

Heating, ventilation and air conditioning - room temperature control



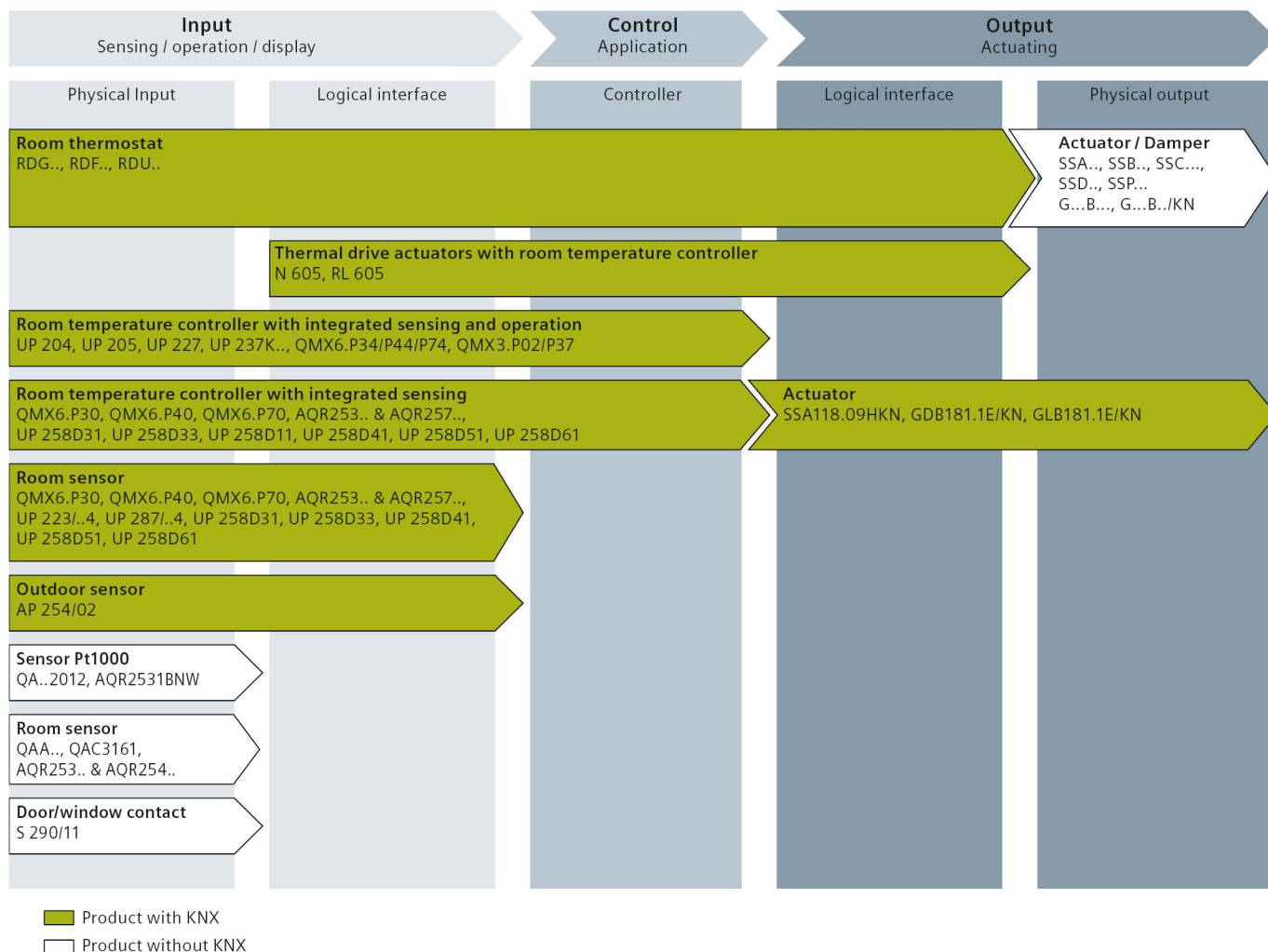
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Overview and selection tools

KNX room temperature controllers, sensors and actuators

The following table describes the different device categories for room temperature control with the corresponding device families. For each category it shows the covered functions (sensing, operation, display, control, actuating) and the interfaces to other categories. It is shown which device combinations are necessary or possible to implement a full room temperature control solution and serves as first step of device selection. More detailed differences between and within the device categories are described in the technical overviews and product descriptions on the following pages.



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Overview and selection tools

Overview room temperature controllers

Room thermostats	RDG200KN..., RDG260KN..., RDG204KN, RDG264KN, RDG405KN, RDF600KN..., RDF600KN/S, RDF800KN..., RDF870KN
Room temperature controllers with integrated sensing and operation	UP 204S12, UP 204S22, UP 205/12, UP 205/22, UP 227, UP 237K, QMX6.P34, QMX6.P44, QMX6.P74, QMX3.P02, QMX3.P37
Room temperature controllers with integrated sensing	QMX6.P30, QMX6.P40, QMX6.P70, AQR253.. & AQR257.., UP 258D31, UP 258D33, UP 258D41, UP 258D51, UP 258D61
Thermal drive actuators with direct operation	N 605D41, RL 605D23 ¹⁾ , N 568/81

Room temperature controllers

	Room thermostats	Room temperature controllers with integrated sensing and operation	Room temperature controllers with integrated sensing	Thermal drive actuators with direct operation
Application				
Fancoil	RDF.., RDG2..	UP 204S12, UP 204S22, UP 205/12, UP 205/22, UP 227	UP 258D31, UP 258D33, UP 258D41, UP 258D51, UP 258D61	
Radiator	RDG2..	All	All	N 605D41, RL 605D23 ¹⁾ , N 568/81
Chilled / heated ceiling	RDG2.., RDF800KN...	QMX6.P34, QMX6.P44, QMX6.P74 UP 204S12, UP 204S22, UP 205/12, UP 205/22, UP 227, UP 237K	QMX6.P30, QMX6.P40, QMX6.P70 UP 258D31, UP 258D33, UP 258D41, UP 258D51, UP 258D61	N 605D41, RL 605D23 ¹⁾ , N 568/81
Floor heating	RDG2..	All	All	N 605D41, RL 605D23 ¹⁾ , N 568/81
Heat pump	RDF.., RDG2..	UP 204S12, UP 204S22, UP 205/12, UP 205/22, UP 227, UP 237K	UP 258D31, UP 258D33, UP 258D41, UP 258D51, UP 258D61	N 605D41, RL 605D23 ¹⁾ , N 568/81
VAV	RDG405KN, RDG200KN..., RDG260KN..., RDG204KN, RDG264KN	-	-	-
Fresh air / Ventilation	RDF870KN, RDG200KN..., RDG260KN..., RDG204KN, RDG264KN	UP 204S12, UP 204S22, UP 205/12, UP 205/22	UP 258D31, UP 258D33, UP 258D41, UP 258D51, UP 258D61	N 605D41, RL 605D23 ¹⁾ , N 568/81
Sensing				
Temperature	All	All	All	-
Air Quality (PM2.5, CO ₂ , VOC)	RDG405KN ²⁾ , RDF870KN ³⁾ , RDG2..4KN	QMX6.P74	QMX6.P70, AQR253.. & AQR257.., UP 258D51	-
Relative humidity	RDG2...KN..., RDF870KN ³⁾	QMX6.P44, QMX6.P74	QMX6.P40, QMX6.P70, AQR253.. & AQR257.., UP 258D41, UP 258D51	-
Display & Operation				
Display	All	All	-	-
Touch operation	RDF800KN	QMX6.P34, QMX6.P44, QMX6.P74, UP 204S12, UP 204S22, UP 205/12, UP 205/22	-	-
Rotary wheel for setpoint setting	RDG..	UP 237K		
Push buttons	RDF..	QMX3.P02, QMX3.P37, UP 227, UP 237K	-	-
Installation				
Flush mounted	RDF..	UP 204S12, UP 204S22, UP 205/12, UP 205/22, UP 227, UP 237K	AQR253.. & AQR257.., UP 258D31, UP 258D33, UP 258D41, UP 258D51, UP 258D61	-
Fit to Delta line / miro	-	UP 227, UP 237K	AQR253.. & AQR257..	-
Wall mounted	RDG..	QMX6..., QMX3..	QMX6..	-
DIN-rail	-	-	-	N 605D41, N 568/81
Modular installation device for mounting in AP 118 ⁴⁾ automation module box, AP 641 ⁴⁾ room control box or M 590/01 ⁴⁾ DIN-rail housing	-	-	-	RL 605D23 ¹⁾

¹⁾ Without direct operation ²⁾ IAQ control with RDG405KN needs an external CO₂/VOC sensor ³⁾ PM2.5 and CO₂ control with RDF870KN needs either external PM2.5 and CO₂ sensors or values via bus ⁴⁾ The AP 641 room control box, AP 118 automation module box or DIN-rail housing M 590/01 must be ordered separately, see Chapter Modular installation system, Room control box

Central collection of heating and cooling demands from rooms

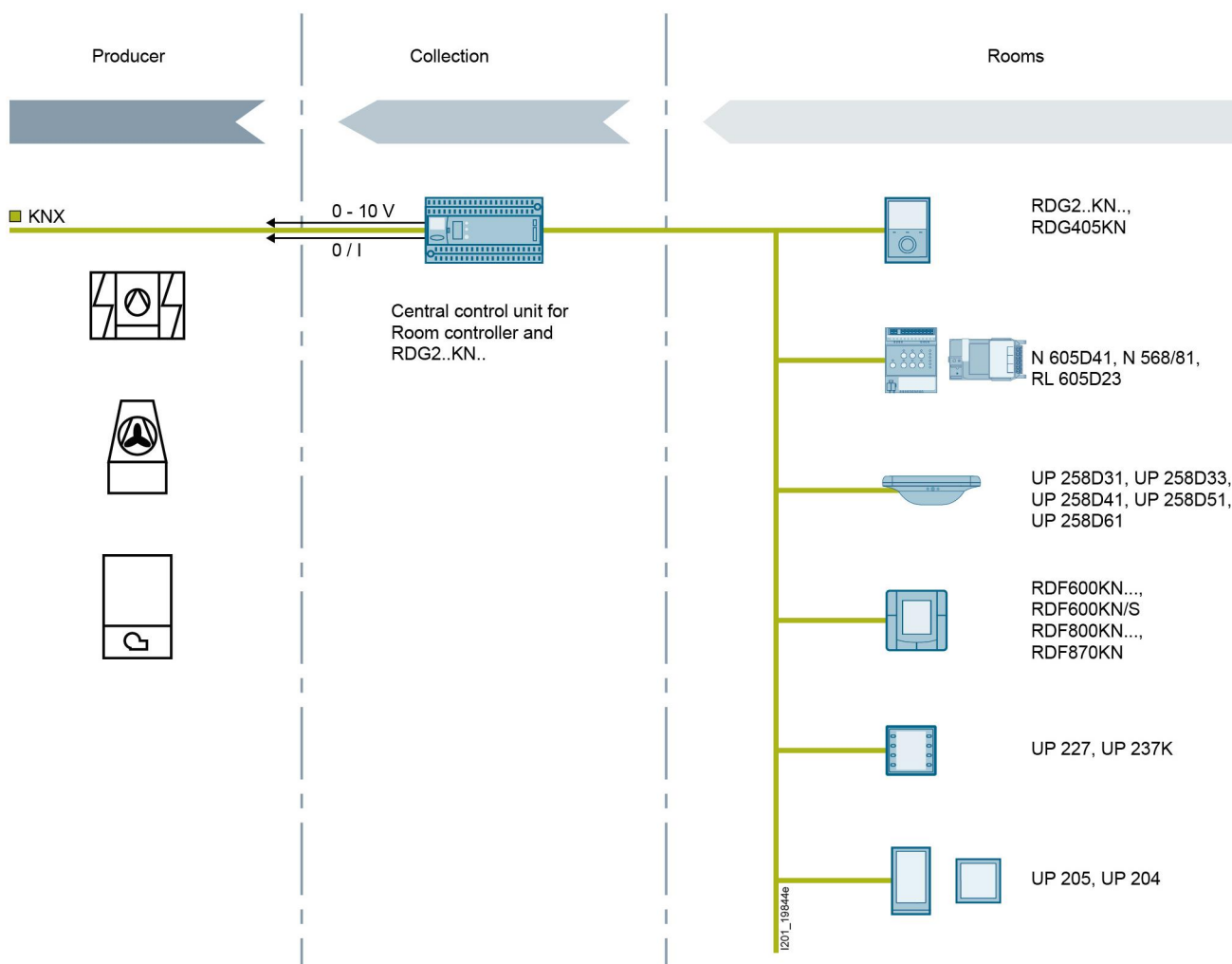
The central control unit RMB795B-1 collects the heating and cooling demands from different devices/room controllers and forwards the calculated demands to the primary controller (producer).

