

DBTV Boiler (Immersion) Thermostats

DBTV are designed for controlling temperature in heating, cooling and air conditioning plants, in boilers and fluid heaters.

Liquid filled sensing elements ensure rapid response and accurate switching differentials. Thermostats are suitable for general control applications, and models with manual maximum reset are available for safety applications.

Thermostats are supplied with brass pocket, stainless steel pockets are available on request.



Features

- 250Vac SPDT Relays
- Well suited for cooling, heating and air conditioning systems
- Exposed setpoint adjustment on most models, concealed models available on request
- Robust housing

Model Types	Model	Description
	DBTV-090U	Single Stage Immersion Thermostat, Range 0..+90°C, Switching Differential 3°C, Concealed Setpoint Adjustment
	DBTV-09090U	Dual Stage Immersion Thermostat, Range 0..+90°C/ 0..+90°C, Switching Differential 3°C (both stages), Concealed Setpoint Adjustment
	DBTV-3090	Single Stage Immersion Thermostat, Range +30..+90°C/+90..+110°C, Switching Differential 3°C, Exposed Setpoint Adjustment
	DBTV-3090R110	Dual Stage Immersion Thermostat, Range +30..+90°C, Switching Differential 3°C/15..20°C, Exposed Setpoint Adjustment
	DBTV-50140	Single Stage Immersion Thermostat, Range +50..+140°C, Switching Differential 3°C, Exposed Setpoint Adjustment
	DBTV-9ST	Single Stage Immersion Thermostat, Range 0..+60°C, Manual Maximum Reset, Exposed Setpoint Adjustment
	DBTV-10	Single Stage Immersion Thermostat, Range +50..+120°C, Switching Differential 2..20°C, Exposed Setpoint Adjustment
	DBTV-12ST	Single Stage Immersion Thermostat, Range +50..+1200°C, Manual Maximum Reset, Exposed Setpoint Adjustment
	DBTV-16	Single Stage Immersion Thermostat, Range +20..+90°C, Switching Differential 2..20°C, Exposed Setpoint Adjustment
	DBTV-18ST	Single Stage Immersion Thermostat, Range +20..90°C, Manual Maximum Reset, Exposed Setpoint Adjustment

Technical Data		
Sensing Element	Liquid Filled Coiled Copper Bulb	
Pipe Connection	R $\frac{3}{4}$ " BSP (Pocket Supplied With) Ø10 x 120mm	
Switching Contacts	DBTV:	15(8)A 250Vac SPDT
	DBTV-090 & 3090	16(4)A 250Vac SPDT
	DBTV-50140:	

Setpoint Adjustment	Exposed Knob (concealed models available) U-Models: Concealed Knob	
Operating Temperature	-35..+65°C	
Protection Class	DBTV: IP65 DBTV-090 & 3090 & DBTV-50140:	IP54
Enclosure	Byblend Base, ABS cover	
Size	132W x 88H x 70D mm or 108W x 70H x 72D mm	

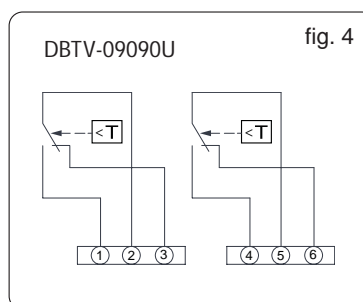
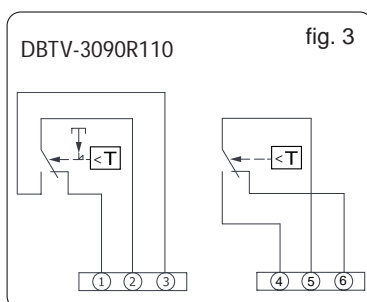
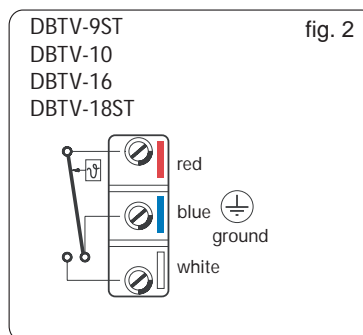
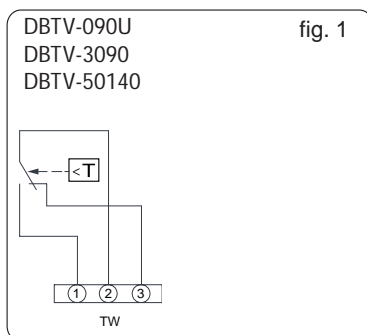
Technical Characteristics

