sygonix®

DIN Rail Mounted Heating and Cooling Thermostat

Item no: 2992337

CE

1 Operating Instructions for download

Use the link www.conrad.com/downloads (alternatively scan the QR code) to download the complete operating instructions (or new/current versions if available). Follow the instructions on the web page.

2 Intended use

The product is a heating and cooling thermostat with a wired NTC sensor. The product is intended to be used to control heating and cooling systems. The product must be mounted on a TS35 DIN rail inside an electric distribution box.

The product is intended for indoor use only. Do not use it outdoors.

Contact with moisture must be avoided under all circumstances.

If you use the product for purposes other than those described, the product may be damaged.

Improper use can result in short circuits, fires, electric shocks or other hazards.

The product complies with the statutory national and European requirements.

For safety and approval purposes, you must not rebuild and/or modify the product.

Read the operating instructions carefully and store them in a safe place. Make this product available to third parties only together with the operating instructions.

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3 Delivery contents

- Thermostat
- Sensor with wire
- Operating instructions

4 Description of symbols

The following symbols are on the product/appliance or are used in the text:

⚠ The symbol warns of hazards that can lead to personal injury.

5 Safety instructions

⚠ **Read the operating instructions carefully and especially observe the safety information. If you do not follow the safety instructions and information on proper handling, we assume no liability for any resulting personal injury or damage to property. Such cases will invalidate the warranty/guarantee.**

5.1 Specialist knowledge required

- The product must only be installed by persons with relevant electrical knowledge.
- The product must only be programmed and operated by authorized people with sufficient knowledge about the consequences of different settings.

5.2 General

- The product is not a toy. Keep it out of the reach of children and pets.
- Do not leave packaging material lying around carelessly. This may become dangerous playing material for children.
- If you have questions which remain unanswered by this information product, contact our technical support service or other technical personnel.
- Maintenance, modifications and repairs must only be completed by a technician or an authorised repair centre.

5.3 Handling

- Handle the product carefully. Jolts, impacts or a fall even from a low height can damage the product.

5.4 Operating environment

- Do not place the product under any mechanical stress.
- Protect the appliance from extreme temperatures, strong jolts, flammable gases, steam and solvents.
- Protect the product from high humidity and moisture.
- Protect the product from direct sunlight.

5.5 Operation

- If it is no longer possible to operate the product safely, take it out of operation and protect it from any accidental use. DO NOT attempt to repair the product yourself. Safe operation can no longer be guaranteed if the product:
  - is visibly damaged,
  - is no longer working properly,
  - has been stored for extended periods in poor ambient conditions or
  - has been subjected to any serious transport-related stresses.

5.6 Electrical installation

WARNING! Safety hazard!

The product should only be installed by people with relevant electrical knowledge and experience! *)

If it is not installed properly, you risk:

- your own life
- the life of user of the electrical device
- severe damage to property, e.g., by fire
- personal liability for personal injury and material damage

Always consult an electrician!

*) Technical knowledge required to perform the installation:

For the installation, the following specialist knowledge is required in particular:

- The "Five safety rules": Disconnect from the mains; protect against accidental switch-on; ensure there is no voltage; earth and short-circuit; cover or protect adjacent live parts
- Use of suitable tools, measuring devices and personal protective equipment, where necessary
- Analysis of measurement results
- Use of electrical installation materials to meet the requirements for disconnection
- IP protection ratings
- Installation of electrical installation materials
- Type of power supply (TN system, IT system, TT system) and the corresponding connection criteria (classic earthing, protective earthing, necessary additional measures etc.)

If you are not a professional, do not do it yourself, have it performed by a specialist.

6 Cleaning

Important:
- Do not use aggressive cleaning agents, rubbing alcohol or other chemical solutions. They damage the housing and can cause the product to malfunction.
- Do not immerse the product in water.

1. Disconnect the product from the power supply.
2. Clean the product with a dry, fibre-free cloth.

7 Disposal

🗑 This symbol must appear on any electrical and electronic equipment placed on the EU market. This symbol indicates that this device should not be disposed of as unsorted municipal waste at the end of its service life.