The RMB795B-1 further supplies the room controllers with the following information:

- Time controlled operating mode for room groups
- Room group set points
- Adjustment of the room groups set point
- Emergency and application operating modes
- Device monitoring

Note:

The KNX room controllers must be able to send every 15 minutes a 1-Byte control or request signal on the bus.



Room thermostats

									
Type	RDF600KN...	RDF600KN/S	RDF800KN...	RDF870KN	RDG-200KN...	RDG204KN	RDG-260KN...	RDG264KN	RDG405KN
Design									
Wall mounted					■	■	■	■	■
Flush Mounted	■	■	■	■					
For VDE box	■	■	■	■					
For British Standard box	■	■	■	■					
Housing									
Digital display	■	■	■	■	■	■	■	■	■
Touch Screen Display			★	■					
Setpoint knob					■	■	■	■	■
Operating mode button	■	■			■	■	■	■	■
Fan speed button	■	■			■	■	■	■	■
Green Leaf					■	■	■	■	
Buttons for light and blind control		★							
Bus connection									
Integrated bus coupling units	■	■	■	■	■	■	■	■	■
Power supply									
Terminal voltage AC 230 V	■	■	■	■	■	■			
Terminal voltage AC 24 V					■	■	■	■	■
Integrated sensor									
Room temperature sensor	■	■	■	■	■	■	■	■	■
Humidity sensor					■	■	■	■	
CO2 sensor						★		★	
Inputs									
Multifunctional inputs digital/analog	2	2	2	2	3	3	3	3	2
Input DC 0...10 V				■					1
Outputs									
ON/OFF (PWM) Triac (H/C)					★	★			■
ON/OFF Relay (H/C)	★	★	■				■	■	
Analog outputs DC 0...10 V (H/C)							★	★	■
3-stage Relay (fan)	■	■	■	■ ¹⁾	■	■	■	■	
Analog DC 0...10 V (fan)				■	■	■	■	■	
Analog DC 0...10 V (air damper)					■	■	■	■	■
Applications									
Fancoil 2-/4-pipe with/without electrical heater	■	■	■		■	■	■	■	
Fancoil with Radiator					■	■	■	■	
Fancoil & Heating / Cooling with 6-port valve / PICV									
Heating / Cooling 2-/4-pipe			■		■	■	■	■	
Humidity control					■	■	■	■	
Indoor Air Quality				★ ²⁾		★		★	■
Heat Pump System	■	■	■				■	■	
VAV with electrical heater and radiator / Heat-Cool coil					■ ⁶⁾	■ ⁶⁾	■ ⁶⁾	■ ⁶⁾	■
Functionalities									
2-position control	■	■	■	■ ⁵⁾	■	■	■	■	■
Modulating control	■ ³⁾	■ ³⁾	■ ³⁾	■ ⁵⁾	■	■	■	■	■
2-stage control sequence for heating or cooling	■ ⁴⁾	■ ⁴⁾	■ ⁴⁾		■	■	■	■	
Operating mode									
Comfort, Economy, Protection	■	■	■	■ ⁵⁾	■	■	■	■	■
Manual / Auto operating mode	■	■	■	■ ⁵⁾	■	■	■	■	■

¹⁾ available for 1-/3-/4-stage Relay (fan) ²⁾ PM2.5 or CO₂ or both controls plus display VOC ³⁾ modulating output only for 2-pipe applications ⁴⁾ only for 2-stage heating ⁵⁾ only fan control functions ⁶⁾ support VAV - cooling with air

■ valid for all variants ★ main feature

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Overview and selection tools

Room temperature controllers with integrated sensing and operation

											
Type	UP 237K	UP 204S_2	UP 205I_2	QMX6.P34	QMX6.P44	QMX6.P34-1BSC	QMX6.P44-1BSC	QMX6.P74	QMX6.P74-1BSC	QMX3.P02	QMX3.P37
Mounting											
Wall mounted				■	■	■	■	■	■	■	■
Flush mounted	■ ¹⁾	■	■								
Display/operating elements											
Display		■	■	■	■	■	■	■	■		■
Capacitive buttons										■	■
Rotary/push-button, Setpoint rotary wheel	■										
LED indicators per button										■	■
LED indicators central	■ ²⁾		■								
Proximity sensor		■	■								
Sensors											
Temperature	■	■	■	■	■	■	■	■	■	■	■
Humidity					■		■	■	■		
Air quality CO ₂								■	■		
Bus interface											
- Integrated bus coupling unit		■	■	■	■	■	■	■	■	■	■
- Separate bus coupling unit	■										
Power supply											
- KNX bus voltage	■	■	■	■	■	■	■	■	■	■	■
- Additional power supply DC 24 V		■	■								
Functionalities											
Switching ON/OFF/OVER		■	■							■	■
Pushbutton function (bell function)		■	■								
Dimming		■	■							■	■
RGB(W) dimming		■	■								
Human Centric Lighting (HCL)			■								
Send Values											
- 8 bit/value		■	■								
- 8 bit/percent		■	■							■	■
- 16 bit		■	■								
- Brightness value		■	■								
- Temperature value		■	■								
- Wind speed value		■	■								
Display value											
- 1 bit		■	■								
- 8 bit/percent/16 bit		■	■								
- Brightness value		■	■								
- Temperature value		■	■	■	■	■	■	■	■		■
- Humidity value		■	■	■	■	■	■	■	■		■
- Air Quality (PM2.5, PM10, VOC, CO ₂ , AQI)		■	■	■(CO ₂)	■(CO ₂)	■(CO ₂)	■(CO ₂)	■(CO ₂)	■(CO ₂)		■
- Wind speed value		■	■								
- Metering values		■	■								
- Text messages		■	■								
Alarmhandling		■	■								
Forced control		■	■								
Shutter-blind control		■	■							■	■
Call and save scene, 8 bit		■	■							■	■
Logic functions		■	■	■	■	■	■	■	■		
Button deactivation				■	■	■	■	■	■		■
Deactivation of the display via password protection		■	■								
Time switch schedules		■	■								

¹⁾ Design line i-system ²⁾ Display operating modes, manual mode, heating/cooling, alarms

Room temperature controllers with integrated sensing and operation

											
Type	UP 237K	UP 204S_2	UP 205I_2	QMX6.P34	QMX6.P44	QMX6.P34-1BSC	QMX6.P44-1BSC	QMX6.P74	QMX6.P74-1BSC	QMX3.P02	QMX3.P37
Room temperature controller functionality											
Setpoint value setting, absolute	■	■	■	■	■	■	■	■	■		■
Relative Setpoint value shifting	■	■	■	■	■	■	■	■	■		■
Setting operating modes	■	■	■	■	■	■	■	■	■		■
Setting comfort prolongation	■	■	■	■	■	■	■	■	■		■
Heating/Cooling	■	■	■	■	■	■	■	■	■		■
Two-point control	■	■	■	■	■	■	■	■	■		■
Continuous control	■	■	■	■	■	■	■	■	■		■
Two stage heating and cooling (sequence)	■			■	■	■	■	■	■		■
Applications											
Radiator	■	■	■	■	■	■	■	■	■	■	■
Underfloor heating	■	■	■	■	■	■	■	■	■	■	■
Fancoil		■	■								
Ventilation		■	■								
VRF (variable refrigerant flow)		■	■								
Threshold control for humidity		■	■							■	■
Threshold control for air quality		■	■							■	■
PI control for humidity				■	■	■	■	■	■		
PI control for CO ₂				■	■	■	■	■	■		

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Overview and selection tools

Room temperature controllers with integrated sensing										
Basic module + Front module Type										
	QMX6.P30 QMX6.P30-1BSC	QMX6.P40 QMX6.P40-1BSC	QMX6.P70 QMX6.P70-1BSC	AQR2570Nx + AQR2532NNW	AQR2570Nx + AQR2535NNW	AQR2576Nx + AQR2530NNW	AQR2576Nx + AQR2532NNW	AQR2576Nx + AQR2535NNW	AQR2576Nx + AQR2535NNW	AQR2576Nx + AQR2535NNWQ
Design										
Wall mounted	■	■	■							
Flush mounted				■	■	■	■	■	■	■
Display / operating										
Air quality indication on LED			■							■
Sensor										
Temperature	■	■	■	■	■		■	■	■	■
Humidity		■	■		■			■	■	■
Air quality CO ₂			■			■	■	■	■	■
Bus interface										
Integrated bus coupling unit	■	■	■	■	■	■	■	■	■	■
Controlling										
Controller enable /disable	■	■	■	■	■	■	■	■	■	■
PI controller for heating and/or cooling	■	■	■	■	■		■	■	■	■
Threshold controller for humidity					■			■	■	■
Threshold controller for air quality						■	■	■	■	■
PI control for humidity	■	■	■							
PI control for CO ₂	■	■	■							
Input										
Passive Temperature NTC 10k				■	■	■	■	■	■	■
Two potential-free contacts				■	■	■	■	■	■	■

7

Fields of application

The core functions of the thermal drive actuators is to control electro-thermal drive actuators for water-based heating and cooling systems. The actuators comes with 6 (N 605) or 2 (RL 605) separate channels or semiconductor outputs. These channels/outputs can be used to silently control several AC 230 V or AC 24 V actuators according to their power consumption. The actuator controls both de-energized closed and de-energized open actuators.

The thermal drive actuators receives control value telegrams for heating and cooling from the room temperature controllers in 1-bit (2-point controller control) or 1-byte (PI controller control) format. Depending on the format of the incoming control value telegram, the actuators controls the valve outputs directly by switching or they converts the continuous control value into a switching signal via pulse width modulation or via limit value evaluation.

The incoming control values can be monitored individually with an individually adjustable monitoring time for each actuator channel. If no control value is received, the affected channel goes into emergency mode. For this emergency mode, individual control value can be configured for summer or winter time.

If the actuators converts continuous control values into a pulse width modulated signal, control value limitations can be specified for this. For basic temperature control or to increase the valve service life, a maximum and minimum control value can be set. Specific valve characteristics can also be taken into account, e.g. that the valve should always be closed or always open above certain thresholds.

Thermal drive actuators with direct operation

		
Type	N 605D41	RL 605D23 ¹⁾
Valve control functions	6 Outputs	2 Outputs
Setting the valve control direction (de-energized closed/ de-energized open)	■	■
Controlling the actuator channels: via switching commands On/Off (1-bit), via continuous positioning commands in percent (1 byte)	■	■
Monitoring of the control value	■	■
Control value limitation	■	■
Safety functions: Service mode, Lock function, Forced position, Forced control, User defined	■	■
Valve flushing	■	■
Operating hours counter with threshold monitoring	■	■
Counting of switching cycles with threshold monitoring	■	■
Diagnostic functions		
Mains voltage failure detection	■	
Overload and short circuit detection	■	■
Room temperature controller	6 Controller	2 Controller
Setting the system type: 2-pipe or 4-pipe system	■	■
Controller behavior: Two-point controller or continuous controller (PI control)	■	■
Sequenz control	■	■
Pre-defined system types: Fan coils H/C, heating or cooling ceilings, underfloor heating/cooling, radiator heating	■	■
Room operating modes: Comfort mode, pre-comfort mode, energy save mode, protection mode	■	■
Automatic mode	■	■
Manual operation	■	■
Comfort extension	■	■
Permanent protective operation	■	■
Presence switching	■	■
Evaluation of up to 4 window contacts	■	■
Receiving one or more actual room temperature values	■	■
Weighting of up to 12 actual room temperature values	■	■
Monitoring of the actual temperature value	■	■
Heat alarm message	■	■
Frost alarm message	■	■
Setting setpoints via a base setpoint with a setpoint shift	■	■
Setting setpoints via absolute setpoints	■	■
Limiting the specified setpoints	■	■
Ambient temperature-based tracking of the room temperature setpoint in cooling mode	■	■
Monitoring of the ambient temperature	■	■
Floor temperature limitation in heating mode	■	■
Monitoring of the actual temperature value of the floor	■	■
Dew point mode	■	■
Fan control	■	■

Heating, ventilation and air conditioning - room temperature control

Overview and selection tools

Thermal drive actuators with direct operation (continued)

		
Type	N 605D41	RL 605D23 ¹⁾
Primary systems – functions		
Heating or cooling requirements	■	■
Determining the largest control value	■	■
Demand-based control of the circulating pumps	■	■
Logic functions		
6 independent logic functions: AND, OR, XOR, TRIGGER, LOCK	■	■

