

## Install intelligent room automation flexibly and future-proofed

Multifunctional, based on KNX room operation devices for the individual requirements of all disciplines in rooms

## Intuitive operation for the entire room automation

Room control units QMX3 with regulation features are available in six device versions, which are designed to work together, for controlling HVAC and electrical applications. They regulate the temperature, humidity and the carbon dioxide (CO<sub>2</sub>) concentration in the room in an energy-efficient way based on specific requirements.

Customizable pairs of buttons cover electrical requirements with switching, dimming and scene features. Thus scenes, which simultaneously trigger several different actions in the room, can be programmed for various working situations and changed at any time, for scenes like Meeting, Presentation, Break or Unoccupied Room.

#### Simple installation optimizes costs

They cover an extremely wide range of room automation requirements. Bundling all functions in a single device serves to reduce to a minimum the effort required for installation and configuration. The room control units with regulation features can easily be integrated in a KNX system via the included bus connector. Wall mounting even allows for flexible positioning of the devices in the room.

## Attractive design with intelligent technology

An LCD display and touch keys round off the design. Room users are informed of energy-efficient and comfortable air quality regulation via an LED indicator.

#### Highlights

- Uniform device range for multifunctional room requirements
- Attractive design for wall mounting – not bound to frame lines
- Fast, highly precise measurement and regulation increase the level of comfort and energy efficiency in the room
- Simplified and intuitive operation due to scene control via LCD display

# **Application examples**

#### Room temperature regulation with operation



This application is recommended for smaller offices with a single heater. The room control unit measures and regulates room temperature and sends the regulation signal to the valve drive actuator via KNX bus.

### Key\*

- Room control unit QMX3.P34 Presence detector UP 258
- Electromotive valve actuator AP 562/02
- Window contact S 290

\*Possible combination of components

In addition to this, window contacts and presence detectors influence the regulation behavior of the room control unit and increase the room's energy efficiency. For example, if the room is unoccupied or if the window is open, the radiator valve closes and reduces the room temperature automatically.



#### Presence-dependent room climate regulation with operation of all disciplines

Key*						
1	Room control unit QMX3.P37					
2	Room control unit QMX3.P70					
3	Room control unit QMX3.P02					
4	Presence detector UP 258					
5	Switch actuator N 562/11 for fan					
6	Shutter/blind actuators N 523/04					
7	Universal dimmer N 528/31 with submodule N 528/41					
8	Thermal drive actuator N 605 for up to 6 rooms					
9	Electrothermal actuator STA23					
	(for up to 4 rooms)					

\*Possible combination of components

ventilation as required and thus saves energy and costs. The buttons on the room control unit (1 and 3) can be used to control lighting and shading as well as scenes for example.

Additional room control units (3) can also be connected, e.g. in large rooms with several doors.

This application is especially suitable for rooms with several heaters, e.g. in offices, lecture halls or conference rooms. The room control unit (1) measures and regulates room temperature and sends the regulation signal to the thermal drive actuator (8) via KNX bus. Together with the integrated room temperature regulation, the sensor thus provides for a comfortable room climate. The room control unit (2) measures the air quality ( $CO_2$ ) in the room, regulates

#### **Room temperature controllers**

#### Technical data

	Туре	Description	
	QMX3	QMX3 room sensor	
		<ul> <li>Wall mount sensor and room operator unit with KNX communications</li> <li>Temperature control, adjustable as PWM control and/or modulating control (PID algorithm) for purely heating mode, purely cooling, heating and cooling mode</li> <li>Operating modes can be changed via KNX: <ul> <li>Comfort mode</li> <li>Pre-comfort</li> <li>Energy savings and protection mode</li> </ul> </li> <li>3 independently adjustable switching values for CO<sub>2</sub> concentration and relative air humidity for ventilation control: <ul> <li>Output for 1, 2 or 3-stage fans (humidity and CO<sub>2</sub>)</li> <li>Output for 1, 2 or 3-point positioning signal (humidity and CO<sub>2</sub>)</li> <li>Setpoint adjustable via KNX or display of room temperature and relative humidity and CO<sub>2</sub> concentration</li> </ul> </li> </ul>	<ul> <li>Adjustable commissioning and control parameters for radiator heating slow and fast, floor heating slow and fast</li> <li>Temperature measurement range: 050 °C</li> <li>Integrated bus coupling</li> <li>Bus connection via bus terminal</li> <li>Power supplied via KNX bus, bus load &lt; 15 mA</li> <li>Maintenance free</li> <li>Wall mounting, covers flush mount boxes</li> <li>IP class: IP30</li> <li>Dimensions (L x B x T): ca. 133 x 88 x 18 mm</li> <li>Color: RAL9003, signal white</li> </ul>
	QMX3,P30	QMX3.P30 room sensor	
		Room temperature acquisition	
-	QMX3.P70	QMX3.P70 room sensor	
		<ul> <li>Temperature sensor and relative air humidity and air quality, including air quality indicator</li> <li>Air quality is indicated by a 3-colored LED (red (poor), orange (average) and green (good))</li> </ul>	<ul> <li>Measuring range for relative humidity: 1095%</li> <li>Measuring range for air quality (CO<sub>2</sub>): 4002000 ppm</li> </ul>

