Installation and operating instructions

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Read installation and operating instructions in their entirety before installing the room thermostat!

The installation and operating instructions as well as other valid documents must remain with the user of the system!

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Illustr. 1.1 Digital room thermostat with fan drive

## 1 General information

# 1.1 Information regarding installation and operating instructions

These installation and operating instructions serve the installer to install the room thermostat professionally and to set it into operation.

Other valid documents:

Manuals of all system components, regulations for prevention of accidents as well as rules of technology.

#### 1.2 Keeping of documents

These installation and operating instructions should be kept by the user of the system.

### 1.3 Copyright

The installation and operating instructions are copyrighted.

### 1.4 Symbol explanation

Safety guidelines are displayed by symbols. These guidelines are to be observed to prevent accidents, damage to property and malfunctions.

↑ DANGER Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

**!WARNING** WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**ACAUTION** CAUTION indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

**NOTICE** NOTICE indicates a situation which, if not addressed, may result in property damage.

## 2 Safty notes

#### 2.1 Correct use

Operating safety is only guaranteed if the room thermostat is used correctly.

The digital room thermostat installed in a Fan-Coil unit is used for the room temperature control.

Any use of the room thermostat outside the above circumstances will be considered as non-compliant and misuse.

Claims of any kind against the manufacturer and/or its authorised representatives due to damages caused by incorrect use cannot be accepted.

The observance of the operating and installation instructions is part of the compliance terms.

# 2.2 Possible dangers at the installation location

## **▲** DANGER

## **Electrical current!**

**Danger to life!** The current supply must be switched off before work commences!

The room thermostat must only be installed in dry and self-contained rooms!

The room thermostat must be installed by a specialist installer!

## 3 Transport, storage and packaging

#### 3.1 Transport inspection

Upon receipt, check delivery for any damages caused during transit.

Any damages must be reported immediately upon receipt.

## 3.2 Storage

## NOTICE

Please remove protective foil of the display and any transport protections only immediately before installation.

Please protect room thermostat against external forces (e.g. impacts, vibrations etc.).

The room thermostat must only be stored under the following conditions:

- Do not store in open air, keep dry and free from dust.
- Do not expose to aggressive fluids or heat sources.
- · Protect from direct sunlight and mechanical agitation.
- Storage temperature: 0°C up to 40°C, max. relative humidity of air: 95 %

## 3.3 Packaging

All packaging material must be disposed of environmentally friendly.

### 4 Technical Data

#### 4.1 Performance data

Temperature setting range: 5 to 35°C

Switching temperature

difference: about ±1K

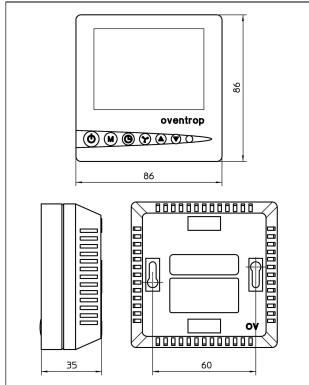
Operating voltage: 100-230 V AC, 50/60Hz Switching capacity: 2 (1) A; 230 V AC

Power: < 3 W Fuse: 3 A, 250 V

Service life: > 100.000 relay actuated switching

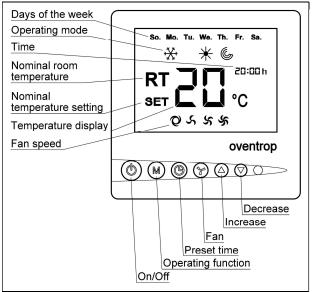
operations Protection: IP 30

# 4.2 Dimensions / Connection dimensions



Illustr. 4.1 Dimensions

## 5 Construction and function



Illustr. 5.1 Display and functions of press buttons

## 5.1 Functional description

The digital room thermostat is used for the fan drive of Fan-Coil units. The temperature of the fan convectors is controlled continuously with the help of a valve which is activated through an actuator. When the temperature has reached the set nominal value, the valve is closed and the ventilator keeps running.

Setting of the nominal value by key stroke, visualisation on a large LCD display with blue backlighting. The backlighting is active when pressing the keys.

Operating functions: Heating, cooling, ventilation.

Fan speeds: slow, medium, fast or automatic.

