dim. capillary: lenght 1,5 m

**Contacts:** dust-tight voltage free microswitches

with SPDT contacts (heat/cool)

**Switch capacity:** 15 (8) A, 24...250 Vac see schedule Differential: Working: -35...+65 °C

10...90% r.h. (without condensing)

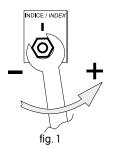
-40...+70 °C Storage: < 95% r.h.

Bayblend base, ABS cover Housing:

**Protection:** IP65, class I **Dimensions:** 108 x 70 x 72 mm

Weight: 340 g

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





# WIRING DIAGRAM

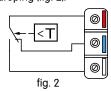
### Single-stage models:

#### **Heating**

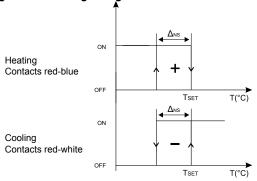
Connect to red and to blue terminal; the contact opens during the temperature rising (fig. 2).

#### Cooling

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



# Logic activation single-stage models:

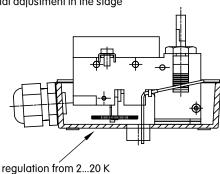


 $\Delta \mbox{\scriptsize NS:}$  differential in the stage  $\mbox{\scriptsize TSET:}$  setting setpoint

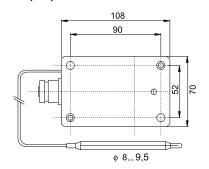
ON: closed contact OFF: open contact

# **DIFFERENTIAL ADJUSTMENT**

Differential adjustment in the stage



# **DIMENSIONS (mm)**



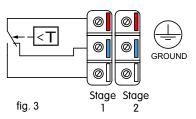
# Two-stage models:

# Heating

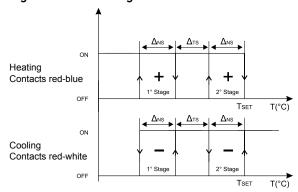
Connect to red and to blue terminal; the contact opens during the temperature rising (fig. 3), see logic activation.

## Cooling

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



# Logic activation two-stage models:



 $\Delta \text{\scriptsize NS:}$  differential in the stage  $\Delta \text{\scriptsize TS:}$  differential between the stage

ON: closed contact OFF: open contact

TSET: setting setpoint

