

Temperature Controller SMM-9050 V2



PURPOSE OF USE

Temperature controller SMM-9050 V2 is designed to control temperature in rooms, vegetable storage facilities, open areas, water and electric heating systems, etc. by turning on/off the heating or cooling unit based on signals from a remote NTC temperature sensor.

DATA SHEET

Voltage	~230V (±10%), 50 (60) Hz
Rated power consumption	no more than 1 W
Max. current.....	16 A
Relay contact type	SPDT
Temperature measure range.....	from -40°C to +120°C
Temperature hysteresis (adjustable)	from 0 °C to 15 °C
Relay operation delay time (adjustable)	from 0 to 300 sec.
Temperature calibration (adjustable)	from -15°C to +15°C
Operating temperature range	from 0°C to +50°C
Max. relative air humidity (at +35 °C)	85%
Temperature sensor	NTC 10 kOhm at +25°C
Sensor location	OUT
Sensor connecting cable length	2 m
IP class	IP20
Enclosure color	gray
Enclosure dimensions	90 (H) x 36 (W) x 62(D) mm
Weight	154 g
Mounting type	DIN rail, 2 modules
Saved settings when power is off	12 months
Warranty	24 months
Certification	CE, EAC

FUNCTIONALITY

- Operation mode can be selected: heating or cooling.
- LED Indication of the relay status (closed/open).
- Adjustable temperature hysteresis.
- Adjustable operation delay time.
- Adjustable temperature calibration.

CONTROL PANEL



Digital Indicator

Operation mode and relay status indication

Setting buttons

The "RUN" indicator lights up green when the control relay contacts are closed if used "NC" connection and control relay contact open if used "NO" connection. The "COLD" (cooling) and "HOT" (heating) indicators light up according to selected mode.

ADVANCED SETTINGS

To set up controller, connect the controller to the ~230V (±10%), 50 (60) Hz network and hold the "SET" button for 3 seconds. To switch between the setting modes, press the "+or-" button in sequence. Use the 'SET' key to determine the setting value. Set up completed press "↶" exit. in Table 1.

Table 1. Temperature controller setting modes.

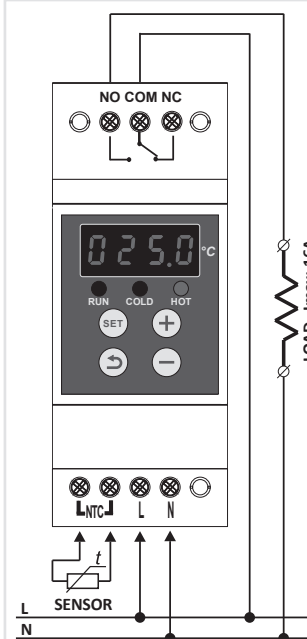
Mode No	Indicator symbol	Settings	Set value. Use buttons "+" or "-"
P-1	8 2 5.0	Target temperature	Set value. Use buttons "+" or "-"
P-2	8 8:8 C or 8 8:8 H	Choose operation mode "HOT" (heating) or "COLD" (cooling)	8 8:8 C → «COLD» 8 8:8 H → «HOT»
	8 8:5.0	Temperature hysteresis	0 °C ~ 15 °C
P-4	8 8:8.0	Operation delay time	0 ~ 300 sec.
P-5	8 8:8.0	Temperature calibration	-15 °C ~ +15 °C

The default parameters for the first power on are: target temperature (25 °C), working mode (H), temperature hysteresis (5 °C), running delay time (10S), temperature calibration (0 °C)

For example, in the case of default parameters and real-time temperature of 15 °C, heating will start after 10 seconds (running delay time) until the real-time temperature reaches (target temperature) 25 °C, and then stop heating until the temperature is less than (target temperature - temperature delay) 20 °C, and the duration is greater than 10 seconds (running delay time), then repeat this step.

If the mode is changed to cooling mode and the real-time temperature is 35 °C, cooling will start after 10 seconds (running delay time) until the real-time temperature reaches (target temperature) 25 °C, and then stop cooling until the temperature is greater than (target temperature+temperature delay) 30 °C, and the duration is greater than 10 seconds (running delay time), then repeat this step.

INSTALLATION



Temperature controller SMM-9050 V2 is designed for installation on a DIN rail. Controller power supply must be connected through the 16A circuit breaker (not shown in the wiring diagram). Controller installation must be done by qualified electrician.

To connect the controller, you need to:

- Install the controller on a DIN rail.
- Connect the temperature sensor.
- Connect the load (if necessary, via an external relay).
- Connect the power wires, strictly observing the correct connection of the L phase and N neutral wires.
- Apply voltage.
- Adjust the settings of the temperature controller.

SAFETY

Temperature controller should be connected to a single-phase network ~230V ($\pm 10\%$), 50 (60) Hz in accordance with existing electrical safety standards.

Installation, connection and settings adjustment must be made by qualified electrician. Before starting the installation, make sure that there is no voltage on the connected wires. Unauthorized opening of the enclosure entails the loss of the right to warranty service of the device, and may also cause electric shock.

Temperature controller must be used for its intended purpose.

WARRANTY

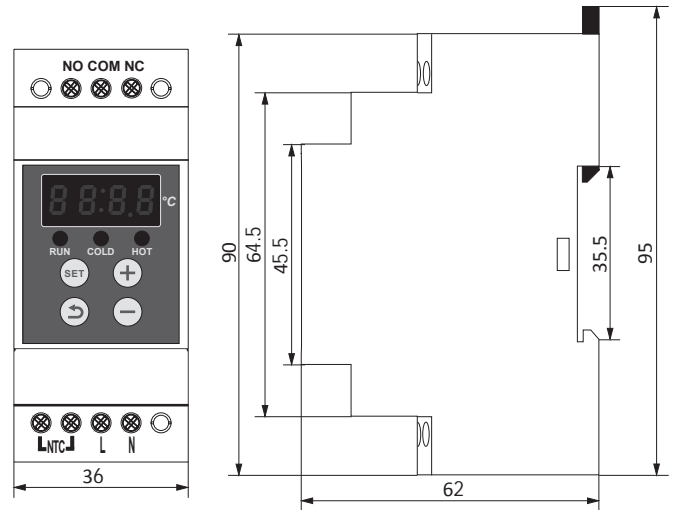
The warranty period is 24 months from the date of sale.

During the warranty period, the buyer has the right to repair or replace the product if any faults are detected that occurred due to the manufacturer's fault and provided that the installation and operation instructions are followed. The warranty does not apply to temperature controllers that have mechanical damage, or if the defect occurred as a result of improper installation, connection, and operation of this device.

SMM-9050 V2 KIT INCLUDES

- Temperature controller SMM-9050. V2
- NTC temperature sensor with 2m.
- Wire Instruction.

DIMENSIONS (mm)



RECYCLING OF OBSOLETE APPLIANCES



Appliances with this label must not be disposed off with the general waste. They must be collected separately and disposed off according to local regulations.