Settings can be stored. Valve and Fan-Coil unit relay-controlled.

## 5.2 Application range

The digital room thermostat is suitable for the operation with three-speed fans in combination with Oventrop two point actuators.

## 6 Installation and assembly

#### 6.1 Extent of supply

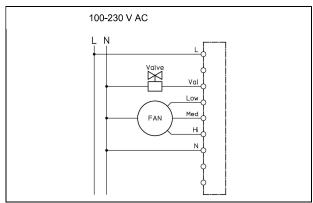
Before installing the room thermostat, please check delivery for completeness and any damages caused during transit.

## 6.2 Installation

Switch off current supply.

## NOTICE

Do not apply pressure onto the display during installation!



Illustr. 6.1 Wiring diagram

Open casing by pushing back the snap hooks at the lower side with a 3.5 mm screwdriver. Now fix casing with the help of the enclosed screws. Finally carry out wiring according to the wiring diagram (illustr. 6.1) and close casing again.

The installation location of the room thermostat must comply with the following conditions:

- The room thermostat must not be exposed to a direct heat source (e.g. sunlight) or cold source.
- A good air circulation must be guaranteed.
- The room thermostat must be easily accessible.

## 7 Operation

The display shows the current room temperature (RT) at the installation location. The current time and day of the week as well as the set operating mode and the setting of the fan are also displayed.

## 7.1 Switching the thermostat off/on

The thermostat and display are switched off by pressing the key . The thermostat is switched on again by pressing the key once more.

## 7.2 Frost protection mode

To activate the frost protection, switch the thermostat off by pressing the key  $\textcircled{\textcircled{b}}$ .

Now keep the key ∰ pressed for about 3 seconds, "00" (inactivated) appears on the display. Now chose "01" (activated) by pressing the key ⊚.

If the room temperature drops below 5°C, the thermostat is switched on automatically. The room temperature is now increased to 7°C. Having reached this value, the thermostat is switched off again automatically.

As supplied, the frost protection is switched off.

#### 7.3 Temperature calibration

Temperature calibration must only be carried out if the indicated temperature is not correct.

Switch off the room thermostat by using the key . Now press the keys and simultaneously for about 3 seconds. The room temperature which visualises on the display is adapted with the help of the keys or .

The calibration settings are stored by pressing the key .

# 7.4 Operating functions

The operating function can be chosen with the key .

★ heating, ★ cooling, © ventilation

#### 7.5 Fan setting

The fan speed can be set with the key 🖫: Solow, Somedium, Soft fast,

Q automatic (only for heating and cooling)

#### 7.6 Normal operating mode

RT: Thermostat in operating mode; the display indicates "RT" and the current room temperature.

### 7.7 Setting the time and the day of the week

Press the key . Now set the hours with the help of the keys and and press to set the minutes. Now press again and set the day of the week.

### 7.8 Setting of the weekly programme

Setting of the nominal temperature for the days of the week (Mo-Fr) and the weekend (Sa-Su) are autonomous. 4 time intervals per day can be set.

Press the key 

for about 3 seconds, The display now indicates 1 (SET 1) and "Mo. Tu. We. Th. Fr.". The first time interval for the days of the week can now be set.

Use the keys a and o to set the required start-up time and confirm it by pressing the key a. Set the required temperature using the keys a and o and confirm it by pressing the key a. Repeat this procedure for the time intervals 2-4 of the days of the week

Now the settings for the weekend (the display shows "Su. Sa.") can be carried out the same way.

#### Example

Room temperature for the days of the week shall be set as follows.

i emperature sequence:	Requirea setting:
05:30 - 08:00 h 22°C	Number 1: 05:30; 22°C
08:00 - 14:00 h 18°C	Number 2: 08:00; 18°C
14:00 – 23:00 h 23°C	Number 3: 14:00; 23°C
23:00 - 05:30 h 19°C	Number 4: 23:00; 19°C

#### 8 Maintenance

The room thermostat must only be cleaned with mild detergent. Detergents must not penetrate the room thermostat, they must not be sprayed onto the thermostat but onto a cleaning cloth.

# 9 General terms and conditions of sale and delivery

Oventrops general terms and conditions of sale and delivery valid at the time of supply are applicable.