

**SM-SM308N-TL-S2**

**Features**

- Override • Timing On/Off • 5+2 Day Programmable
- Infrared Remote Control (Optional)
- Blue backlight (Optional)
- Remote Sensor (Optional)
- Hole pitch: 60 mm



**Application**

SM308N-TL-S2 series Thermostats used in individual rooms or zones in buildings. SM308N-TL-S2 has one digital input as open/close contact input, one analog input that can be used as an external sensor input, one relay outputs. It controls the fan coil unit depending on the internal room sensor or external return sensor temperature.

**Notes on Usage**

Please, read this datasheet carefully. SM308N-TL-S2 thermostat safety rules in accordance with the latest technological developments designed and manufactured. To avoid injury and property damage safety warnings must be observed.

**Security Advice-Caution**

Assembly, maintenance, diagnostic and repair must be done by authorized service. The power supply of the device is 260V AC and it has no internal fuse. External protection with max C 10A circuit breaker required in all cases. Disconnect from power supply before separating front plate.



**Ordering Information**

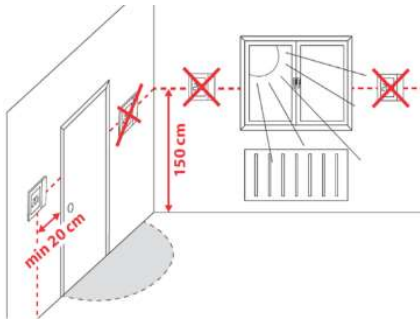
Product Code	Description	Power
SM308N-TL-S2	1 pcs Temperature Input 1 pcs Digital Outputs (Relay) Electrical Control	220 VAC

**Technical Specification**

Power Supply	85~260 VAC, 50/60 Hz
Power Consumption	< 2.0W
Electrical Connection	Terminal Connectors
Switch current rating	16 A (resistive load) 6 A (inductive load)
Accuracy	±1°C

Inputs	1 pcs Digital Input (Voltage Free Dry Contact) 1 pcs Analog Input (NTC 10K)
Outputs	1 pcs Digital Output (1 x 16 (6) A Relay)
Maximum Humidity	%5~95
Sensor Type	NTC
Control Performance	On/Off Internal sensor :1°C differential External sensor :2°C differential
Operating Rating	0~40 °C, 5~95%RH (non-condensing)
Dimensions	86 x 86 x 13 mm
Housing	ABS + PC Flame Retardant
Mounting	Flush Mounting

### Mounting Location

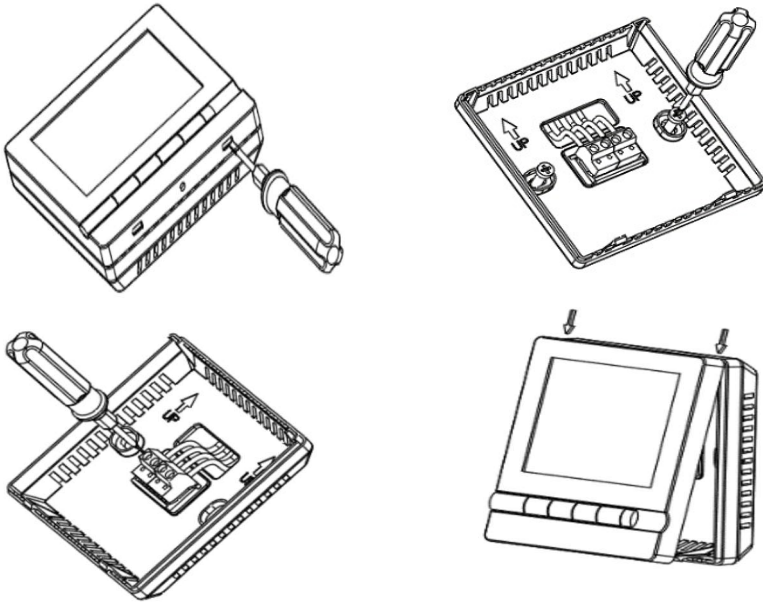


Mount the room thermostat on the cable conduit. Do not mount in niches or bookcases, behind curtains, above or near heat sources. Install at a height of about 1.5 meters from the floor. Devices must be mounted on clean, dry indoor place without direct airflow from a heating/cooling device. Do not expose to dripping or splashing.

**CAUTION: Disconnect the power supply before removing the front cover. Wiring, protection, and earthing should be done in accordance with the directions.**



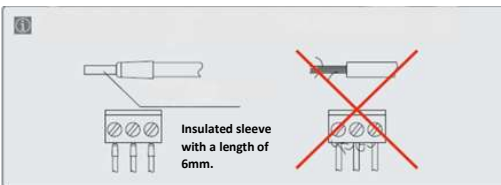
**Mounting Instructions**



Please follow below instructions during mounting.

