

# oventrop

Innovation + Quality

Valves, controls + systems

Electric room thermostats  
Heating and cooling

Product range

*for an improved  
energy efficiency ...*





1

Room temperature control in buildings is carried out with the help of room thermostats. Different applications call for different functions. The Oventrop room thermostat programme includes a wide range of models.

### 1 Room thermostats – Heating and cooling with fan drive

Fan convectors (fan coils) are installed in many administration buildings and hotels for room heating and cooling. A heating and cooling function as well as a fan drive are “must have” features for these room thermostats. Depending on the actuators mounted onto the regulating valves of the fan convectors, different signals (e.g. two point, 0-10 V) are required for the activation of the actuators through the room thermostats.

### 2 Room thermostat – surface mounting – heating or cooling, 230 V and 24 V, with LCD display and adjustable timed programme.

Temperature range: 5 °C up to 35 °C  
Heating or cooling: Use electrothermal actuators (two point) “closed with current off”.

**Item no.: 1152451/52**

### 3 Room thermostat – surface mounting – heating and cooling, 24 V. Electronic room thermostat with digital display for ventilation systems with heating and cooling function. Activation of actuators with a control voltage of 0-10 V – separate for the heating and cooling circuit. Three-stage or automatic ventilator operation (depending on the difference between the nominal and actual room temperature). Manual switching option from heating to cooling.

**Item no.: 1152066**

### 4 Room thermostat – surface mounting – heating and cooling. The room thermostat does not only feature analogue outlets 0-10 V for heating and cooling, but also 3 switches (24 V – 240 V) for the activation of fan convectors (fan coil units).

**Item no.: 1152153**

### 5 “R-Tronic WA K” Thermostat with fan drive (in preparation).

Advantages:

- easy menu navigation
- three-stage fan speed control
- automatic interruption of the heating or cooling operation when opening the window

**Item no.: 1150690**



2



3



4



5



1

1 In combination with the corresponding actuators, room thermostats are used for room temperature control, for instance with radiators, surface heating systems or radiant ceiling panels.

2 Room thermostat – surface mounting – heating, 230 V and 24 V. The surface- or flush-mounted model of the electric room thermostat is required for individual room temperature control in combination with the electrothermal actuators (two point) “Aktor T 2P”.

Temperature range: 5 °C up to 30 °C  
Heating: Use electrothermal actuators (two point) “closed with current off”. Temperature may be set back by use of an external time switch.

Cooling: Use electrothermal actuators (two point) “open with current off”. Limitation of the control range by using the concealed limiting elements.

**Item no.: 1152051/52/71/72**

3 Room thermostat – flush mounting – heating, 230 V and 24 V, with LDC display and adjustable timed programme.

Temperature range: 5 °C up to 35 °C  
Heating: Use electrothermal actuators (two point) “closed with current off” (terminal “NC”) or “open with current off” (terminal “NO”).

**Item no.: 1152561/62**

4 Room thermostat-clock – surface mounting – heating, with daily or weekly setting, 230 V and 24 V. The electric room thermostat-clock is required for individual room temperature control of heating systems in combination with the electrothermal actuators (two point) “Aktor T 2P”. Output signal PWM (pulse-width modulation).

Temperature range: 5 °C up to 30 °C  
Heating: Use electrothermal actuators (two point) “closed with current off”. Central temperature setback is carried out according to a timed programme. Limitation of the control range by using the concealed limiting elements.

**Item no.: 1152551/52/54**

5 “R-Tronic” climate display device/control The actuators “Aktor MH/MD CON B”, for instance on the radiator, are controlled via radio. All settings are easily carried out at the wireless thermostat and the system status is displayed. Adjustable nominal temperatures and time profiles facilitate an optimum room temperature control. Depending on the model, the climate display device/control additionally displays the air humidity and the CO<sub>2</sub> concentration. These values can then be influenced directly (e. g. by airing). Further information can be found in the colour leaflet “i-Tronic / “R-Tronic” Energy saving and improvement of the room climate achieved with low investments.



2



3



4



5



1



2



3



4

Oventrop actuators are used for heating, ventilation and air conditioning. The actuators serve to control the room temperature and can, for instance, be used with conventional radiators, radiators with integrated distributor, radiant ceiling panels, chilled ceiling systems, induction air systems and fan convectors. Further applications in bivalent heating installations.

**1** “Aktor T 2P” electrothermal actuator (two point), 230 V and 24 V. With First-Open function (except for actuators “open with current off”) and stroke index. Simple plug-in connection with valve adapter. The actuators can be installed in any position. Due to their construction, the electrothermal actuators are secured against overvoltage which could occur when switching on neon tubes. A varistor is thus not necessary.

**2** “Aktor T ST” electrothermal actuator (0 – 10 V) as proportional actuator, “closed with current off”, 24 V. Automatic recognition of neutral point and valve travel. The actuator can be used in centralised building control systems in combination with the electronic room thermostat (**item no. 1152151**) or with a central controller.

**3** “Aktor M 2P H” electromotive actuator, 230 V and 24 V. Two point actuator, without anti-blocking function. With short operating time (about 3 sec.).

**4** “Aktor M ST L” electromotive actuator, 24 V. Modulating proportional actuator, 0 – 10 V, automatic anti-blocking function and recognition of neutral point. Multiple characteristic lines adjustable.

Further information can be found on our homepage: [www.oventrop.de](http://www.oventrop.de)  
Subject to technical modification without notice.

Private persons may purchase our products from their qualified installer.

Presented by:

### Combination possibilities of room thermostats (heating) and actuators\*

| Room-thermostat \ Actuator          | 11520..<br>(Heating, 2 point), 230V/24V | 115256..<br>(Heating, 2 point), 230V/24V | 1152151<br>(Heating and cooling, 0-10V), 24V |
|-------------------------------------|---|--|--|
| “Aktor T 2P”<br>Item no. 10124..    | X                                       | X  |  |
| “Aktor T ST”<br>Item no. 1012953    |   |  | X  |
| “Aktor M 2P H”<br>Item no. 101271.. | X                                       | X  |  |
| “Aktor M ST L”<br>Item no. 101270.. |   |  | X  |

### Combination possibilities of room thermostats with fan drive (heating/cooling) with actuators\*

| Room-thermostat \ Actuator          | 1152351<br>(Heating or cooling, 2 point), 230V | 1152153<br>(Heating and cooling, 0-10V), 24 V | 115245..<br>(Heating or cooling, 2 point), 230V/24V | 1152064<br>(Heating or cooling, 0-10V), 24V | 1152066<br>(Heating, 2 point, and cooling, 0-10V), 24V | 1152065<br>(Heating and cooling, 0-10V), 24V |
|-------------------------------------|--|---|---|---|--|--|
| “Aktor T 2P”<br>Item no. 10124..    | X  |   | X   |   |  | X  |
| “Aktor T ST”<br>Item no. 1012953    |  | X   |   | X   | X  | X  |
| “Aktor M 2P H”<br>Item no. 101271.. | X  |   | X   |   |  | X  |
| “Aktor M ST L”<br>Item no. 101270.. |  | X   |   | X   | X  | X  |

\* The supply voltage of the room thermostats and actuators must be observed!

