Symaro sensors for flush mounting, innovative and energy-efficient.

Energy-saving sensors of flexible design with standardized communication

siemens.com/symaro
Symaro range for flush mounting – operating efficiently and with style

Thanks to low power consumption and their fast and highly accurate acquisition of measured variables, Symaro™ sensors for flush mounting ensure energy- and cost-efficient control of entire HVAC plants. The new sensors feature communication and have an LED to indicate the state of indoor air quality. Also, they can be used for direct control of heating and ventilation plants.

What’s more, their design meets all requirements: Symaro sensors for flush mounting are not only compatible with all types of frames of the DELTA switch program from Siemens, but also with the switch frames marketed by other suppliers. So the sensors are very versatile and blend perfectly into different room surroundings.
Innovative technology for versatile applications

Broad range of flush-mounted sensors for all types of applications
The Symaro range for flush mounting includes not only sensors for temperature, humidity and indoor air quality but also multisensors for the simultaneous acquisition of up to three measured variables. In addition, the sensors can be matched to specific requirements, thanks to their wide choice of configuration options, such as active and passive output signals.

In KNX S-/LTE-Mode and KNX PL-Link, the communicating sensors for flush mounting can be integrated in the building automation from Siemens – Desigo™ Total Room Automation (TRA), Synco™ or GAMMA. When using KNX S-Mode, they can also be used in connection with third-party systems.

All in harmony – thanks to uniform room design
Symaro sensors blend perfectly into any room surroundings: They can be fitted into all types of commercially available recessed conduit boxes – worldwide – and be freely used with the frames of the DELTA switch programs or with third-party products. This way, the sensors can be matched to different types of rooms or frame designs.

Functionality that pays off
The communicating Symaro sensors are products that can also be used as room temperature or ventilation controllers or for lighting and shading control.

Demand-controlled ventilation indicated by LED
The room users’ ability to concentrate and their well-being are ensured by ventilation that maintains the CO₂ concentration of the air at an optimum level. To save energy in the process, the amount of outside air supplied to the room should not exceed the amount actually required. Symaro in-door air quality sensors acquire the exact amount of CO₂ contained in the room air or the amount of mixed gases, which are, for example, emitted by certain materials. The fan’s speed is controlled depending on the measured variables, thus saving energy. And the sensors’ multicolor LED indicates whether the indoor air quality is good, average, or poor.

Ease of handling
Thanks to their snap-on catches, Symaro sensors for flush mounting are easy to install. Only one sensor is needed to acquire several measured variables, thus reducing the effort for installation.

Highlights
• Significant energy savings thanks to fast, highly accurate measurements and low internal power consumption
• Sensors of elegant design for flush mounting, suited for any type of room
• Extensive choice of colors and designs of frames of the DELTA switch program and third-party products
• Multisensor with several measuring parameters in one device, ensuring lower installation and wiring costs
• Adaptation to specific requirements thanks to configurable outputs
• KNX bus communication for seamless integration

Symaro sensors in DELTA switch design for flush mounting blend perfectly into any surroundings.
The benefits at a glance

Active and passive sensors for flush mounting that meet all requirements
- Choice of active and passive sensors
- Configuration of active sensors for output ranges DC 0...5 V, 0...10 V, 0...20 mA, 4...20 mA and 0/4...20 mA
- One relay output for measured variable-dependent single-stage control (e.g. for switching ventilation in connection with humidity measurements)
- Optimum adaptation to individual needs

Matching sensors for every type of application
- Sensors for flush mounting for individual measured variables
- Multisensor acquires several measured variables concurrently
- Measured variables: carbon dioxide (CO₂), volatile organic compounds (VOC), temperature and humidity
- Housings without operating elements for universal use, ideally suited for public buildings, such as schools

Straightforward and secure installation and operation
- Easy and error-free installation of front modules on the base modules with snap-on catches (patent pending)
- Reliable anti-theft protection by studs, which prevent unauthorized removal of the front module (patent pending)
Flexibility in design

- Compatible with DELTA switches from Siemens as well as third-party products
- Freedom of design with a variety in colors and forms – from classic to exclusive
- Suitable for all international standards: VDE/CEE, British Standard, Italian Standard and UL

Communicating sensors for flush mounting offer comprehensive functionality

- Straightforward integration in superior systems thanks to KNX communication (S-/LTE-Mode, KNX PL-Link)
- Room temperature (PID controller) and ventilation control in KNX S-Mode
- Lighting and shading control via two binary inputs
- Input for an additional passive temperature sensor
# Active and passive sensors

## Active sensors

<table>
<thead>
<tr>
<th>Base module</th>
<th>Front module</th>
<th>CO₂</th>
<th>VOC</th>
<th>Relative humidity</th>
<th>Active temperature</th>
<th>Passive temperature</th>
<th>CO₂ indicator</th>
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### Passive sensors

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1) Here, the indoor air quality is calculated, representing the result of maximum selection of the measured variables of CO₂ and VOC.

2) VOC is not available as a direct measured variable.

Replace x by:

- F for VDE/CEE (70x70 mm)
- H for British Standard (83x83 mm)
- G for Italian Standard 3 modular (110x64 mm)
- J for UL Standard 2” x 4” (64x110 mm)

Power supply: AC 24 V, DC 15...36 V

Signal ranges of active sensors: DC 0...5 V, DC 0...10 V, DC 0...20 mA, DC 4...20 mA and DC 0/4...20 mA

Freely selectable switching contact is available for every measured variable.
Communicating sensors

<table>
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<tr>
<th>Base module</th>
<th>Front module</th>
<th>Measured variables</th>
<th>Inputs</th>
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The room sensors are KNX-certified and can be used in conjunction with all devices capable of communicating over KNX. In addition, the sensors can be used with the following systems from Siemens:
- Synco 700 building automation and control system (KNX LTE-Mode)
- GAMMA building control (KNX S-Mode)
- Desigo TRA (KNX PL-Link)
When building technology creates perfect places – that’s Ingenuity for life.


With our knowledge and technology, our products, our solutions and our services, we turn places into perfect places.

We create perfect places for their users’ needs – for every stage of life.

#CreatingPerfectPlaces
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