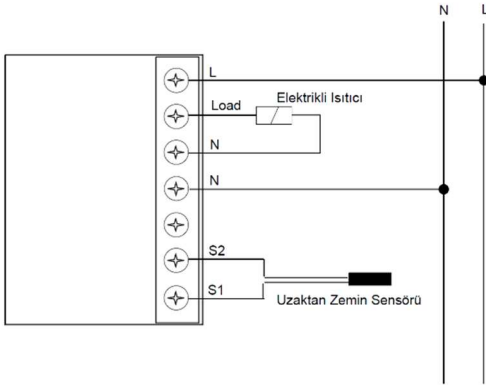
- Step 1:** Take the thermostat and user manual out from the package. Remove the front cover by free the hooks at the bottom of the front panel with a flat screwdriver.
- Step 2:** Connect the cables according to the wiring diagram below.
- Step 3:** Surface mounting in a 60mm wall box. Make sure the back cover is in the appropriate position (according to the arrow on it)
- Step 4:** Attach Connect the front plate to the back plate. Make sure that the pins on the front plate are fully inserted into the back plate. Push the front of the case until you hear a click.
- Step 5:** Refer to the pictures after installation.
- Step 6:** Power on the thermostat to work.

**Important Note:** It is recommended to use the screws included in the product box. Otherwise, there could be fitting problems during the mounting.

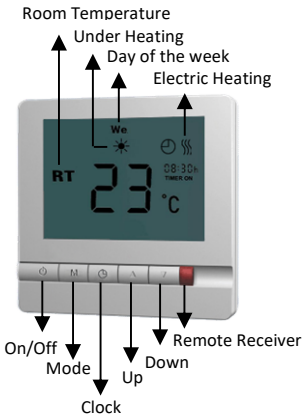


**Caution! The ends of the connecting wires must be protected against delamination using insulated sleeves as shown in the figure.**

**Wiring Diagram**



**Button Description and Operations**



• **On/Off:** Press power button (⏻) to switch on and off thermostat.

• **Frost Mode (Thermostat Off):**

To enable this operation:

When the thermostat turned off

Press "M" for 3 seconds.

Select 01 (00 = disabled)

When enabled and thermostat has been turned off, the icon "☁" will be showed and the heating will be activated if the room temperature is lower than 5 °C; the heating will be stopped if the room temperature is higher than 7 °C.

• **Temperature Calibrating:**

When the thermostat turned off, Press “▲” and “▼” for 3 seconds. The display will show the measured temperature.

Press “▲” or “▼” to adjust the temperature to the correct value.

Press “⏻” to turn off. The calibration setting will be stored.

• **Normal Operating Mode:**

**RT** = When thermostat is in the operating mode; RT is displayed and indicates the Room Temperature.

**SET** = Pressing the Up or Down key once will display SET and the current set-point temperature. You can increase/decrease the set-point temperature using the Up/Down key. This temperature change is only temporary and will be maintained only until the next programmed setting.

• **Override/ Timing On/Off/ 5+2 Days 4 Period Programmable Select :**

When the thermostat turned on, press “M” button for 3 seconds. You can select below settings:

01 = Override.

02 = Timing on/off. And the display will show “⌚”.

03 = Programmable. And the display will show “⏸”.

• **Setting The Clock:**

1. Press “⌚” once, hour will be flash.

Use the Up/Down key to select the hours.

2. Press “⌚” again, minute will be flash.

Use the Up/Down key to select the minutes.

3. Press “⌚” button, till to week flash.

Use the Up/Down key to select the day of the week.

• **Setting The Timing On/Off:**

When select Timing On/Off function and the display show “⌚”, you could set “TIMER ON” / “TIMER OFF”.

Press “⌚” till to display “TIMER ON” and “hh” all flash, press “▲” or “▼” to adjust hour, press “⌚”, “mm” flash, press “▲” or “▼” to adjust minute; Press “⌚” till to display “TIMER OFF” and “hh” all flash, press “▲” or “▼” to adjust hour, press “⌚”, “mm” flash, press “▲” or “▼” to adjust minute.

The settings will be finished after the TIME OFF. I.e. the settings validity is a day.

To disable the function, you have 2 ways:

Select to “Override” or “Programmable” mode.

Set the TIME ON/OFF to “00:00”.

• **Setting The Heating Program:**

When select Programmable function and the display show “⏸”. You could set the heating program.

1. Press “⏸” for 3 seconds, the number 1 and “Mo Tu We Th Fr” are displayed.

This indicates that you can program switching time 1 for the weekday.

2. Use Up/Down key to set the required start time.

3. Press “⏸” to accept this setting.

4. Use the Up/Down key to set the required temp.

5. Press “⏸” to accept this setting.

6. Repeat for switching times 2-4 weekday.

7. After you have programmed times 1-4 for the weekday, you are now able to set the switching times for weekend “Sa Su” will be displayed.

8. Use Up/Down key to set the required start time.

9. Press “⏸” to accept this setting.

10. Use the Up/Down key to set the required temp.

11. Repeat for switching times 2-4 for the weekend.

**To disable the function:** Select to “Override” or “Programmable” mode.

**Setting The Floor Maximum Limit**

1. When the thermostat turned off.
2. Press "M" for 5 seconds and until the display show "✱", now leave "M" button, the display show "✱" and "SET".
3. You are now prompted to enter the maximum floor limit.
4. Range = 20 ~ 90°C.

**Reading The Floor Temperature**

When the thermostat turned on.  
Press "M" once, the "🌀" will be flashed, then the display show the floor temperature.

**Dimensions**

