

# TR85-12 Electronic Thermostat User Manual

## Summary:

TR85-12 is the international universal heating electronic thermostat. It use installation of direct wall and have a wide range of controlling temperature. Fool type control interface is easy to use. LED indicates the working state and it is easy for users to understand operation of the thermostat. It is applicable to the heating system of the temperature automatic controlling and provides users with a comfortable, safe, energy-saving and high standard heating environment.

Access to external sensors can realize double temperature double controlling (Built-in sensor measures temperature and external sensor makes the over-temperature protection).

## Technical parameters:

- Voltage: 230VAC 50/60Hz (24VAC Option)
- Power waste: <2VA
- Range of temperature: 5°C–40°C
- Ambient temperature: –5°C–50°C
- Protective casing: IP20
- External sensor: B=3380 10K@25°C Lead length: 3M Temperature protection
- Shell material: Flame-retardant PC
- Installation height: 1.2M
- Installation location: To be fitted in the surrounding air to flow freely on the wall, shall not be affected by other heat effect (Such as sunlight, windows and doors airflow and wall temperature).

## External limiting temperature sensor installation:

The casing is buried under the floor, the sensor is arranged inside the casing, ending of casing should be thickened, and put in upper part of the concrete layer. Sensor cable can be instead of other cable to be lengthened to 50 meters. If the extension cable is used two of multi core cable, the rest of the cable can not be used for other equipment power supply (such as heating power cable) so as to avoid the voltage signal to disturb the thermostat. If the extension cable is shielded cable, shielding line should not be grounding. The best way is using independent extension cable and be arranged in a separate casing.

## Temperature setting and control:

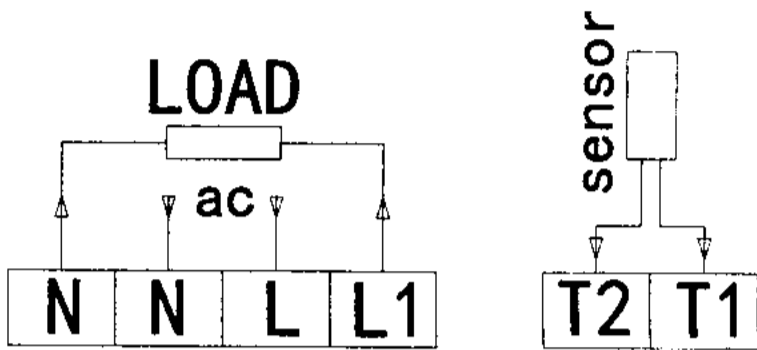
Adjust dial to the temperature which need to be controlled, the controller will automatically track and compare the current environment temperature with the setting temperature. When the environment temperature is higher than the preset temperature, the thermostat will automatically disconnect the heater. When the environment temperature in the current is lower than the setting temperature, the thermostat can automatically connect with the heater.

## Temperature calibration:

Every thermostat in the factory is calibrated, the user don't need to calibrate again.

If the users need calibrating again, he can unload the thermostat knob. After room temperature is stable, use a thermometer to measure the accurate room temperature, and then anti-clockwise rotate adjusting rod slowly to green light state, keep scale indicating " | " which in on the panel and the corresponding disk temperature value aligned with the pressure regulating disk (please keep disk temperature value and Measured value of thermometer aligned.)

