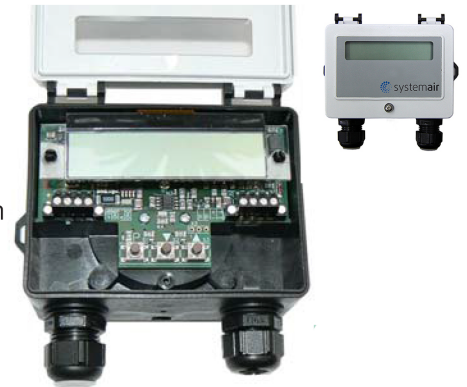


**Application / Function**

Temperature control for e.g.: extraction systems, warm-air heaters, air curtain installations, liquid-cooling, chillers.

- The measured actual value at the sensor is compared with the adjusted target value, and the controlled value is deduced from this. Controlled output (0 - 10 V) e.g. for activating a speed controller for fans. Fans with integrated controller and input 0 - 10 V can be activated directly.
- Voltage input (10...24 V DC) for switch over between Setpoint 1 and Setpoint 2 (e.g. for day / night, summer / winter).
- Alternatively the device can be operated as temperature sensor. Output 0 - 10 V in this mode proportional to the adjusted measuring range (max. -50...150 °C).
- Input for temperature sensor type TF.. (KTY81-210) or PT1000.



**Sensors**



Room sensor,  
 outdoor sensor  
 Type: TFR

**Technical Data / Settings**

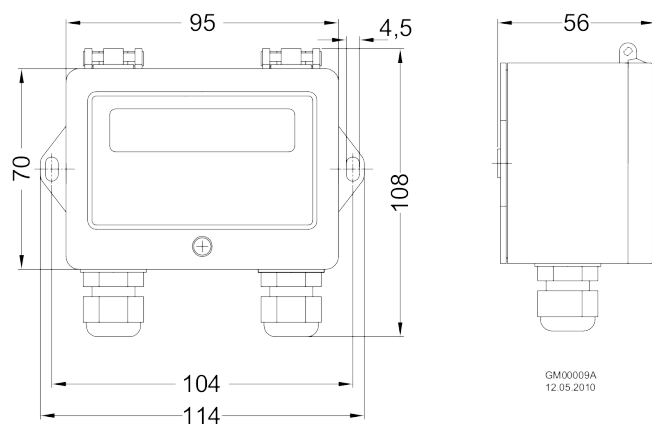
- Measuring range -50...150 °C
- Voltage supply 10 V...24 V DC electronic protected against faulty polarization
- Current consumption approx. 6 mA
- Output voltage (0 - 10 V),  $I_{max} = 0.3 \text{ mA}$  (short-circuit- proof)
- LC Display double-row (max. 16 digits each)
- Housing cover ABS, bottom Polyamid PA 6.6 fire protection classification UL 94 HB
- Protection class IP54 according EN 60529
- Weight approx. 200 g
- Permissible ambient temperature -10...50 °C

- Permissible rel. humidity 85 % no condensation
- Interference emission according EN 61000-6-3
- Interference immunity EN 61000-6-2

**Possible settings by three internal keys**

- Mode: sensor, control module
- Kind of sensor: KTY81-210 or PT1000, sensor offset
- Minimal and maximal output voltage (0 - 10 V)
- For operation control module:  
 Setpoint 1/2 (-50...150 °C), Pband (1...50 K), Switch-over control function ("Heating" / "Cooling"), Minimum rate of air ON / OFF

**Dimension sheet [mm]**



**Connection diagram**