¹⁾ without direct operation

Damper and rotary actuators

						
	Actuators for air volume controllers 300 Pa operating range		Rotary actuators for ball valves		Rotary actuators for air dampers	
Type	GDB181.1E/KN	GLB181.1E/KN	GDB111.9E/KN	GLB111.9E/KN	GDB111.1E/KN	GLB111.1E/KN
	GDB 300 Pa VAV compact controller 5 Nm for approx. 0.8 m ² damper area 150 s running time	GLB 300 Pa VAV compact controller 10 Nm for approx. 1.5 m ² damper area 150 s running time	GDB Rotary actuator for 2-port, 3-port and 6-port control ball valves up to DN 25 5 Nm 150 s running time	GLB Rotary actuator for 2-port, 3-port and 6-port control ball valves up to DN 50 10 Nm 150 s running time	GDB Damper actuator 5 Nm (non-spring return) for approx. 0.8 m ² damper area, 150 s running time	GLB Damper actuator 10 Nm (non-spring return) for approx. 1.5 m ² damper area, 150 s running time
Control signal	KNX S-Mode KNX LTE-Mode KNX PL-Link	KNX S-Mode KNX LTE-Mode KNX PL-Link	KNX S-Mode KNX PL-Link	KNX S-Mode KNX PL-Link	KNX S-Mode KNX PL-Link	KNX S-Mode KNX PL-Link
Operating voltage	AC 24 V	AC 24 V	AC 24 V	AC 24 V	AC 24 V	AC 24 V
Standard model	GDB181.1E/KN	GLB181.1E/KN	GDB111.9E/KN	GLB111.9E/KN	GDB111.1E/KN	GLB111.1E/KN
Dimensions, round damper shaft (mm)	8...16	8...16	-	-	8...16	8...16
Dimensions, square damper shaft (mm)	6...12.8	6...12.8	-	-	6...12.8	6...12.8

Electromotoric valve actuators without KNX

						
Type	SSA151.05HF	SSA161.05HF	SSA161E.05HF	SSA131.00	SSA331.00	SSA161.05
Dimensions						
• Width [mm]	88.6	88.6	88.6	88.6	88.6	88.6
• Height [mm]	83.4	83.4	83.4	81	81	81
• Depth [mm]	51.4	51.4	51.4	51.4	51.4	51.4
Technical data						
• AC 230 V					(+/-) 15%	
• AC 24 V	(+/-) 15%	(+/-) 15%	(+/-) 15%	(+/-) 20%		(+/-) 15%
• DC 24 V	(+/-) 20%	(+/-) 20%	(+/-) 20%			(+/-) 20%
Control signal	4...20 mA	0...10 V	0...10 V	3 Point	3 Point	0...10 V
Max. lift [mm]	1.2...6.5	1.2...6.5	1.2...6.5	1.2...6.5	1.2...6.5	1.2...6.5
Max. positioning force [N]	100	100	100	100	100	100
Max. open/close time [s]	25	25	25	67.5	67.5	25
Length of connecting lead [m]	1.5	1.5	1.5	1.5	1.5	1.5
Ambient temperature for operation [°C]	1 ... 110	1 ... 110	1 ... 110	1 ... 110	1 ... 110	1 ... 110
Power Consumption [VA]	2.5	2.5	2.5	2.5	2.5	2.5
Mounting	360 °	360 °	360 °	360 °	360 °	360 °
Degree of protection	IP 54	IP 54	IP 54	IP 54	IP 54	IP 54

Electrothermal valve actuators without KNX

												
Type	STA121. 65L10 65L20 65H20			STA321. 65L10 65L20 65HL20			STA161. 65L10	STA162. 65L10	STA121. 40L10	STA126. 40L10	STA161. 40L10	
Dimensions												
• Width [mm]	48.3			48.3			63.5		48.4	56.0	61.5	
• Height [mm]	44.3			44.3			44.1		44.3			
• Depth [mm]	69.3			69.3			70.1		59.2	59.5	60	
Technical data												
• AC 230 V												
• AC/DC 24 V	■	■	■	■	■	■		■	■	■	■	
• AC 24 V												
Sense of action	NC											
Positioning signal	2-point-control						DC 0...10 V		2-point-control	DC 0...10 V		
Stroke [mm]	6.5								4.0			
Positioning force [N]	125								100			
Positioning time [s]	270						30s/mm		210	30s/mm		
Cable length [m]	1	2	2	1	2	2	1	1	1	1	1	
Power consumption [W]	1.2								1.0			
Operation temperature [°C]	0 ... +50											
Mounting	360°											
Degree of protection	IP54											

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Electrothermal valve actuators without KNX

											
Type	STP121. 65L10 65L20 65H10			STP321. 65L10 65L20 65HL20			STP161. 65L10	STP162. 65L10	STP121. 40L10	STP126. 40L10	STP161. 40L10
Dimensions											
• Width [mm]	48.3			48.3			63.5		48.4	56.0	61.5
• Height [mm]	44.3			44.3			44.1		44.3		
• Depth [mm]	69.3			69.3			70.1		59.2	59.5	60
Technical data											
• AC 230 V				■	■	■					
• AC/DC 24 V	■	■	■					■	■	■	
• AC 24 V							■				■
Sense of action	NO										
Positioning signal	2-point-control						DC 0...10 V		2-point-control	DC 0...10 V	
Stroke [mm]	6.5								4.0		
Positioning force [N]	125								100		
Positioning time [s]	270						30s/mm		210	30s/mm	
Cable length [m]	1	2	2	1	2	2	1	1	1	1	1
Power consumption [W]	1.2								1.0		
Operation temperature [°C]	0 ... +50										
Mounting	360°										
Degree of protection	IP54										

Room thermostats

Flush-mounted

RDF8..KNX Flush Mount



Flush mount touch screen KNX room thermostat for 2-/4-pipe FCU with on/off outputs, 2x universal input and electrical heater application, fit for both round and square conduit boxes

- Operating modes: Comfort, Economy and Protection
- For heating and/or cooling applications
- 2 or 3-position control outputs
- Output for 1-speed or 3-speed fan
- 2 multifunctional inputs for keycard contact, external room / return air temperature (QAH11.1, QAA32), heat / cool changeover, window contact on/off, dewpoint monitor, electrical heater enabled, fault contact, presence detector
- Automatic or manual heating/cooling changeover
- Adjustable commissioning and control parameters
- Minimum and maximum setpoint limitation
- Color of housing: Ivory white or black
- Backlit display

Application selectable:

- 2-pipe system
- 2-pipe system with electrical heater
- 4-pipe system

Data sheet	N3174
Power consumption	6 VA
Setpoint setting range	5...40 °C
Switching differential	0.5...6 K
Communication	Bus: KNX (S-mode and LTE mode with Synco 700)
Analog inputs, number	2
Relay outputs	Fan: N.O. contacts, non-floating Valve: N.O. contacts, non-floating
Relay outputs, number	5
Relay output, switching voltage	AC 230 V
Relay output, switching current	5 (2) A
Degree of protection	IP30
Dimensions (W x H x D)	86 x 86 x 47 mm

Range overview RDF8..KNX Flush Mount

Product Title	Operating voltage [V]	Stock no.	Product no.
Flush mount touch KNX room thermostat for 2-/4-pipe FCU with on/off output and 2x universal input, fit for both round and square conduit boxes, black	AC 230	S55770-T429	RDF800KN/VB
Flush mount touch KNX room thermostat for heating applications and/or VRF Room Unit with KNX Interface to VRF Gateway, for square and round conduit boxes	AC 230	S55770-T415	RDF880KN
Flush mount touch KNX room thermostat for 2-/4-pipe FCU with on/off output and 2x universal input, fit for both round and square conduit boxes	AC 230	S55770-T350	RDF800KN

Flush mount KNX room thermostat for 2-/4-pipe FCU with on/off outputs, 2x universal input and electrical heater application, fit for both round and square conduit boxes

RDF6..KNX Flush Mount



Flush-mount room thermostat with LCD for fan coil units and compressors in DX-type equipment

- KNX communications
- For heating and/or cooling applications
- 2 or 3-position control outputs
- Output for 1-speed or 3-speed fan
- 2 multifunctional inputs for keycard contact, external room / return air temperature (QAH11.1, QAA32), heat / cool changeover, operation mode changeover, window contact on/off, dewpoint monitor, electrical heater enabled, fault contact, presence detector
- Operating modes: Comfort, Economy and Protection
- Automatic or manual heating/cooling changeover
- Adjustable commissioning and control parameters
- Minimum and maximum setpoint limitation
- Backlit display
- Color of housing: signal white (RAL 9003) or black
- Independent function for window contact, presence detector (standard presence and hotel presence)

Application selectable:

- 2-pipe system
- 2-pipe system with electrical heater
- 4-pipe system

Data sheet	N3076
Power consumption	2 VA
Switching differential	0.5...6 K
Communication	KNX
Analog inputs, number	2
Relay outputs	Fan: N.O. contacts, non-floating Valve: N.O. contacts, non-floating
Relay outputs, number	5
Relay output, switching voltage	AC 230 V
Relay output, switching current	5 (2) A
Type of fixing	With screws on recessed round conduit box diameter min. 60 mm
Dimensions (W x H x D)	86 x 86 x 46 mm

Range overview RDF6..KNX Flush Mount

Product Title	Operating voltage [V]	Digital inputs, number	Stock no.	Product no.
Flush mount KNX room thermostat for 2-/4-pipe FCU with on/off output and 2x universal input, fit for both round and square conduit boxes	AC 230		S55770-T293	RDF600KN
Flush mount KNX room thermostat for 2-/4-pipe FCU with on/off output, KNX switching group, four buttons for switching lights and blinds and 2x universal input, fit for both round and square conduit boxes	AC 230	2	S55770-T400	RDF600KN/S
Flush mount KNX room thermostat for 2-/4-pipe FCU with on/off output and 2x universal input, fit for both round and square conduit boxes, black	AC 230	2	S55770-T430	RDF600KN/VB

Room thermostats

Flush-mounted

RDF870KN



Flush mount touch KNX PM2.5 & CO2 & Ventilation Controls with on/off or ECM fans selectable and 2x DC 0-10 V input, fit for both round and square conduit boxes

- AC 230 V operating voltage, large, backlit display
- Display and setpoint adjustment for PM2.5 and CO2 control
- Display of room temperature, outside temperature, VOC (volatile organic compound) and RH (relative humidity)
- Support 1-/3-/4-speed On/Off fan or DC fan output
- Two multifunctional inputs for external passive and DC 0...10 V sensors
- Operating modes: Comfort, Economy and Protection
- KNX S-Mode
- KNX commissioning via ETS or local control parameters
- KNX integration into Desigo via group (ETS) or individual addressing
- KNX integration into third-party system via group addressing (ETS)
- Mounting on recessed square 86 mm box or round 60 mm with 60 mm fixing centers and minimum 40 mm depth
- Color of housing: Ivory white (RAL 9001)

Application selectable:

- PM2.5 control only
- CO2 control only
- PM2.5 & CO2 controls (CO2 higher priority in control)
- Ventilation control

2x sensor inputs are selectable:

- 0: No function
- 1: Temperature (AI) (NTC 10k)
- 2: Temperature (AI) (0...10 V)
- 3: PM2.5 (AI) µg/m3 (0...10 V)
- 4: CO2 (AI) ppm (0...10 V)
- 5: VOC (AI) % (0...10 V)
- 6: VOC (AI) mg/m3 (0...10 V)
- 7: RH (AI) % (0...10 V)
- 8: Alarm input (DI)
- 9: Dummy AI (0...10 V) (RU only)

Data sheet

Operating voltage

Power consumption

Setpoint setting range

Connection cable

Communication

Analog outputs

Relay outputs

Relay output, switching voltage

Relay output, switching current

Degree of protection

Dimensions (W x H x D)

Color

Warranty

A6V11439454

AC 230 V

230 V

7 VA

2.5 W

0...50 °C

Supply: 2-wire

KNX S-Mode

DC 0...10 V for ECM fan output

Fan: N.O. contacts, non-floating

Valve: N.O. contacts, non-floating

230 V

5 A

IP30

86 x 86 x 46.8 mm

White

24 Months

Stock no.

Product no.

S55770-T407

RDF870KN

Room thermostats RDG2.. with KNX communications

RDG2..KN

- For fan coil , universal heat/cool and ventilation (VAV fresh air) applications
- KNX communications: S-mode, PL-Link with PXC4/5/7, LTE-mode with Synco
- 3 multifunctional inputs for keycard contact, external room / return air temperature (NTC3K; QAH11.1, QAA32 or LG-Ni1000 sensors), heat / cool changeover, operation mode changeover, window contact on/off, dewpoint monitor, electrical heater enabled, fault contact, presence detector
- Operating modes: Comfort, Economy and Protection
- Automatic or manual DC fan or 1-/3-speed
- Automatic or manual heating / cooling changeover
- Adjustable commissioning and control parameters
- Minimum and maximum setpoint limitation
- Backlit display
- Green leaf function
- Local weekly time program (with 3 Comfort periods per day)
- Manager /Subordinate (M/S) function
- Delta temperature control for district heating and cooling
- Commissioning via Smartphone APP "PCT Go", local HMI or KNX tools.