### Wiring diagram:

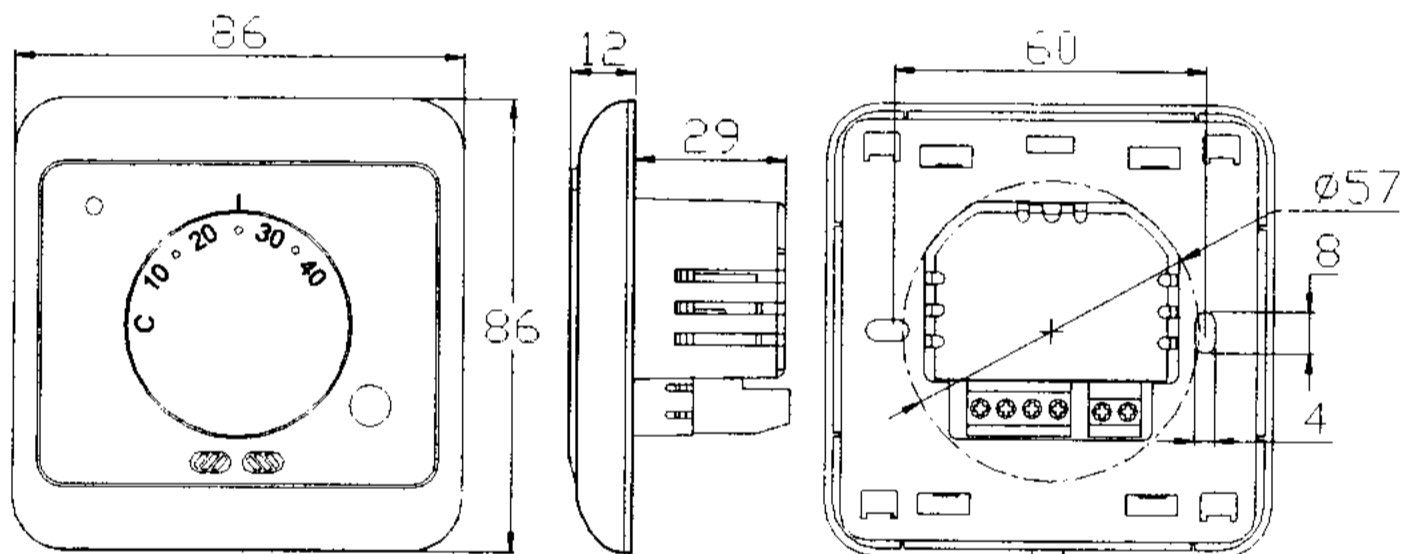


### Mode setting:

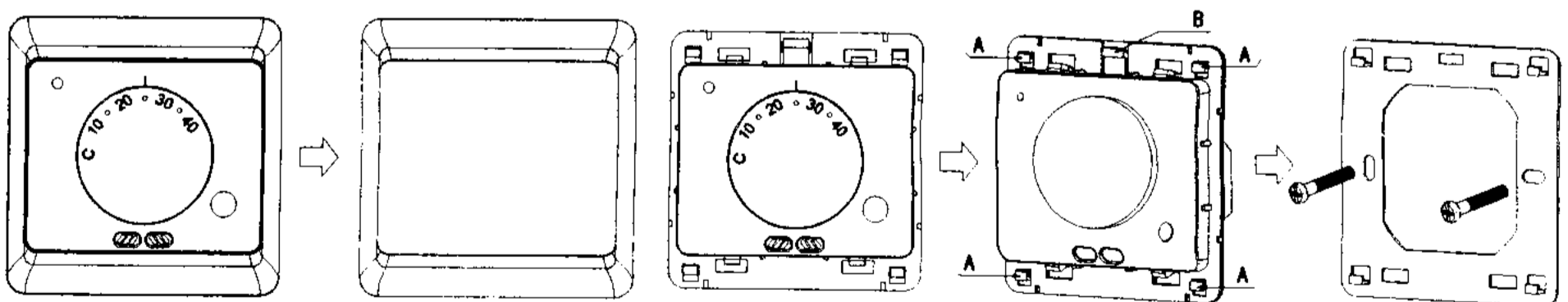
Mode	J1	J2	J3
IN	<b>ON</b>	<b>ON</b>	<b>OFF</b>
OUT	<b>OFF</b>	<b>OFF</b>	<b>ON</b>
ALL	<b>ON</b>	<b>ON</b>	<b>OFF</b>

ON: shorted    OFF: Open circle

### Dimensions: Unit: mm



### MOUNTING INSTRUCTIONS



A: Hook

B: Buckle

Step 1: Separate the Polycarbonate Bezel unit from the LCD screen.

Step 2: In Laka buckle, outside at the same time lift up the movement, it is necessary to separate the iron with the movement.

Step 3: Fixing plate with screws to the wall to ensure that the de-energized state product back wiring diagram connected electrical lines.

Combinations: Align the four hooks, press down on the movement, the iron plate with movement combinations, and then fasten the frame