# International Standard Electronic Heating

# Thermostat Characteristics:

- Installed on the surface of the wall indoors
- Temperature control range +5/+40°C
- Applied in the auto-control system of space heating
- LED turned on while heating
- Satisfying the requirements of safety, energy saving and comfort.

### Types Table:

Model	Current	Sensor	Applications
BDE73-1	3A	Built-in Sensor	Motorised valve or electro-thermal actuator
BDE73	16A	Built-in Sensor Floor Sensor	Heating cable or other power heat loads

#### Technique Parameters:

Voltage: 220VAC

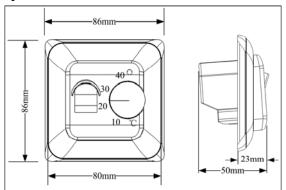
Power consumption: 5VA

Temperature control range: 5~40°C Temperature limit range: 25~55°C Power save mode temperature: 5°C Temperature deviation: ±0.5K Ambient temperature: -5~50°C

Degree of protection provided by enclosure: IP20

Outer sensor: length of cable 3m

#### Specification:



#### **Installation of Outer Sensor:**

Please place the casing under the floor with the outer sensor in, the terminal of which should be thickened and placed on the top of the concrete layer. Sensor cable can be extended to 50m with other cables if necessary. If multi-core cable is used as extended cable, extra cable core should not be used for power supply (e.g. power supply for heating cable) for avoiding the interference of voltage signal to the heating thermostat. If there is shielded cable in the extended cable, shielded cable should not be connected to ground but to terminal 7. It is recommended that the extended cable and casing should not be shared with others.

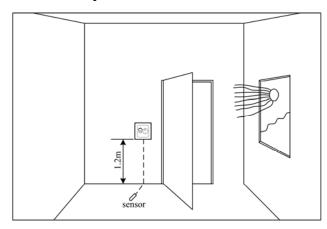
#### Outer sensor and its resistance:

Temperature(°C)	Resistance( $\Omega$ )	
5	22070	
10	17960	
20	12091	
30	8312	
40	5827	

#### **Installation Location Recommended:**

The heating thermostat should be installed on the wall with air flowing freely around.

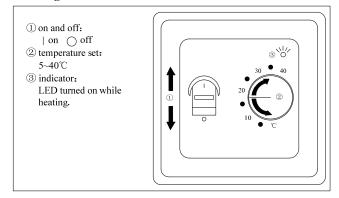
Warning: The installation location should not be influenced by other heat source (e.g. sunlight), air flow through doors & windows or temperature of outer wall.



## **Temperature Set:**

The factory default of temperature control range is  $+5/+40^{\circ}\text{C}$ . For convenient adjusting the LED will be turned on while heating. For the first use, please set the thermostat at the highest temperature, when the room or floor temperature approaches the expected, please turn the knob back until the LED is turned off. One or two days after, user could do fine turning if necessary.

#### Handling Instruction:



#### **Temperature Calibrating:**

When indoor temperature reaches steady state, user could calibrate the heating thermostat to make the temperature reading be the same as the real room temperature., Calibrate Operation Procedures:

- a) Measure the temperature with thermometer;
- **b)** Remove the control knob;
- c) Rotate the adjuster bar D (shown in Fig.2) until the LED is turned off;
- **d**) Install the control knob and make the temperature reading be the same as the real temperature.

Warning: Please do not rotate the control knob since the factory default has been calibrated!

#### Restriction of Control Knob Adjusting Range:

The lock mechanism under the control knob can be used to restrict the adjusting temperature range. User can lock the adjusting range (e.g.20-25 $^{\circ}$ C) as long as loosing the screw C (shown in Fig.2). The red adjusting ring can restrict the maximal temperature, and the green one can restrict the minimal temperature.