Data sheet	A6V11545853
Setpoint setting range	5...40 °C
Switching differential	Heating: 0.5...6 K; Cooling: 0.5...6 K
Communication	Bus: KNX (S-mode and LTE with Synco)
Analog output, signal	DC 0...10 V
Relay output, switching current	5 (4) A
Type of fixing	Wall mounting with screws
Degree of protection	IP30
Dimensions (W x H x D)	92 x 134 x 25 mm

Heating, ventilation and air conditioning - room temperature control

Room thermostats

Wall-mounted

RDG200KN



KNX communicating room thermostat. Outputs modulating (PWM / 3-pos.) or on/off. Fan coil (3-speed / DC fan), universal H/C applications, VAV fresh air

- Built-in temperature and humidity sensors
- For applications with 2-position (on/off or PWM) or 3-position control outputs
- For applications with 3-speed or DC 0...10 V fan
- AC 230 V or AC 24 V power supply.

Application selectable:

- 2-pipe system
- 2-pipe system with electrical heater
- 2-pipe system and radiator / floor heating
- 2-pipe / 2-stage heating or cooling systems
- 4-pipe system
- 4-pipe system with electrical heater
- 4-pipe / 2-stage heating and cooling system (selectable also for 2-stage cooling / 1-stage heating or 2-stage heating / 1-stage cooling)

Data sheet	A6V11545853
Operating voltage	AC 24 V
	AC 230 V
Analog inputs, number	3
Analog outputs	Fan, fresh air damper (DC 0...10V)
Analog outputs, number	2
Digital inputs, number	3
Relay outputs	Fan: 1- or 3-speed
Relay output, switching voltage	AC 24 V or 230 V
Triac outputs	Valve, el. heater
	2-position, PWM, 3-position
Triac outputs, number	4
Triac output, switching voltage	AC 24...230 V
Triac output, switching current	1 A

Stock no.	Product no.
S55770-T409	RDG200KN

KNX communicating room thermostat in black. Outputs modulating (PWM / 3-pos.) or on/off. Fan coil (3-speed / DC fan), universal H/C applications, VAV fresh air

- Built-in temperature and humidity sensors
- Black color device RAL9011
- For applications with 2-position (on/off or PWM) or 3-position control outputs
- For applications with 3-speed or DC 0...10 V fan
- AC 230 V or AC 24 V power supply.

Application selectable:

- 2-pipe system
- 2-pipe system with electrical heater
- 2-pipe system and radiator / floor heating
- 2-pipe / 2-stage heating or cooling systems
- 4-pipe system
- 4-pipe system with electrical heater
- 4-pipe / 2-stage heating and cooling system (selectable also for 2-stage cooling / 1-stage heating or 2-stage heating / 1-stage cooling)

Data sheet	A6V11545853
Operating voltage	AC 24 V AC 230 V
Analog inputs, number	3
Analog outputs	Fan, fresh air damper (DC 0...10V)
Analog outputs, number	2
Digital inputs, number	3
Relay outputs	Fan: 1- or 3-speed
Relay output, switching voltage	AC 24 V or 230 V
Triac outputs	Valve, el. heater 2-position, PWM, 3-position
Triac outputs, number	4
Triac output, switching voltage	AC 24...230 V
Triac output, switching current	1 A

RDG200KN/BK



Stock no.	Product no.
S55770-T452	RDG200KN/BK

Room thermostats

Wall-mounted

RDG204KN



KNX communicating room thermostat with CO2 sensor. Outputs modulating (PWM / 3-pos.) or on/off. Fan coil (3-speed / DC fan), universal H/C applications, VAV fresh air

- Built-in temperature, humidity and CO2 sensors
- Indoor air quality monitoring and controlling (CO2) via fresh air damper
- Display of CO2 value in ppm (parts per million) or with text
- For applications with 2-position (on/off or PWM) or 3-position control outputs
- For applications with 3-speed or DC 0...10 V fan
- AC 230 V or AC 24 V power supply.

Application selectable:

- 2-pipe system
- 2-pipe system with electrical heater
- 2-pipe system and radiator / floor heating
- 2-pipe / 2-stage heating or cooling
- 4-pipe system
- 4-pipe system with electrical heater
- 4-pipe / 2-stage heating and cooling system (selectable also for 2-stage cooling / 1-stage heating or 2-stage heating / 1-stage cooling)

Data sheet	A6V11545853
Operating voltage	AC 24 V AC 230 V
Analog inputs, number	3
Analog outputs	Fan, fresh air damper: (DC 0...10 V)
Analog outputs, number	2
Digital inputs, number	3
Relay outputs	Fan: 1- or 3-speed
Relay output, switching voltage	AC 24 V or 230 V
Triac outputs	Valve, el. heater, fresh air damper 2-position, PWM, 3-position
Triac outputs, number	4
Triac output, switching voltage	AC 24...230 V
Triac output, switching current	1 A

Stock no.	Product no.
S55770-T410	RDG204KN

KNX communicating room thermostat. Outputs modulating (DC) or on/off. Fan coil (3-speed / DC fan), universal H/C applications, VAV fresh air

RDG260KN



- Built-in temperature and humidity sensors
- For applications with DC control outputs and DC or 3-speed fan output
- For applications with 2-position control output with DC fan output
- AC or DC 24 V operating voltage

Application selectable:

- 2-pipe system
- 2-pipe system with electrical heater
- 2-pipe system and radiator / floor heating
- 2-pipe / 2-stage heating or cooling system
- 4-pipe system
- 4-pipe system with electrical heater
- 4-pipe / 2-stage heating and cooling system (selectable also for 2-stage cooling / 1-stage heating or 2-stage heating / 1-stage cooling)
- 4-pipe system with 6-port ball valves and PICV
- Heating / cooling with 6-port ball valves

Data sheet	A6V11545853
Operating voltage	AC/DC 24 V
Analog inputs, number	3
Analog outputs	Valve, el. heater: 4 fan: 1 fresh air damper: 1 (DC 0...10V)
Analog outputs, number	5
Digital inputs, number	3
Relay outputs	Valve, compressor or el. heater: 2 outputs, 2-position Fan: 1- or 3-speed
Relay output, switching voltage	AC 24...230 V

Stock no.

Product no.

S55770-T412

RDG260KN

Heating, ventilation and air conditioning - room temperature control

Room thermostats

Wall-mounted

RDG260KN/BK



KNX communicating room thermostat in black. Outputs modulating (DC) or on/off. Fan coil (3-speed / DC fan), universal H/C applications, VAV fresh air

- Built-in temperature and humidity sensors
- Black color device RAL9011
- For applications with DC control outputs and DC or 3-speed fan output
- For applications with 2-position control output with DC fan output
- AC or DC 24 V operating voltage

Application selectable:

- 2-pipe system
- 2-pipe system with electrical heater
- 2-pipe system and radiator / floor heating
- 2-pipe / 2-stage heating or cooling system
- 4-pipe system
- 4-pipe system with electrical heater
- 4-pipe / 2-stage heating and cooling system (selectable also for 2-stage cooling / 1-stage heating or 2-stage heating / 1-stage cooling)
- Heating / cooling with 6-port ball valves

Data sheet

A6V11545853

Operating voltage

AC 24 V

24 V

DC 24 V

Analog inputs, number

3

Analog outputs

Valve, el. heater: 4

Fan: 1 (DC 0...10 V)

Analog outputs, number

5

Digital inputs, number

3

Relay outputs

Valve, compressor or el. heater: 2 outputs, 2-position

Fan: 1- or 3-speed

Relay output, switching voltage

AC 24...230 V

Stock no.

Product no.

S55770-T453

RDG260KN/BK

KNX communicating room thermostat with CO2 sensor. Outputs modulating (DC) or on/off. Fan coil (3-speed / DC fan), universal H/C applications, VAV fresh air

RDG264KN



- Built-in temperature, humidity and CO2 sensors
- Indoor air quality monitoring and controlling (CO2) via fresh air damper
- Display of CO2 value in ppm (parts per million) or with text
- For applications with DC control outputs and DC or 3-speed fan output
- For applications with 2-position control output with DC fan output
- AC or DC 24 V operating voltage

Application selectable:

- 2-pipe system
- 2-pipe system with electrical heater
- 2-pipe system and radiator / floor heating
- 2-pipe / 2-stage heating or cooling system
- 4-pipe system
- 4-pipe system with electrical heater
- 4-pipe / 2-stage heating and cooling system (selectable also for 2-stage cooling / 1-stage heating or 2-stage heating / 1-stage cooling)
- Heating / cooling with 6-port ball valves

Data sheet	A6V11545853
Operating voltage	AC 24 V 24 V DC 24 V
Analog inputs, number	3
Analog outputs	Valve, el. heater: 4 fan: 1 fresh air damper: 1 (DC 0...10V)
Analog outputs, number	5
Digital inputs, number	3
Relay outputs	Valve, compressor or el. heater: 2 outputs, 2-position Fan: 1- or 3-speed
Relay output, switching voltage	AC 24...230 V

Stock no. Product no.

S55770-T413 RDG264KN

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Flush-mounted

UP 237K11



KNX Temperature controller, titanium white

- Integrated room temperature sensors
- Control can be set as a two-point control and/or continuous-action control (P or PI algorithm), for heating only, for cooling only, or for heating and cooling mode
- Operating modes that can be switched via KNX: comfort mode, pre-comfort mode, energy-saving mode and frost or heat protection mode
- Presence pushbutton to locally switch between comfort and pre-comfort mode or comfort and energy-saving mode and to extend comfort mode after operating energy-saving or protection mode
- Pushbutton for switching over between manual and automatic mode
- The room temperature setpoint value for comfort mode can be set via an interchangeable rotary button (+/-) on the controller and via the KNX
- Basic setpoint of the room temperature for comfort mode which can be set via the KNX
- Setpoint value for comfort mode in °C which can be set via an interchangeable rotary button on the controller
- Adjustable dead zone between the heating setpoint and the cooling setpoint for comfort mode
- Two-level heating or cooling
- Output of the control variable(s) either as an on/off switch command or as a positioning command in the range of 0...100 %
- 5 LEDs to display manual mode and the current operating modes
- 4 LEDs to display heating/cooling valve open, dew point alarm and open window
- For plugging onto a bus transceiver module (BTM) or a flush-mounting actuator with bus transceiver module (BTM)
- Titanium white

The bus coupling module (BTM) (see chapter Systemproducts and Accessories) or flush-mounting actuator with bus coupling (BTM) must be ordered separately. The matching design frame must be ordered separately. See chapter Display and Operation Units - Pushbutton Accessories.

Data sheet	A6V10416253
Dimensions (W x H x D)	55 x 55 x 16 mm
Warranty	24 Months

	Stock no.	Product no.
	5WG1237-2KB11	UP 237K11

The bus transceiver module (BTM) (see Chapter System Products and Accessories) or flush-mounting actuator with bus transceiver module (BTM) must be ordered separately. The matching design frame must be ordered separately. See Chapter Display and Operation Units - Pushbutton accessories.

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

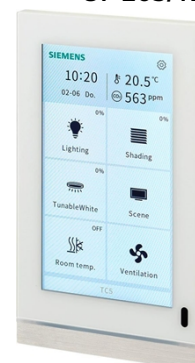
Flush-mounted

KNX Touch control TC5, 5 inch touch panel, white

UP 205/12

- Aluminium and glas housing
- Capacitive touch colour display 5", 480 x 854 pixels
- Mounting in horizontal as well as vertical direction, configurable via ETS
- LED colour light strip as orientation light, respectively to signal alarms
- Integrated room temperature sensor
- Micro SD card reader for on-site customization of wallpaper, screen saver and icons
- Connection to external power supply DC 24 V
- Flush mounted device for mounting in a flush wall box 60 mm Ø or 60 mm x 60 mm, for screw fixing
- Mounting plate included in gift box

- Up to 15 configurable function pages
- 5 configurable home pages for navigation
- 120 individual functions configurable (icons on function pages)
- Room control functions switching, dimming, tunable white, RGBW, HCL, solar protection, HVAC
- Switching functions toggle, switching on/off, doorbell function
- Dimming control page for colour lights: 3-colour RGB light, 4-colour RGBW light, optional with colour temperature adjustment
- Human Centric Lighting
- Solar protection functions for curtains, roller shutters and venetian blinds
- Room temperature control configurable as two-step control and/or continuous control, for heating and/or cooling operation
- Manual or automatic ventilation control
- VRF interface
- Up to 8 configurable sets of scene functions with 5 different data type options for each output
- Up to 8 inputs for logical operations: AND, OR, XOR, gate forwarding, threshold, maximum value and format conversion
- 5 different alarm conditions
- 16 daily or weekly schedules
- Display of date, time, temperature, relative humidity or CO2 on homepage
- Display pages for air quality and weather values
- Display pages for energy metering values
- Display pages for free configurable values including unit text



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Data sheet	A6V13357279
Dimensions (W x H x D)	86 x 148.8 x 11.5 mm
Warranty	24 Months

Stock no. Product no.

