



## TYP RC

### FOR THE INDIVIDUAL TEMPERATURE CONTROL IN ROOMS

Lower operating costs due to intelligent sensor technology

- Temperature range 10 – 45 °C
- For variable air volume systems and 2-pipe or 4-pipe air water systems
- With integral temperature sensor

Options

- Room occupant can select the operating mode
- Remote control for RC/M1

## Application



Application

- Room temperature controller
- Ideally suited for the control of VAV terminal units using Easy, Compact, or Universal controllers
- Comfortable room temperature control
- Low energy consumption due to demand-based operating modes
- Cooling and/or heating
- Device versions with different output sequences for many different ventilation and air conditioning systems, including air-water systems.

## Description



Variants

- B1: Room temperature controller with one analog output for cooling or heating (changeover)
- B2: Room temperature controller with two analog outputs for cooling or heating (3 point)
- B3: Room temperature controller with three analog outputs for cooling or heating (0 – 10 V DC and 3 point)
- M1: Room temperature controller with two analog outputs for cooling or heating (0 – 10 V DC)

## INFORMACJE TECHNICZNE

### Functional description

Room temperature controller and VAV terminal unit, including control components, form a functional unit that allows occupants to control the room temperature individually and at the lowest possible energy consumption. It also allows to control the water valves of hot water or cold water systems.

Room temperature control is a closed loop control. The controller is fitted with a temperature sensor that measures the room temperature. The setpoint can be a constant value or it can be changed by room occupants. The controller compares the actual value with the setpoint value and alters the volume flow rate setpoint value and/or the valve settings accordingly.

The room temperature control is P control or PI control.

Maximum energy efficiency is achieved because of demand-based operating modes that can be activated by the room occupant or at a higher level.

### Operating modes

#### Energy-saving mode

The room temperature is such that devices will not suffer, i.e. the setpoint temperature for heating is very low, and the setpoint temperature for cooling is very high, for example in a room with an open window.

#### Standby mode

The setpoint temperature for heating is just slightly reduced, and the setpoint temperature for cooling is just slightly increased, e.g. for a room that is currently not used.

#### Frost mode

If the room temperature falls below 10 °C, the anti-freeze function is activated.

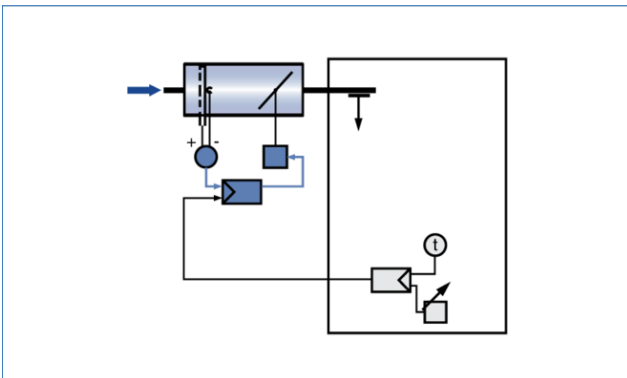
#### Changeover

Changeover from cooling to heating or from heating to cooling.

#### Boost

Room ventilation with the maximum volume flow rate ( $V_{max}$ ), or maximum heating or cooling.

### Single operation



Room temperature controller for the control of VAV terminal units

Attractive unit for wall mounting, with a setpoint adjuster and a push button to select the operating mode

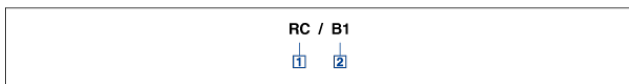
Integral temperature sensor (NTC) and input for external temperature measuring unit.

Voltage output 0 - 10 V DC for connection to an electronic volume flow controller for cooling, or for heating and cooling in changeover mode.

Technical data

- Supply voltage: 24 V AC, 50/60 Hz
- Power rating: 3 VA
- External setpoint changes: 0 - 10 V DC
- Output for variable volume flow: 0 - 10 V DC

RC



**1** Type

RC Room temperature controller

**2** Type

B1 CR24-B1

B2 CR24-B2

B3 CR24-B3

M1 ETN-24-VAV-277V-P

M2 Remote control for M1