



HVAC controllers type OPTIGO 5

Preprogrammed, easy to configure HVAC controller with numeric/graphic background illuminated display

Brand

- Regin

Application

- Temperature control
- CO₂ - control
- Humidity control
- Pressure control
- Pressure control with outdoor compensation

Specifications

- Supply voltage: 24 V AC
- 1 analogue input for PT1000
- 1 digital input
- 1 universal input 0 - 10 V DC or digital
- 2 analogue outputs 0 - 10 V DC

Mounting

- DIN-rail

Accessoires

- Transfo 230 / 24 V AC, type **TRAFO 15/D**
- Duct temperature sensor, type **TG-KH/PT1000 / TG-K3/PT1000**
- Room temperature sensor, type **TG-R5/PT1000**
- Outdoor temperature sensor, type **TG-UH3/PT1000**
- Pressure transmitter, type **DMD**
- Pressure switch, type **DTV**
- CO₂ transmitter, type **WOX/E(-D) (room) / DOX-E (duct)**
- Humidity transmitter, type **HRTN (room) / DTTH (duct)**

Technical data

- Power consumption: 6 VA
- IP 20



Function

- Temperature control : the temperature at the sensor is kept at the setpoint value by controlling output signals on AO1 and AO2. A single PI control loop is used. The output AO1 can be configured as : heating / cooling / changeover, the output AO2 can be configured as : not used / cooling / heating / damper
- CO2 control : The CO2-value at the sensor is kept at the setpoint value by controlling the output signal AO1. A single PI control loop is used. The output signal will increase when the CO2-value rises above the setpoint value
- Humidity control : The humidity at the sensor is kept at the setpoint value by controlling the output signals on AO1 and AO2. AO1 is used for humidification, AO2 for dehumidification. A single PI loop is used. Humidification and dehumidification can be used simultaneously, a neutral zone can be set between.
- Pressure control : The pressure at the sensor is kept at the setpoint value by controlling output signal AO1. A single PI control loop is used. The output signal will increase when the pressure signal falls below the setpoint value.
- Pressure control with outdoor compensation : The pressure at the sensor is kept at the setpoint value by controlling the output signal on AO1. The setpoint is automatically adjusted according to the outdoor temperature. A single loop PI control is used. The output signal will increase when the pressure signal falls below the setpoint value. the setpoint value follows a settable pressure-to-outdoor temperature relation

Settings

- Temperature setpoints :
 1. Temperature: -20 to 40°C
 2. Hysteresis: 0 to 10°C
 3. P-band: 0 to 99 s
 4. I-time: 0 to 999 s
 5. Min-limit damper: 0 to 99%
- Other settings
 1. CO2 setpoint: 0 to 5000 ppm (settable range corresponds the range of the sensor)
 2. Humidity setpoint: 0 to 100 %
 3. Pressure setpoint: 0 to 500 kPa (settable range corresponds the range of the sensor)
 4. P-band: 0 to 100 %
 5. I-time: 0 to 990 s
 6. Outdoor compensation, start: -30 to 50°C
 7. Pressure at -20°C outdoor temp.: 50 to 500 kPa