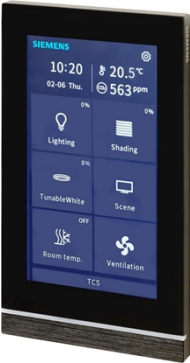
5WG1205-2AB12 UP 205/12

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Flush-mounted

UP 205/22



KNX Touch control TC5, 5 inch touch panel, black

- Aluminium and glas housing
 - Capacitive touch colour display 5", 480 x 854 pixels
 - Mounting in horizontal as well as vertical direction, configurable via ETS
 - LED colour light strip as orientation light, respectively to signal alarms
 - Integrated room temperature sensor
 - Micro SD card reader for on-site customization of wallpaper, screen saver and icons
 - Connection to external power supply DC 24 V
 - Flush mounted device for mounting in a flush wall box 60 mm Ø or 60 mm x 60 mm, for screw fixing
 - Mounting plate included in gift box
-
- Up to 15 configurable function pages
 - 5 configurable home pages for navigation
 - 120 individual functions configurable (icons on function pages)
 - Room control functions switching, dimming, tunable white, RGBW, HCL, solar protection, HVAC
 - Switching functions toggle, switching on/off, doorbell function
 - Dimming control page for colour lights: 3-colour RGB light, 4-colour RGBW light, optional with colour temperature adjustment
 - Human Centric Lighting
 - Solar protection functions for curtains, roller shutters and venetian blinds
 - Room temperature control configurable as two-step control and/or continuous control, for heating and/or cooling operation
 - Manual or automatic ventilation control
 - VRF interface
 - Up to 8 configurable sets of scene functions with 5 different data type options for each output
 - Up to 8 inputs for logical operations: AND, OR, XOR, gate forwarding, threshold, maximum value and format conversion
 - 5 different alarm conditions
 - 16 daily or weekly schedules
 - Display of date, time, temperature, relative humidity or CO2 on homepage
 - Display pages for air quality and weather values
 - Display pages for energy metering values
 - Display pages for free configurable values including unit text

Data sheet	A6V13357279
Dimensions (W x H x D)	86 x 148.8 x 11.5 mm
Warranty	24 Months

Stock no.	Product no.
5WG1205-2AB22	UP 205/22

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Flush-mounted

KNX Room Control Unit, i-system

UP 227



- Multifunctional display-/control panel for KNX with Dot-Matrix LCD display 96 x 128 pixels
- 8 capacitive touch buttons for horizontal operation
- For the display and control of at least 10 adjustable room control functions: Switching toggle/On/Off, Dimming, Door bell function On/Off, Solar protection control; send 1 Byte/2 Byte value; display 1 Bit/1 Byte/2 Byte value; Forced control; display text messages; warning and alarm messaging; recall and save scenes; warning and alarm messaging
- Room control functions lockable via KNX-bus
- Green/red LED as orientation light, as status indication, as a response to pressing a button respectively to the signalling of alarm reports
- A signaler for acoustical alarm reports respectively as a status of the touch operation
- Integrated room temperature sensor
- Evaluation and weighting of an external inside temperature sensor
- Room temperature control configurable as two-step control and/or continuous control, for exclusive heating operation, exclusive cooling operation or heating and cooling operation
- Selectable operating modes over the KNX: Comfort, Pre-comfort, Energy-savings and protection
- Local indication
 - Of the active operating modes or automatic- respectively manual mode
 - Inside temperature or outside temperature
 - Heating or cooling mode
 - Dew point alarm
 - Open window
- Local switching between
 - Manual- and automatic mode
 - Comfort, pre-comfort, energy-saving- and protection mode
- Adjustable time-limited extension of the comfort mode
- Adjustable room temperature setpoint shifting for comfort mode
- Via KNX set basic setpoint value of the room temperature for comfort mode
- An outside temperature based temperature setpoint value tracing in the cooling operation
- Adjustable dead zone between the heating setpoint value and the cooling setpoint value for comfort mode
- Transmission of controller output(s) either as On/Off switching commands or as control commands in the range 0...100 %
- Local display of the manually selected fan rotational speed respectively of the automatic adjustment of the fan rotational speed
- Adjustable fan rotational speed respectively automatic adjustment of the fan rotational speed on the controller
- Weekly schedule programme for controller- operating modes, automatic mode and at the least 8 room control functions
- At the least 40 schedule tasks and Display and set of the date and time
- User control of LCD background lighting and Background color
- Display system settings and room temperature controller in the languages: German, English, French, Italian od Spanish
- User setting of at least 3 operating languages also Integrated bus coupling unit, bus connection via bus terminal possible
- Flush mounted device for the mounting in an flush wall box Ø 60 mm, for fixing on the mounting plate AQR2500NF via lateral springs (separately specified)

The matching design frame must be ordered separately. See chapter Display and Operation Units - Pushbuttons bus transceiver module (BTM).

The mounting plate AQR2500.. must be ordered separately.

Data sheet	A6V10416250
Dimensions (W x H x D)	55 x 55 x 37.2 mm
Warranty	24 Months

Stock no.	Product no.
5WG1227-2AB11	UP 227

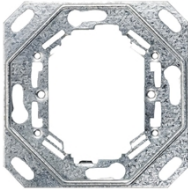
Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Flush-mounted

Accessories for UP 227

AQR2500NF



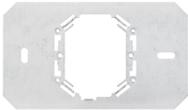
Mounting plate EU (CEE/VDE)

- Mounting plates to plug onto the front module

Data sheet	N1408
Mechanical design	EU (CEE/VDE)
Dimensions (W x H x D)	71 x 71 x 45 mm
Warranty	60 Months

	Stock no.	Product no.
	S55720-S161	AQR2500NF

AQR2500NG



Mounting plate IT (3 modular)

- Mounting plates to plug onto the front module

Data sheet	N1408
Mechanical design	IT (3 modular)
Dimensions (W x H x D)	71 x 71 x 45 mm
Warranty	60 Months

	Stock no.	Product no.
	S55720-S163	AQR2500NG

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Wall-mounted

Room operator unit KNX with temperature sensor, configurable touchkeys, LED display, white

QMX3.P02



Functions:

- Temperature sensor
- Configurable touchkeys with LED display
- Switching and control of lighting, blinds, scenes
- Window for labels
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Power consumption	Quiet power: 0.18 W
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Display	LED
Communication	KNX PL-Link KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Weight (net)	0.19 kg
Warranty	24 Months

Stock no.	Product no.
S55624-H107	QMX3.P02

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Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Wall-mounted

QMX3.P02-1BSC



Room operator unit KNX with temperature sensor, configurable touchkeys, LED display, black

Functions:

- Temperature sensor
- Configurable touchkeys with LED display
- Switching and control of lighting, blinds, scenes
- Window for labels
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link
	KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Warranty	24 Months

Stock no.	Product no.
S55624-H128	QMX3.P02-1BSC

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Wall-mounted

Room operator unit KNX with temperature sensor, segmented backlit display, touchkeys, white

QMX3.P34



Functions:

- Temperature sensor
- Segmented backlit display and touchkeys
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Power consumption	Quiet power: 0.18 W
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Weight (net)	0.21 kg
Warranty	24 Months

Stock no.	Product no.
S55624-H105	QMX3.P34

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Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Wall-mounted

QMX3.P34-1BSC



Room operator unit KNX with temperature sensor, segmented backlit display, touchkeys, black

Functions:

- Temperature sensor
- Segmented backlit display and touchkeys
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link
	KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Warranty	24 Months

	Stock no.	Product no.
	S55624-H126	QMX3.P34-1BSC

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Wall-mounted

Room operator unit KNX with temperature sensor, segmented backlit display, configurable touchkeys, LED display, white

QMX3.P37



Functions:

- Temperature sensor
- Segmented backlit display and touchkeys
- Configurable touchkeys with LED display
- Switching and control of lighting, blinds, scenes
- Window for labels
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Operating voltage	DC 21 V
Voltage supply	KNX bus
Power consumption	Quiet power: 0.24 W
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Display	LED
Communication	KNX PL-Link KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Weight (net)	0.216 kg
Warranty	24 Months

Stock no.	Product no.
S55624-H108	QMX3.P37

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Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Wall-mounted

QMX3.P37-1BSC



Room operator unit KNX with temperature sensor, segmented backlit display, configurable touchkeys, LED display, black

Functions:

- Temperature sensor
 - Segmented backlit display and touchkeys
 - Configurable touchkeys with LED display
 - Switching and control of lighting, blinds, scenes
 - Window for labels
-
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
 - Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
 - Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
 - Integrated bus coupling unit
 - 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
 - Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
 - Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
 - Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link
	KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Warranty	24 Months

	Stock no.	Product no.
	S55624-H129	QMX3.P37-1BSC

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Wall-mounted

Room operator unit KNX with sensors for temperature, humidity, segmented backlit display, touchkeys, white

QMX3.P44



Functions:

- multisensor for temperature and humidity
- Segmented backlit display and touchkeys
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Measuring range	NTC: 0...50 °C Humidity: 10%...95 % r.F.
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Weight (net)	0.21 kg
Warranty	24 Months

Stock no.	Product no.
S55624-H143	QMX3.P44

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Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Wall-mounted

QMX3.P44-1BSC



Room operator unit KNX with sensors for temperature, humidity, segmented backlit display, touchkeys, black

Functions:

- Multisensor for temperature and humidity
- Segmented backlit display and touchkeys
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Operating voltage	DC 24 V
Voltage supply	KNX bus
Power consumption	0.24 VA
Measuring range	NTC: 0...50 °C Humidity: 10%...95 % r.F.
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Display	Segment LCD
Communication	KNX PL-Link KNX S-Mode
Connection cable	1.0 mm ² ; 0 m
Ambient temperature, operation	0...50 °C
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Weight (net)	0.21 kg
Warranty	24 Months

Stock no.	Product no.
S55624-H144	QMX3.P44-1BSC

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Wall-mounted

Room operator unit KNX with sensors for temperature, humidity, CO2, segmented backlit display, touchkeys, white

QMX3.P74



Functions:

- multisensor for temperature, humidity and CO2
- Segmented backlit display and touchkeys
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Power consumption	Quiet power: 0.36 W
Measuring range	400...10000 ppm CO ₂
Sensing element	Temperature sensor, CO2 sensor, relative humidity sensor
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Weight (net)	0.22 kg
Warranty	24 Months

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Stock no.	Product no.
S55624-H106	QMX3.P74

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing and operation

Wall-mounted

QMX3.P74-1BSC



Room operator unit KNX with sensors for temperature, humidity, CO2, segmented backlit display, touchkeys, black

Functions:

- Multisensor for temperature, humidity and CO2
- Segmented backlit display and touchkeys
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Measuring range	400...10000 ppm CO ₂
Sensing element	Temperature sensor, CO2 sensor, relative humidity sensor
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Warranty	24 Months

Stock no.	Product no.
S55624-H127	QMX3.P74-1BSC

Accessories for QMX3..

QMX3.MP1



Basic plate for conduit and cavity wall box

Basic plate for conduit box / cavity wall box with 68 mm diameter hole

20 pcs. per package

Data sheet	N1602
Dimensions (W x H x D)	80.5 x 115 mm
Warranty	60 Months

Stock no.	Product no.
S55624-H110	QMX3.MP1

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing i-system

Front module for base module, without sensor

AQR2530NNW

- Front module without sensor for plugging onto the Base module
- Matching the DELTA line and DELTA miro frame program

Data sheet	N1411
Color	Titanium white
Degree of protection	IP30
Dimensions (W x H x D)	55 x 55 x 12 mm
Warranty	60 Months



Stock no.	Product no.
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S55720-S137	AQR2530NNW
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Matching the DELTA line and DELTA miro frame program. See chapter Display and Operation Units.
The relevant base modules must be ordered separately. See chapter Physical sensors.