Selection and ordering data

	5								
	Туре	Version	DT	Order No. Price	per PU	PU (Unit, Set, M)	PS*/ P.unit	PG	Weight per PU approx.
									kg
		Variants							
NRA.	QMX3.P30	QMX3.P30 room sensor	A	S55624-H103		1	1 ST	A06	0,100
S55624-H103									
Mass -	QMX3.P70	QMX3.P70 room sensor	A	S55624-H104		1	1 ST	A06	0,190

S55624-H104

#### Room temperature controller

#### Technical data

	Туре	Description	
	QMX3	QMX3 sensor and room operator unit	
		Wall mount sensor and room operator unit with KNX communi- cations	Adjustable commissioning and control parameters for radia- tor heating slow and fast, floor heating slow and fast
		<ul> <li>Temperature control, adjustable as PWM control and/or modu- lating control (PID algorithm) for purely heating mode, purely</li> </ul>	Temperature measurement range: 050 °C     Boom temperature acquisition
		cooling, heating and cooling mode	Integrated bus coupling
		<ul> <li>Purely cooling operation, heating and cooling mode</li> </ul>	Bus connection via bus terminal
		<ul> <li>Operating modes switchable via KNX or display:</li> <li>Comfort mode</li> <li>Pre-comfort</li> </ul>	<ul> <li>Power supplied via KNX bus, bus load &lt; 15 mA</li> <li>Maintenance free</li> </ul>
		- Energy savings and protection mode	Wall mounting, covers flush mount boxes
		<ul> <li>3 independently adjustable switching values for CO<sub>2</sub> concentration and relative air humidity for ventilation control:</li> <li>Output for 1, 2 or 3-stage fans (humidity and CO<sub>2</sub>).</li> <li>Output for 1, 2 or 3-point positioning signal (humidity and CO<sub>2</sub>).</li> <li>Setpoint adjustable via KNX or display of room temperature and relative humidity and CO<sub>2</sub> concentration</li> </ul>	<ul> <li>IP class: IP30</li> <li>Dimensions (L x B x T): ca. 133 x 88 x 18 mm</li> <li>Color: RAL9003, signal white</li> </ul>
		Variants	
(1.000)	QMX3.P34	QMX3.P34 sensor and room operator unit	
Der St.		Multifunctional display/operator unit for KNX with LCD display	Adjust setpoints for temperature, humidity, and air quality
		<ul> <li>8 touchkeys for horizontal operation</li> </ul>	<ul> <li>Manual fan operation and operating modes</li> </ul>
		<ul> <li>Signal for acoustic feedback on touch operation</li> </ul>	Go to display pages for temperature, humidity, and air quality
		Displays room temperature, room humidity, and room air quality	<ul> <li>Presence button of comfort extension button</li> </ul>
		Displays outside temperature and outside humidity	
" . Prov.	QMX3.P74	QMX3.P74 sensor and room operator unit	
Deciti		Multifunctional display/operator unit for KNX with LCD display	Manual fan operation and operating modes
		8 touchkeys for horizontal operation     Signal for acquisition foodback on touch operation	Go to display pages for temperature, humidity, and air quality
		Signal for acoustic reedback on touch operation     Displays room temperature, room humidity, and room air quality	Multisepsor for temporature and relative humidity and air
		Displays room temperature, room tumidity, and room an quality     Displays outside temperature and outside humidity	quality
		Adjust setpoints for temperature, humidity, and air quality	<ul> <li>Measuring range for relative humidity: 1095%</li> </ul>
			<ul> <li>Measuring range for air quality (CO<sub>2</sub>): 4002000 ppm</li> </ul>
	QMX3.P02	QMX3.P02 sensor and room operator unit	
		<ul><li>With 8 touch sensitive buttons and horizontal operation</li><li>Labeling on a printable foil; insert into the unit</li></ul>	Per button pair, select function 2-button dimming with stop telegram
		<ul> <li>Per button, the following functions switching, changeover, switch on, switch off, turn on and off with selectable raising or falling slope, single pushbutton dimming. 8-bit scene control.</li> </ul>	<ul> <li>Integrated s-bit scene control of query and save scenes for up to 8 scene channels</li> <li>Assignment of up to 8-bit scene numbers (164) per scene</li> </ul>
		<ul> <li>8-bit value, percentage value</li> <li>Additional, selectable functions (time delay adjustable from</li> </ul>	<ul><li>channel</li><li>User adjustable scene that can be saved in the 8-bit scene</li></ul>
		0.55.0 seconds) depending on the selected main function • Additional functions dependent on the selected main function	control • Brightness of all status LEDs configurable using parameters
		per button for switching on, off, 8-bit value, percentage value, query 8-bit scene	or via the object • Selectable function per status LED of continuous off, LED
			continuous on
The second	QMX3.P37	QMX3.P37 sensor and room operator unit	
121		Multifunctional display/operator unit for KNX with LCD display	<ul> <li>Per button pair, select function 2-button dimming with stop telegram</li> </ul>
1-51		16 touchkeys for horizontal operation	Additional, selectable functions (time delay adjustable from
		Signal for acoustic feedback on fouch operation     Displays room temporature, room humidity, and room air quality.	0.55.0 seconds) depending on the selected main function
		<ul> <li>Displays outside temperature, fourn fullidity, and fourn all quality</li> <li>Displays outside temperature and outside humidity</li> <li>Adjust setooints for temperature, humidity, and air quality</li> </ul>	<ul> <li>Additional functions dependent on the selected main function per button for switching on, off, 8-bit value, percentage value, query 8-bit scene</li> </ul>
		Manual fan operation and operating modes     Cost of display segar for tomografing modes	Integrated 8-bit scene control to query and save scenes for up to 8 scene channels
		Presence button or comfort extension button	<ul> <li>Assignment of up to 8-bit scene numbers (164) per scene channel</li> </ul>
		<ul> <li>Labeling on a printable foil; insert into the unit</li> <li>Per button, the following functions switch on, switch off, turn on</li> </ul>	User adjustable scene that can be saved in the 8-bit scene control
		and off with selectable raising or falling slope, single pushbut- ton dimming, 8-bit scene control, 8-bit value, percentage value	<ul> <li>Brightness of all status LEDs configurable using parameters or via the object</li> </ul>
			Selectable function per status LED of continuous off, LED continuous on

