Glass Room Temperature Controller Smart with colour display [SCN-RTRGx.02]

The Glass Room Temperature Controller Smart has permanently assigned [-] and [+] sensor areas for intuitive setpoint adjustment. Available in black and white in 92 mm x 92 mm (WxH), it complements the MDT glass assortment. The large colour display always provides the most important information about the controller.

SCN-RTRGS.02

SCN-RTRGW.02

Room temperature controller with temperature sensor

The integrated and comprehensive PI temperature controller only needs the actual temperature of the internal or an external temperature sensor to start the regulation. The setpoints for "Comfort", "Standby" and "Night" can be individually configured independently of the "Basic Comfort" setpoint. This ensures a high level of compatibility with many visualisations. The external setpoint shift via objects can be done classically via 1 bit (step), 1 byte (counter pulses) and via 2 bytes (temperature difference and absolute value). This also provides a high compatibility with other visualisations. Setpoints and the operating mode can be saved and restored in the event of a bus voltage failure.

Operation as extension unit

In extension unit operation, the Glass Room Temperature Controller Smart can be used, for example, in combination with the MDT heating actuator, or as an additional second unit at a different position. The display provides all relevant information and the internal buttons can be used for control. (Operating mode switchover, setpoint shift)

Lock heating/cooling operation while windows are open

If, for example, a window is opened for ventilation in winter, the heating actuator disables the heating operation and switch into frost protection mode. As soon as the window is closed, the heating mode is activated again. In cooling mode, the heat protection would be activated.

Setpoint controlled via outdoor temperature, brightness or percentage value

In cooling mode, it is possible to control the setpoint via the outdoor temperature or a 1-byte [%] value. In this way, high temperature differences between the outside and inside temperatures can be avoided. In heating mode, it is also possible to control the setpoint via the brightness value of the weather station in order to use solar energy to heat the room.

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Maximum flow temperature

If the flow temperature is measured with an external temperature sensor and linked via an object, the maximum flow temperature can be limited. In cooling mode, it is possible to limit the temperature via dew point monitoring using a 1-bit alarm or 2-byte threshold value comparison.

Ventilation control

The ventilation control enables the control of fans manually in up to 4 steps, via the control value of the temperature controller, by means of the temperature difference between the setpoint and actual value or via the relative humidity (external object). Furthermore, the [day/night] function ensures the individual setting of the ventilation according to the time of day. A sticking protection function is available for the ventilation system.

Active colour display

The brightness adjusts automatically to the environment or can be changed continuously via a 1-byte (%) object. In addition, the current display brightness can be sent to the bus as a 1-byte (%) object and made available to other devices. The display (white text on black background or inverted) can be set individually for day and night and the colours of the symbols can be changed.

Button functions

The [-] and [+] sensor areas below the display are permanently set to setpoint shift. The two upper areas can be set individually. In addition to the internal functions such as operating mode selection, ventilation control, control value = 0% and heating/cooling selection, external functions such as switch, switch short/long, dimming, blinds and sending values/status can be set.

RGB status LEDs

Each of the 4 status LEDs can react to operation, an internal or external object. The display behaviour can be set separately for day and night.

Plain text diagnosis

The Glass Room Temperature Controller Smart has a plain text diagnosis and outputs the current status via a 14-byte object per channel. This allows errors to be localised in a short time and makes commissioning much easier for the system integrator.

Updateable via DCA App

If necessary, the Glass Room Temperature Controller Smart can be updated via the MDT Update Tool (DCA). The download is available free of charge at www.mdt.de and www.knx.org.

Long Frame Support

The MDT Glass Room Temperature Controller Smart supports "long frames" (longer telegrams). These contain more user data per telegram, which significantly reduces the programming time of the actuators with the ETS.