Front module for base modules, temperature (active)

AQR2532NNW

- Front module with sensor for plugging onto the Base module
- Matching the DELTA line and DELTA miro frame program

Data sheet	N1411
Signal output temperature	Active
Measuring range, temperature	0...50 °C
Color	Titanium white
Degree of protection	IP30
Dimensions (W x H x D)	55 x 55 x 12 mm
Warranty	60 Months



Stock no.	Product no.
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S55720-S136	AQR2532NNW
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Matching the DELTA line and DELTA miro frame program. See chapter Display and Operation Units.
The relevant base modules must be ordered separately. See chapter Physical sensors.

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Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing i-system

AQR2535NNW



Front module for base modules, humidity and temperature (active)

- Front module with humidity and temperature sensor for plugging onto the Base module
- Matching the DELTA line and DELTA miro frame program

Data sheet	N1411
Signal output temperature	Active
Measurement range humidity	0...100 % r.h.
Sensing element, temperature	Active
Measuring range, temperature	0...50 °C
Color	Titanium white
Degree of protection	IP30
Dimensions (W x H x D)	55 x 55 x 12 mm
Warranty	60 Months

Stock no.	Product no.
S55720-S141	AQR2535NNW

Matching the DELTA line and DELTA miro frame program. See chapter Display and Operation Units.
The relevant base modules must be ordered separately. See chapter Physical sensors.

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AQR2535NNWQ



Front module for base module, humidity and temperature, with LED

- Front module with humidity and temperature sensor and CO₂ indicator for plugging onto the Base module
- Matching the DELTA line and DELTA miro frame program

Data sheet	N1411
Signal output temperature	Active
Measurement range humidity	0...100 % r.h.
Sensing element, temperature	Active
Measuring range, temperature	0...50 °C
Display	CO ₂ indicator by LED
Color	Titanium white
Degree of protection	IP30
Dimensions (W x H x D)	55 x 55 x 38 mm
Warranty	60 Months

Stock no.	Product no.
S55720-S219	AQR2535NNWQ

Matching the DELTA line and DELTA miro frame program. See chapter Display and Operation Units.
The relevant base modules must be ordered separately. See chapter Physical sensors - Without KNX connection.

Remote sensor for AQR257..

Product Title	Data sheet	Stock no.	Product no.
Front module with passiv temperature measurement, LG-Ni1000	N1408	S55720-S133	AQR2531ANW
Mounting plate EU (CEE/VDE)	N1408	S55720-S161	AQR2500NF
Cable temperature sensor PVC 2 m, NTC 10k	N1831	BPZ:QAP1030.200	QAP1030.200

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing i-system

Base module with KNX for temperature and humidity measurement

AQR2570..

- Base module without sensor for plugging onto a front module
- 1 analog input to connect temperature sensors with NTC 10k sensing element to measure room, floor, or ceiling temperature
- 2 multifunctional binary inputs to connect window contacts or buttons
- Power supply via KNX bus, bus load < 5 mA



- Communication: KNX S-Mode, KNX PL-Link

- Temperature control as continuous control (PID algorithm) for pure heating operation, heating and cooling operation, and adjustable positioning variable as continuous positioning signal 0...100%, or as pulse-width modulated (PWM) switching signal On/Off,
- Ventilation control across 3 settable switching steps for relative humidity, and 3 switching signal objects On/Off, or one positioning signal object 0...100% to control a ventilation actor
- Via setpoints for room temperature and relative humidity adjustable via KNX bus
- Adjustable commissioning and control parameters
- Integrated bus coupler with programming button and LED



Data sheet	N1411
Voltage supply	KNX bus
Analog inputs, number	1
Analog inputs	Passive temperature sensor NTC 10k
Digital inputs, number	2
Digital inputs	Potential-free contacts
Warranty	60 Months

Range overview AQR2570..

Mechanical design	Operating voltage [V]	Measuring range, temperature [°C]	Display	Stock no.	Product no.
EU (CEE/VDE)	DC 21...29	0...50	No display	S55720-S203	AQR2570NF
IT (3 Modular)				S55720-S205	AQR2570NG
UK (British Standard)				S55720-S204	AQR2570NH
US (UL)				S55720-S206	AQR2570NJ

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Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing

i-system

AQR2576..



Base modules with KNX for CO₂ measurement

- Base module with maintenance and recalibration-free CO₂ sensor to plug onto a front module
- 1 analog input to connect temperature sensors with NTC 10k sensing element to measure room, floor, or ceiling temperature
- 2 multifunctional binary inputs to connect window contacts or buttons
- Power supply via KNX bus, bus load < 5 mA
- Communication: KNX S-Mode, KNX PL-Link
- Ventilation control across 3 settable switching steps for relative humidity & CO₂ concentration, and 3 switching signal objects On/Off, or one positioning signal object 0...100% to control a ventilation actor
- Temperature control as continuous control (PID algorithm) for pure heating operation, heating and cooling operation, and adjustable positioning variable as continuous positioning signal 0...100%, or as pulse-width modulated (PWM) switching signal On/Off
- Via setpoints for room temperature and relative humidity, and CO₂ concentration, adjustable via KNX bus
- Adjustable commissioning and control parameters
- Integrated bus coupler with programming button and LED

Data sheet	N1411
Voltage supply	KNX bus
Measuring range	CO ₂ : 0...5000 ppm
Analog inputs, number	1
Analog inputs	Passive temperature sensor NTC 10k
Digital inputs, number	2
Digital inputs	Potential-free contacts
Warranty	60 Months

Range overview AQR2576..

Mechanical design	Dimensions (WxHxD) [mm]	Stock no.	Product no.
EU (CEE/VDE)	71 x 71 x 45	S55720-S207	AQR2576NF
IT (3 Modular)	71 x 71 x 45	S55720-S209	AQR2576NG
UK (British Standard)	71 x 71 x 45	S55720-S208	AQR2576NH
US (UL)	64 x 110 x 45	S55720-S210	AQR2576NJ

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing

Wall-mounted

Room sensor KNX for temperature, white

QMX3.P30

Functions:

- Temperature sensor
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX



Data sheet	N1602
Voltage supply	KNX bus
Power consumption	Quiet power: 0.18 W
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode KNX LTE-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Weight (net)	0.19 kg
Warranty	24 Months

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Stock no.	Product no.
S55624-H103	QMX3.P30

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Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing

Wall-mounted

QMX3.P30-1BSC



Room sensor KNX for temperature, black

- Functions:
- Temperature sensor
 - Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
 - Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
 - Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
 - Integrated bus coupling unit
 - 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
 - Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
 - Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
 - Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link
	KNX S-Mode
	KNX LTE-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Warranty	24 Months

	Stock no.	Product no.
	S55624-H123	QMX3.P30-1BSC

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing

Wall-mounted

Room sensor KNX for temperature and humidity, white

QMX3.P40

Functions:

- Multisensor for temperature and humidity
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX



Data sheet	N1602
Voltage supply	KNX bus
Measuring range	NTC: 0...50 °C Humidity: 10%...95 % r.F.
Sensing element	Temperature sensor, relative humidity sensor
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Weight (net)	0.71 kg
Warranty	24 Months

Stock no.	Product no.
S55624-H116	QMX3.P40

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Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing

Wall-mounted

QMX3.P40-1BSC



Room sensor KNX for temperature and humidity, black

- Functions:
- Multisensor for temperature and humidity
 - Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
 - Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
 - Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
 - Integrated bus coupling unit
 - 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
 - Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
 - Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
 - Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet	N1602
Voltage supply	KNX bus
Measuring range	NTC: 0...50 °C Humidity: 10%...95 % r.F.
Sensing element	Temperature sensor, relative humidity sensor
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Warranty	24 Months

	Stock no.	Product no.
	S55624-H124	QMX3.P40-1BSC

Heating, ventilation and air conditioning - room temperature control

Room temperature controllers with integrated sensing

Wall-mounted

Room sensor KNX for temperature, humidity, CO2, white

QMX3.P70

Functions:

- Multisensor for temperature, humidity and CO2
- Air quality indicator with LED
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX



Data sheet	N1602
Voltage supply	KNX bus
Power consumption	Quiet power: 0.36 W
Measuring range	400...10000 ppm CO ₂
Sensing element	Temperature sensor, CO2 sensor, relative humidity sensor
Measuring range, temperature	0...50 °C
Sensing element, temperature	NTC
Communication	KNX PL-Link KNX S-Mode KNX LTE-Mode
Degree of protection	IP30
Dimensions (W x H x D)	88.4 x 133.4 x 18 mm
Weight (net)	0.19 kg
Warranty	24 Months

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	Stock no.	Product no.
	S55624-H104	QMX3.P70

Room temperature controllers with integrated sensing

Wall-mounted

QMX3.P70-1BSC



Room sensor KNX for temperature, humidity, CO2, black

Functions:

- multisensor for temperature, humidity and CO2
- Air quality indicator with LED
- Temperature control, adjustable as PWM control and/or modulating control (PID algorithm), for pure heating mode, pure cooling mode, heating and cooling mode
- Operating modes switchable via KNX and/or display: Comfort mode, Pre-Comfort, energy savings and protection mode
- Adjustable commissioning and control parameters for radiated heating, slow and fast, floor heating slow and fast
- Integrated bus coupling unit
- 3 independently adjustable switching values for CO2 concentration and relative air humidity for air quality control
- Actuating variable for 1, 2, or 3-stage fans (humidity and CO2)
- Actuating variable for 1, 2, or 3-point positioning signal (humidity and CO2)
- Setpoint for room temperature and relative humidity and CO2 concentration adjustable via KNX

Data sheet

Voltage supply

Measuring range

Sensing element

Measuring range, temperature

Sensing element, temperature

Communication

Degree of protection

Dimensions (W x H x D)

Warranty

N1602

KNX bus

400...10000 ppm CO₂

Temperature sensor, CO2 sensor, relative humidity sensor

0...50 °C

NTC

KNX PL-Link

KNX S-Mode

KNX LTE-Mode

IP30

88.4 x 133.4 x 18 mm

24 Months

Stock no.

Product no.

S55624-H125

QMX3.P70-1BSC

Accessories for QMX3..

Product Title	Packaging unit	Data sheet	Stock no.	Product no.
Basic plate for conduit and cavity wall box		N1602	S55624-H110	QMX3.MP1

KNX Pushbutton, triple, with status LED, with scene controller, with room temperature sensor, titanium white, i-system

- Pushbutton in 3 pairs
- Horizontal operation
- Per pushbutton selectable function, scene controller
- LED for orientation light
- Labeling field
- Temperature sensor
- Connectable bus coupling unit (BTM) or flush-mounted actuators via BTI

Data sheet	A6V10416093
Dimensions (W x H x D)	55 x 55 x 11 mm
Warranty	24 Months



	Stock no.	Product no.
	5WG1223-2AB14	UP 223/14

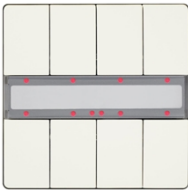
The bus transceiver module (BTM) (see Chapter System Products and Accessories) or flush-mounting actuator with bus transceiver module (BTM) must be ordered separately. The matching design frame must be ordered separately. See Chapter Display and Operation Units - Pushbutton accessories.

Heating, ventilation and air conditioning - room temperature control

Room sensors with KNX

DELTA style

UP 287/14



KNX Pushbutton, quadruple, with status LED, titanium white, DELTA style

- Pushbutton in 4 pairs
- Vertical operation
- Per pushbutton selectable function, scene controller
- LED for orientation light
- Labeling field
- Temperature sensor
- Connectable bus coupling unit (BTM) or flush-mounted actuators via BTI

Data sheet

A6V10416122

Dimensions (W x H x D)

68 x 68 x 14 mm

Warranty

24 Months

Stock no. Product no.

5WG1287-2AB14 **UP 287/14**

The bus transceiver module (BTM) (see Chapter System Products and Accessories) or flush-mounting actuator with bus transceiver module (BTM) must be ordered separately. The matching design frame must be ordered separately. See Chapter Display and Operation Units - Pushbutton accessories.

Touch sensor with status LED, scene controller and room temperature sensor,
GAMMA arina, white

- Pair of touch areas for vertical operation
- Per touch area selectable function
- LED for orientation light
- Labeling field
- Room temperature sensor
- Integrated bus coupling unit

Data sheet	A6V10438647
Dimensions (W x H x D)	86 x 86 x 14 mm
Warranty	24 Months



	Stock no.	Product no.
	5WG1203-2DB14	UP 203/14

The suitable mounting frame is already included in the package.

Heating, ventilation and air conditioning - room temperature control

Room sensors without KNX
i-system

AQR253..



Front modules for base module

- Front module with sensors
- Matching the DELTA line and DELTA miro frame program

Data sheet	N1411
Color	Titanium white
Degree of protection	IP30
Warranty	60 Months

Range overview AQR253..