Owners of WEEE (Waste from Electrical and Electronic Equipment) shall dispose of it separately from unsorted municipal waste. Spent batteries and accumulators, which are not enclosed by the WEEE, as well as lamps that can be removed from the WEEE in a non-destructive manner, must be removed by end users from the WEEE in a non-destructive manner before it is handed over to a collection point.
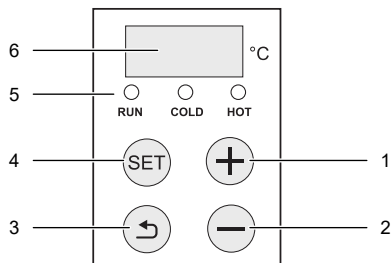
Distributors of electrical and electronic equipment are legally obliged to provide free takeback of waste. Conrad provides the following return options **free of charge** (more details on our website):

- in our Conrad offices
- at the Conrad collection points
- at the collection points of public waste management authorities or the collection points set up by manufacturers or distributors within the meaning of the ElektroG

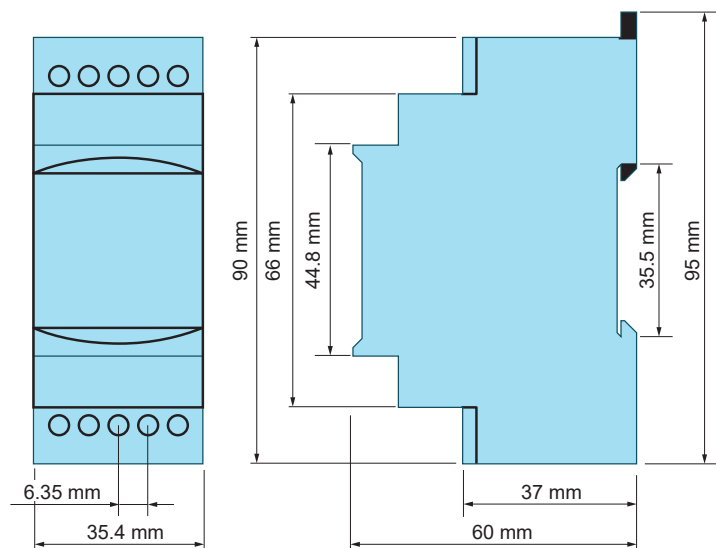End users are responsible for deleting personal data from the WEEE to be disposed of.

It should be noted that different obligations about the return or recycling of WEEE may apply in countries outside of Germany.
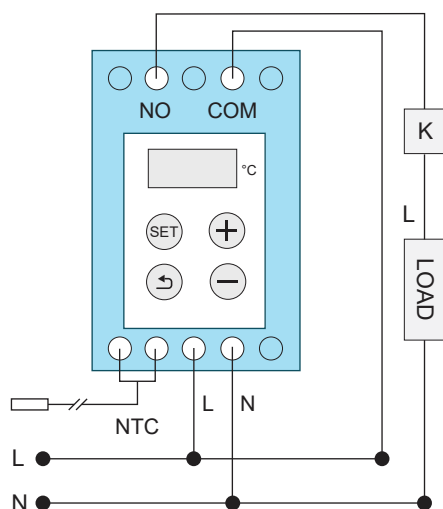
8 Product overview

	Component	Description/Function
1	Programming button **+**	For programming the thermostat
2	Programming button **-**	For programming the thermostat
3	Programming return button	For programming the thermostat
4	Programming button **SET**	For programming the thermostat
5	Operating mode indicators	■ **RUN**: heating or cooling is in progress ■ **COLD**: cooling mode is activated ■ **HOT**: heating mode is activated
6	Display	Displays temperature