Element	Range °C	Differential °C	Max. bulb Temp °C
DBTV-090U	0..90	3±1	120
DBTV-3090	30..90	3±1	120
DBTV-50140	50..140	5±1	150
DBTV-9ST	0..60	Max. Reset	75
DBTV-10	50..120	Adj. 2..20	140
DBTV-12ST	50..120	Max. Reset	140
DBTV-16	20..90	Adj. 2..20	100
DBTV-18ST	20..90	Max. Reset	100

Technical Characteristics

Element	Range 1 °C	Range 2 °C	Differential Range 1, °C	Differential Range 2, °C	Max. bulb Temp °C
DBTV-09090U	0..90	0..90	3±1	3±1	120
DBTV-3090R110	30..90	90..110	3±1	20±5	120

Wiring Details



Notes: In the view of a constant development of their products, the manufacturer reserves the right for changing technical data and features without prior notice. The consumer is guaranteed against any lack of conformity for 24 months from the time of delivery, according to the European Directive 1999/44/EC. The full text of guarantee is available on request from the seller.

WARNING:

Installation and electrical wirings of this appliance must be made by qualified technicians and in compliance with the current standards

DBTV (fig. 1):

Heating Application: Connect terminal 2 (common) and terminal 3. The contacts open during the temperature increase.

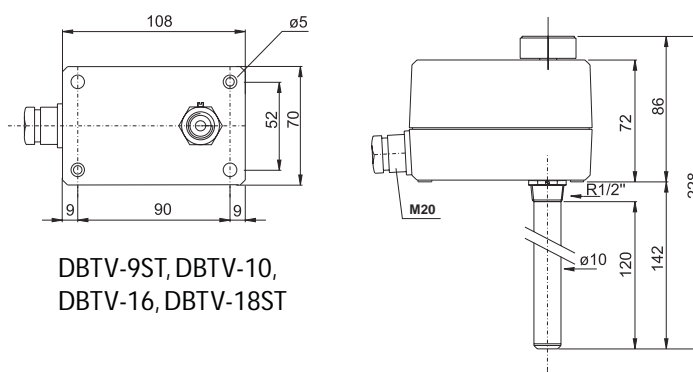
Cooling Application: Connect terminal 2 (common) and terminal 1. The contacts open during the temperature decrease.

DBTV (fig. 2):

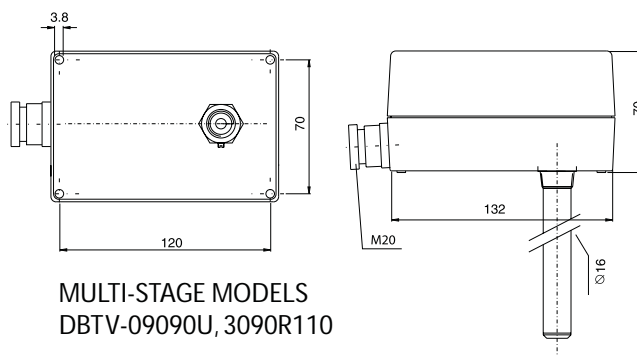
Heating Application: Connect red (common) to blue terminal. The contacts open during the temperature increasing.

Cooling Application: Connect red (common) to white terminal. The contacts open during the temperature decreasing.

Dimensions



DBTV-9ST, DBTV-10,
DBTV-16, DBTV-18ST



MULTI-STAGE MODELS
DBTV-09090U, 3090R110