Measuring range, temperature [°C]	Signal output temperature	Measurement range humidity [% r.h.]	Display	Dimensions (WxHxD) [mm]	Stock no.	Product no.
				55 x 55 x 12	S55720-S137	AQR2530NNW
0...50	Active			55 x 55 x 12	S55720-S136	AQR2532NNW
0...50	Active	0...100		55 x 55 x 12	S55720-S141	AQR2535NNW
0...50	Active	0...100	CO ₂ indicator by LED	55 x 55 x 38	S55720-S219	AQR2535NNWQ

Matching the DELTA line and DELTA miro frame program. See chapter Display and Operation Units.
The relevant base modules must be ordered separately. See chapter Physical sensors.

KNX Electromotive valve actuator with LED valve position indication

AP 562/02

Electromotive, proportional (constant) valve actuator with LED valve position indication and with integrated bus coupling unit for direct connection to KNX:

- For latching to valve adapter
- Delivery with valve adapterring VA80 for mounting on all regular valves with a connection thread of M30x1.5 mm and a ram stroke of up to 5.5 mm (e.g. Siemens series VPI46... and VPP46...)
- Max. positioning force: 120 N
- Cable (0.80 m) permanently connected to the enclosure for bus connection and two additional signaling contacts (e. g. window contacts), which can be connected as binary inputs
- For operation solely with the bus voltage, i. e. without external auxiliary power
- Maintenance-free, silent drive
- Automatic valve stroke detection, through which the actuator travel is adjusted to the valve used



Data sheet	A6V10416192
Number of channels	1
Relay outputs, number	2
Triac outputs, number	0
Dimensions (W x H x D)	50 x 82 x 65 mm
Warranty	24 Months

Stock no.	Product no.
5WG1562-7AB02	AP 562/02

7

Electromotoric actuators 100 N for valves with 1.2..6.5 mm stroke

SSA..KN

For pressure independent combi valves (PICV), radiator valves, MiniCombi valves (MCV) and small globe valves.

Electromotoric actuators with KNX S-Mode and PL-Link communication for radiator, chilled ceiling, VAV and fan coil unit applications. With automatic stroke adaption, force-dependent switching off in the end position, LED position indication, and manual operation. Suited for use with Siemens PICV VPP46../VPI46..., Siemens radiator valves VDN../VEN../VUN..., Siemens MiniCombi valves VPD../VPE..., Siemens small valves VD1..CLC and on radiator valves with M30 x 1.5 connection without adapter (Heimeier, Cazzaniga, Oventrop M30x1.5, Honeywell-Braukmann, MNG, Junkers, Beulco new). Further valves of other manufacturers on request.



For fitting to the valve: Cap nut M30 x 1.5

Data sheet	A6V11858280
Positioning force	100 N
Stroke	1.2 mm 6.5 mm
Positioning time	50/100 s
Communication	KNX-TP
Degree of protection	IP54
Medium temperature	1...110 °C
Ambient humidity, operation	5...85 % r.h.
Dimensions (W x H x D)	88.6 x 83.4 x 51.4 mm
Mounting position	360°
Warranty	60 Months

Range overview SSA..KN

Operating voltage [V]	Auxiliary switch	Cable length [m]	Stock no.	Product no.
DC 21...30 24	0	1.5	S55180-A111	SSA118.09HKN

Actuators with KNX

Damper and rotary actuators

G..B181.1E/KN



VAV compact controller KNX

- Compact controller with KNX communication for plants with variable or constant air volume flow
- Integrated, highly precise differential pressure sensor, damper actuator and digitally configurable air volume controller
- Nominal torque 5 or 10 Nm
- Air damper rotation angle mechanically adjustable between 0 and 90°
- Configurable as single device per room or for cascade control with pressure ratio 1:1, positive pressure, or negative pressure
- Prewired with a 0.9 m cable and a 0.9 m cable

Can be configured as damper actuator (without air volume control) with ETS.

Data sheet	N3547
Positioning time	150 s
Communication	KNX S-Mode KNX LTE-Mode KNX PL-Link
Cable length	0.9 m
Degree of protection	IP54
Dimensions (W x H x D)	71 x 158 x 61 mm
Warranty	60 Months

Range overview G..B181.1E/KN

Torque [Nm]	Operating voltage [V]	Air damper area [m²]	Power consumption	Rated impulse voltage [V]	Stock no.	Product no.
5	AC 24	0.8	3 VA 2.5 W	800	S55499-D134	GDB181.1E/KN
5	AC 24	0.8	3 VA 2.5 W	800	S55499-D902- A518	GDB181.1E/KN-SW
10	AC 24	1.5	3 VA 2.5 W	800	S55499-D903- A518	GLB181.1E/KN-SW
5	AC 19.2...28.8 24	0.8	3 VA 2.5 W	800	S55499-D505	GDB181.1EMKN
10	AC 24	1.5	3 VA 2.5 W	800	S55499-D135	GLB181.1E/KN
10	AC 24	1.5	3 VA 2.5 W	800	S55499-D263	GLB181.1EMKN

GDB181.EMKN packaging unit 18 pieces.

Basic Documentation No.: P3547

Heating, ventilation and air conditioning - room temperature control

Actuators with KNX

Damper and rotary actuators

Rotary air damper actuators 5 Nm, without spring return

- KNX S-Mode or KNX PL-Link communication
- For shaft dia. 8...16 mm, square 6...12.8 mm, min. shaft length 30 mm
- With position indication and adjustable mechanical limit stop
- Button for disengaging the gear train to enable manual override
- With base made of steel, plastic housing and two 0.9 m connecting cables

Data sheet	A6V11566316
Torque	5 Nm
Air damper area	0.8 m²
Angular rotation	90°
Power consumption	3 VA 2.5 W Quiet power: 0.5 W
Positioning time	150 s
Communication	KNX TP
Cable length	0.9 m
Positioning signal	KNX TP
Spring return function	No
Degree of protection	IP54
Ambient humidity, operation	95 % r.h.
Dimensions (W x H x D)	68 x 137 x 59.5 mm
Operating voltage	AC 24 V
Auxiliary switch	0
Warranty	60 Months

GDB111.1E/KN



7

Stock no.	Product no.
S55499-D190	GDB111.1E/KN

Rotary air damper actuators 10 Nm, without spring return

- KNX S-Mode or KNX PL-Link communication
- For shaft dia. 8...16 mm, square 6...12.8 mm, min. shaft length 30 mm
- With position indication and adjustable mechanical limit stop
- Button for disengaging the gear train to enable manual override
- With base made of steel, plastic housing and two 0.9 m connecting cables

Data sheet	A6V11566316
Torque	10 Nm
Positioning force	10 N
Air damper area	1.5 m²
Angular rotation	90°
Power consumption	3 VA 2.5 W Quiet power: 0.5 W
Positioning time	150 s
Cable length	0.9 m
Positioning signal	KNX TP
Spring return function	No
Degree of protection	IP54
Ambient humidity, operation	95 % r.h.
Dimensions (W x H x D)	68 x 137 x 59.5 mm
Operating voltage	AC 24 V
Auxiliary switch	0
Warranty	60 Months

GLB111.1E/KN



Stock no.	Product no.
S55499-D198	GLB111.1E/KN

Heating, ventilation and air conditioning - room temperature control

Actuators with KNX

Damper and rotary actuators

GDB111.9E/KN



Electromotoric rotary actuator KNX for control ball valves up to DN25

- Electromotoric rotary actuator
- for KNX S-Mode or KNX PL-Link communication
 - for 2-/3-port control ball valves up to DN25
 - for 6-port control ball valves up to DN25
 - without spring-return
 - pre-wired with two 0.9 m connection cables

- Operating Mode 1:
- Use of two separate setpoints 0..100% for heating and cooling
- Operating Mode 2:
- Use of one setpoint 0..100% for actuator position

Data sheet	A6V10725318
Torque	5 Nm
Angular rotation	90°
Power consumption	3 VA
	2.5 W
	Quiet power: 0.5 W
Positioning time	150 s
Cable length	0.9 m
Communication	KNX S-Mode or KNX PL-Link
Positioning signal	KNX S-Mode or KNX PL-Link
Spring return function	No
Degree of protection	IP54
Medium temperature	5...90 °C
Ambient humidity, operation	95 % r.h.
Dimensions (W x H x D)	88 x 112 x 143 mm
Mounting position	Horizontal or vertical
Operating voltage	AC 24 V
Position feedback	None
Auxiliary switch	0
Warranty	60 Months

Stock no.	Product no.
S55499-D203	GDB111.9E/KN

Heating, ventilation and air conditioning - room temperature control

Actuators with KNX

Damper and rotary actuators

Electromotoric rotary actuator KNX for control ball valves up to DN50

GLB111.9E/KN

Electromotoric rotary actuator

- for KNX S-Mode or KNX PL-Link communication
- for 2-/3-port control ball valves up to DN50
- without spring-return
- pre-wired with two connection cables



Data sheet	A6V10725318
Torque	10 Nm
Angular rotation	90°
Power consumption	3 VA
	2.5 W
	Quiet power: 0.5 W
Positioning time	150 s
Cable length	0.9 m
Communication	KNX S-Mode or KNX PL-Link
Positioning signal	KNX S-Mode or KNX PL-Link
Spring return function	No
Degree of protection	IP54
Ambient humidity, operation	5...95 % r.h.
Dimensions (W x H x D)	88 x 112 x 143 mm
Mounting position	Upright to horizontal
Operating voltage	AC 19.2...28.8 V
	24 V
Position feedback	DC 0...10 V
Auxiliary switch	0
Warranty	60 Months

Stock no.

Product no.

S55499-D207

GLB111.9E/KN

7

Actuators without KNX

Electrothermal valve actuators

STA..40..



Electrothermal actuator for radiator-, zone- and combi-valves

for radiator valves and floor heating

Electrothermal actuators, stem extended in a deenergized state (NC) for 2-position and quasi-proportional control of heating systems, chilled ceilings and terminal units. With position indication and connecting cable.

Suited for:

- Radiator valves VDN../VEN../VUN../VPD../VPE..
- Floor heating
- Valves of other manufacturers

For fitting to valve: Cap nut M30 x 1.5

Data sheet	A6V14028280
Force	100 N
Stroke	4.0 mm
Degree of protection	IP54
Dimensions (W x H x D)	48.8 x 44.3 x 57.3 mm
Power consumption	1 W

7

Range overview STA..40..

Operating voltage [V]	Positioning time [s]	Cable length [m]	Stock no.	Product no.
AC/DC 24	210	1	S55174-A219	STA121.40L10
AC/DC 24	210	1	S55174-A225	STA126.40L10
AC/DC 24	210	1	S55174-A222	STA161.40L10
AC 230	210	1	S55174-A218	STA321.40L10
AC 230	210	1	S55174-A224	STA326.40L10

STA..65..



Electrothermal actuator for radiator-, zone- and combi-valves

for radiator valves, small valves and Combi valves

Electrothermal actuators, stem extended in a deenergized state (NC) for 2-position and quasi-proportional control of heating systems, chilled ceilings and terminal units. With position indication.

Suited for valves:

- Radiator valves VDN../VEN../VUN../VPD../VPE..
- Small valves VD1..CLC and V..I46..
- Combi valves VPP46.., VPI46..
- Valves of other manufacturers

For fitting to valve: Cap nut M30 x 1.5

Data sheet	A6V14028280
Force	125 N
Stroke	6.5 mm
Degree of protection	IP54
Power consumption	1.2 W

Range overview STA..65..

Operating voltage [V]	Positioning time [s]	Cable length [m]	Stock no.	Product no.
AC/DC 24	270	0	S55174-A211	STA121.65/00
AC/DC 24	270	2	S55174-A208	STA121.65H20
AC/DC 24	270	1	S55174-A201	STA121.65L10

Range overview STA..65..

Operating voltage [V]	Positioning time [s]	Cable length [m]	Stock no.	Product no.
AC/DC 24	270	2	S55174-A205	STA121.65L20
AC/DC 24	270	1	S55174-A214	STA161.65L10
AC/DC 24	270	1	S55174-A216	STA162.65L10
AC 230	270	0	S55174-A210	STA321.65/00
AC 230	270	2	S55174-A209	STA321.65H20
AC 230	270	1	S55174-A200	STA321.65L10
AC 230	270	2	S55174-A204	STA321.65L20

Electrothermal actuator for radiator-, zone- and combi-valves**STP..40..**

for radiator valves and floor heating

Electrothermal actuators, stem retracted in a deenergized state (NO) for 2-position and quasi-proportional control of heating systems, chilled ceilings and terminal units. With position indication and connecting cable.