9 Dimensions

10 Wiring

> **Important:**
> Strictly observe the wiring as indicated in the diagram to prevent accidents, injury and property damage.
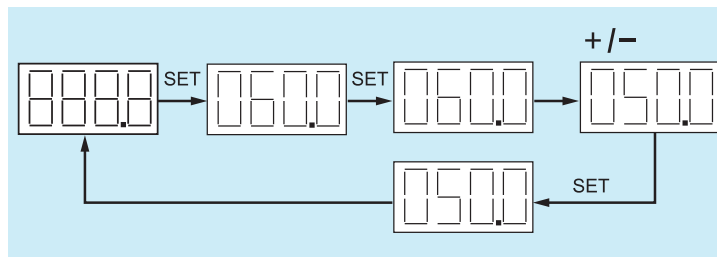
11 Programming the thermostat

> **Important:**
> Before you perform any tests, wait for at least 1 minute for the connected sensor to adjust to the environment.
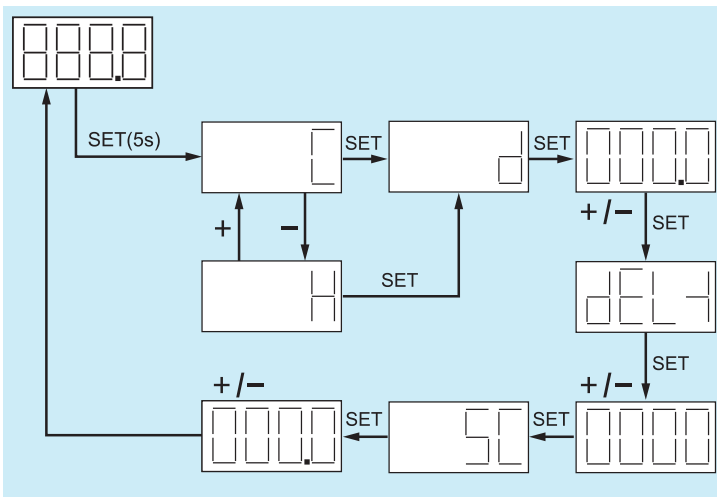
11.1 Programming buttons

Button	Function
+ / -	Change settings
Return	■ Undo setting ■ Return to start display
SET	■ Enter settings ■ Save settings

11.2 Setting the temperature

11.3 Configuring the thermostat

Code	Indication	Description
C	Cold mode	■ The relay is normally open. ■ The relay will **close** if the measured temperature exceeds the set temperature value. ■ Example: a connected fan will start cooling if the measured temperature exceeds the set temperature.
H	Hot mode	■ The relay is closed. ■ The relay will **open** if the measured temperature exceeds the set temperature value. ■ Example: a connected heater will stop heating if the measured temperature exceeds the set temperature.
d	Temperature delta	The temperature delta sets the bounds of the working temperature range. ■ Cold mode: The relay will close if the measured temperature exceeds (set temperature + d). ■ Hot mode: The relay will open if the measured temperature falls below (set temperature - d).
DELY	Relay delay time	Indicates the relay operation delay. Possible setting: 0 - 300 s
SC	Temperature deviation correction	Indicates the temperature correction value for the connected temperature sensor. Temperature correction is useful if the connected temperature sensor operates in an environment that is different from the thermostat installation location. Possible setting: -15 to +15 °C

12 Error codes

Code	Error description	Action
-20	Sensor is disconnected.	Connect the sensor.

13 Technical data

Relay switch type............................	1 pole
Input voltage	220 - 240 V/AC
Input AC frequency	50/60 Hz
Output voltage	220 - 240 V/AC
Standy power consumption	approx. 0.8 W
Current range	0 - 5 A
Relay delay time	0 - 300 s
Temperature measuring range	-20 to +100 °C
Temperature sensor	NTC 10K
Sensor temperature correction	-15 to +15 °C
Accuracy..	±1 °C
Sensor wire length..........................	2 m
Installation method	DIN Rail TS35
Cable type	H05VV-F 3G 0.5 - 6 mm^2
Operating temperature	0 to +50 °C
Operating humidity	<93 % RH (non-condensing)
Storage temperature	0 to +50 °C
Storage humidity	<93 % RH (non-condensing)
Dimensions (W x H x D) (approx.) .	35.4 x 95 x 60 mm
Weight (approx.)	175 g