## Heating, cooling, ventilation, air-conditioning

Room temperatur	e contro	ller						
Selection and ordering data								
	Туре	Version	DT	Order No. Price pe Pl	r PU (Unit, Set, M)	PS*/ P.unit	PG	Weight per PU approx.
		V/			_			kg
u 200- 205- , 4jo r.	QMX3.P34	Variants QMX3.P34 sensor and room operato	or unit A	S55624-H105	1	1 ST	A06	0,220
S55624-H105	QMX3.P74	QMX3.P74 sensor and room operato	or unit A	S55624-H106	1	1 ST	A06	0 230
а 2005 2015 . Аје т.								
S55624-H106	QMX3.P02	QMX3.P02 sensor and room operato	or unit A	S55624-H107	1	1 ST	A06	0,190
S55624-H108	QMX3.P37	QMX3.P37 sensor and room operato	or unit A	S55624-H108	1	1 ST	A06	0,140

Siemens Switzerland Ltd Infrastructure & Cities Sector Building Technologies Division International Headquarters Gubelstrasse 22 6301 Zug Switzerland Tel +41 41 724 24 24

Siemens Building Technologies Infrastructure & Cities Sector Brunel House Sir William Siemens Square, Frimley Camberley Surrey, GU16 8QD United Kingdom Tel +44 1276 696000

Siemens Ltd Infrastructure & Cities Sector Building Technologies Division 22/F, AIA Kowloon Tower, Landmark East 100 How Ming Street Kwun Tong, Hong Kong Tel +852 2870 7888

The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

© Siemens Switzerland Ltd, 2013 • BT\_0021\_EN

#### Answers for infrastructure.

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers. "We are the trusted technology partner for energy-efficient, safe and secure buildings and infrastructure."