Suited for:

- Radiator valves VDN../VEN../VUN../VPD../VPE..
- Floor heating
- Valves of other manufacturers

For fitting to valve: Cap nut M30 x 1.5

Force	100 N
Stroke	4.0 mm
Degree of protection	IP54
Dimensions (W x H x D)	48.8 x 44.3 x 57.3 mm
Power consumption	1 W

Range overview STP..40..

Operating voltage [V]	Positioning time [s]	Cable length [m]	Stock no.	Product no.
AC/DC 24	210	1	S55174-A221	STP121.40L10
AC/DC 24	210	1	S55174-A223	STP161.40L10
AC 230	210	1	S55174-A220	STP321.40L10



7

Actuators without KNX

Electrothermal valve actuators

STP..65..



Electrothermal actuator for radiator-, zone- and combi-valves

for small valves

Electrothermal actuators, stem retracted in a deenergized state (NO) for 2-position and quasi-proportional control of heating systems, chilled ceilings and terminal units. With position indication.

Suited for valves:

- Small valves VVP47.., VXP47.., VMP47..
- Valves of other manufacturers

For fitting to valve: Cap nut M30 x 1.5

Force	125 N
Stroke	6.5 mm
Degree of protection	IP54
Power consumption	1.2 W

Range overview STP..65..

Operating voltage [V]	Positioning time [s]	Cable length [m]	Stock no.	Product no.
AC/DC 24	270	0	S55174-A213	STP121.65/00
AC/DC 24	270	1	S55174-A203	STP121.65L10
AC/DC 24	270	2	S55174-A207	STP121.65L20
AC/DC 24	270	1	S55174-A215	STP161.65L10
AC/DC 24	270	1	S55174-A217	STP162.65L10
AC 230	270	0	S55174-A212	STP321.65/00
AC 230	270	1	S55174-A202	STP321.65L10
AC 230	270	2	S55174-A206	STP321.65L20

Electromotoric actuators 100 N for valves with 1.2...6.5 mm stroke

SSA..

For pressure independent combi valves (PICV), radiator valves, MiniCombi valves (MCV) and small globe valves.

Electromotoric actuators for modulating control in radiator, chilled ceiling, VAV and fan coil unit applications. With automatic stroke adaption, force-dependent switching off in the end position, LED position indication, feedback signal, and manual operation. Suited for use with Siemens PICV VPP46../VPI46.., Siemens radiator valves VDN../VEN../VUN.., Siemens MiniCombi valves VPD../VPE.., Siemens small valves VD1..CLC and on radiator valves with M30 x 1.5 connection without adapter (Heimeier, Cazzaniga, Oventrop M30x1.5, Honeywell-Braukmann, MNG, Junkers, Beulco new). Further valves of other manufacturers on request.

For fitting to the valve: Cap nut M30 x 1.5
1.2 mm minimal stroke required for self calibration

Data sheet	CE1N4893, A6V11858278, A6V11858276
Positioning force	100 N
Degree of protection	IP54
Medium temperature	1...110 °C
Mounting position	360°
Warranty	60 Months

Range overview SSA..

Operating voltage [V]	Positioning signal	Power consumption	Auxiliary switch	Cable length [m]	Stock no.	Product no.
AC 24	3-position	0.8 VA 0.8 W Quiet power: 0.2 W	0	1.5	S55180-A106	SSA131.00
AC 24 DC 24	4...20 mA	2.5 VA 2.5 W Quiet power: 2 W	0	1.5	S55180-A110	SSA151.05HF
AC 24 DC 24	DC 0...10 V	6 VA 2.5 W Quiet power: 2 W	0	1.5	S55180-A107	SSA161.05
AC 24 DC 24	DC 0...10 V	2.5 VA 2.5 W Quiet power: 2 W	0	1.5	S55180-A108	SSA161.05HF
AC 24 DC 24	DC 0...10 V	2.5 VA 2.5 W Quiet power: 2 W	0	1.5	S55180-A109	SSA161E.05HF
AC 230	3-position	3.5 VA 7 W Quiet power: 2 W	0	1.5	S55180-A105	SSA331.00
3.0			0		S55181-A105	SSA911.02ZB

Positioning time for 2.5 mm stroke.

Heating, ventilation and air conditioning - room temperature control

Thermal drive actuators with room temperature controller

N 605D41



KNX Thermal drive actuator, 6 x AC 24...230 V, with 6 integrated room temperature controllers

- For control of electrothermal valve drives for AC 24...230 V in heating/cooling systems via 6 noiseless semiconductor outputs
- Electronic protection of the outputs against short circuit and overload
- Rated current: 0.5 A per channel and group of 3 outputs
- Max. inrush current (2 sec.): 3.5 A per channel and group of 3 outputs
- Max. inrush current (2 min.): 0.9 A per channel and group of 3 outputs
- Direct operation per channel for opening and closing the valve and activating direct operation
- Red LED per channel to indicate valve open or closed and status of the control value
- Red error LED per channel to indicate overload/short circuit and power voltage failure
- Maintenance-free terminals for connection and through-wiring of untreated single-core, stranded or multi-core conductors, 0.5 ... 2.5 mm²
- 2 terminals per channel for connecting the electrothermal valve drives
- 2 terminals on the unit for supply of the valve voltage AC 24...230 V
- Bus-powered electronics
- Housing: plastic, color RAL 7035, N-system
- DIN rail mounted device for mounting on rail TH35 according to DIN EN 60715
- Type of protection: IP 20
- Per channel setting of the valve operation direction de-energised open or closed
- Per channel optional control via switching commands or continuous positioning commands
- Per channel control value limitation and adjustment of the valve characteristic for continuous control values
- Per channel control value monitoring
- Adjustable behaviour in case of override (lock, service mode, forced position, forced control)
- Per output automatic, demand-oriented or manual valve rinsing
- Per output operating hours counting and switching cycle counting with limit value monitoring
- Evaluation of control values for heating or cooling demand requirements on a primary system and for controlling heating or cooling circuit pumps
- 6 room temperature controllers for 2-pipe or 4-pipe systems, adjustable as 2-position control or continuous control, for heating-only mode, cooling-only mode, heating and cooling mode, with two-stage heating or cooling
- Output of the control values optionally as switching command On/Off or as continuous control command
- 13 min., max. and weighted value calculators
- 6 logical operations (AND/OR/XOR/TRIGGER/LOCK)
- Surveillance of device function

Data sheet	A6V13488290
Rated current	0.5 A
Triac output, switching voltage	24...230 V
Dimensions (W x H x D)	72 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	4 TE
Warranty	24 Months

Stock no.	Product no.
5WG1605-1DB41	N 605D41

KNX Thermal drive actuator, 2 x AC 24...230 V, with 2 integrated room temperature controllers

RL 605D23



- For control of electrothermal valve drives for AC 24...230 V in heating/cooling systems via 2 noiseless semiconductor outputs
- With electronic protection of the outputs against short circuit and overload
- Rated current: 0.45 A per channel
- Max. inrush current (2 sec.): 2.75 A per channel
- Max. inrush current (2 min.): 0.75 A per channel
- Maintenance-free terminals for connection and through-wiring of untreated single-core, stranded or multi-core conductors, 0.5 ... 2.5 mm²
- 2 terminals per channel for connecting the electrothermal valve drives
- 2 terminals on the unit for supply of the valve voltage AC 24...230 V
- Bus-powered electronics
- Housing: plastic
- Built-in device for mounting in a separately to be ordered Control Module Box AP 118 or Room Control Box AP 641
- Type of protection: IP 20
- Per channel setting of the valve operation direction de-energised open or closed
- Per channel optional control via switching commands or continuous positioning commands
- Per channel control value limitation and adjustment of the valve characteristic for continuous control values
- Per channel control value monitoring
- Adjustable behaviour in case of override (lock, service mode, forced position, forced control)
- Per output automatic, demand-oriented or manual valve rinsing
- Per output operating hours counting and switching cycle counting with limit value monitoring
- Evaluation of the control values for heating or cooling demand requirements on a primary system and for controlling heating or cooling circuit pumps
- 2 room temperature controllers for 2-pipe or 4-pipe systems, adjustable as 2-position control or continuous control, for heating-only mode, cooling-only mode, heating and cooling mode, with two-stage heating or cooling
- Output of the control values optionally as switching command On/Off or as continuous control command
- 5 min., max. and weighted value calculators
- 6 logical operations (AND/OR/XOR/TRIGGER/LOCK)
- Surveillance of device function

Data sheet	A6V13488292
Rated current	0.45 A
Triac output, switching voltage	24...230 V
Dimensions (W x H x D)	48 x 87 x 36 mm
Warranty	24 Months

Stock no. Product no.

5WG1605-4DB23 RL 605D23

RS 510K23



KNX Thermo Drive Actuator, 2 x 1.5 A, AC 24...230 V / DC 24 V

- 2 switching outputs for control of electro-thermal drives for heating radiator and cooling ceiling valves
- Per output up to 4 connected electro-thermal drives with in total up to 1.5 A in the on-state and up to 58 W power consumption when switched on
- One relay contact per output as switching element
- Rated contact operating voltage AC 24...230 V or DC 24 V
- Rated contact frequency: 50/60 Hz
- Contact rated current according to DIN EN 60669-1: 1.5 A (resistive load)
- Screw-less terminals for connection and through-wiring of untreated single-core, stranded or multi-core conductors, 0.5...2.5 mm²
- With bus connection module
- Bus-powered electronics
- Integrated bus coupling unit, bus connection via bus terminal
- Modular installation device for mounting in AP 118 automation module box or AP 641 room control box
- Selectable control via switching commands (on-off control) or via control commands in percent (continuous control)
- Conversion of control commands in percent into pulse width modulated (PWM) switching commands
- Additional functions for avoiding calcification of a valve and forced position as well as a status object per output
- Status object as an optional addition for each output
- Selectable switching state for each output on bus voltage failure and recovery

The AP 641 room control box and AP 118 automation module box must be ordered separately.
See chapter Modular Installation System - Room control box - Module boxes.

Data sheet	A6V10532363
Rated voltage	AC 24 V
Rated current	1.5 A
Number of channels	2
Relay outputs, number	2
Triac outputs, number	0
Dimensions (W x H x D)	51 x 49 x 36 mm
Warranty	24 Months

	Stock no.	Product no.
	5WG1510-2KB23	RS 510K23

Door/window contact, white

- Opening alarm for the monitoring of windows and doors, comprising:
 - 1 magnet (Ø 8 x 30 mm)
 - 1 magnetically operated contact in a fully cast plastic enclosure (Ø 8 x 30 mm)
 - Switching voltage: max. DC 110 V
 - Switching current: 10...100 mA
 - Contact current carrying capacity: max. 5 W
 - Contact resistance: max. 150 mW
 - VdS-class B
 - 5 m long connection cable LiYY 4 x 0,14 mm2
- Suitable for flush and surface mounting
- 2 surface-mounting enclosure tops (43 x 12 x 12 mm)
- 2 surface-mounting enclosure bottoms
- 4 spacer plates (thickness: 2 x 4 mm or 2 x 2 mm)
- 2 flush-mounting flanges
- 4 antimagnetic countersunk self-tapping screws DIN 7982-ST2, 9 x 16-A2

Data sheet

Dimensions (W x H x D)

Warranty

A6V11793756

43 x 12 x 12 mm

24 Months

S 290/11



		Stock no.	Product no.
		5WG1290-7AB11	S 290/11

AP 254/02



KNX Dual sensor for brightness measurement, temperature measurement, sun protection control, lighting control

- Brightness measurement, temperature measurement, sun protection control, lighting control
- For the detection and transmission of brightness and temperature
 - Temperature measuring range -25 °C...+55 °C
 - Brightness measuring range 1 Lux...100 kLux
 - Horizontal sensing angle -60°...+60°, vertical -35°...+66.5°
- For the control of switch, dimming and shutter/blind actuators, depending on the ambient luminosity and/or ambient temperature
- One sun protection channel for the automatic control of sun protection equipment, with
 - Starting and stopping of automation by means of an object or a dusk threshold
 - Up to three brightness thresholds for determining the height and position of the shutters/blinds or roller shutters
 - Optional teach-in of dusk thresholds and brightness thresholds by means of a teach-in facility
 - Blocking object for the temporary deactivation of the sun protection channel function
- Up to four universal channels for the control of switch, dimming and shutter/blind actuators, depending on ambient luminosity and/or temperature. Optionally available with:
 - Threshold switches for brightness
 - Threshold switches for temperature
 - Threshold switches with logical combination of brightness and temperature
 - Optional teach-in of brightness threshold for each universal channel by means of an associated teach-in facility
 - Deactivation option for each universal channel by means of an associated blocking object (1 bit)
 - Optional second object for transmission of a second telegram on fulfillment of threshold conditions
- Bus-powered electronics
- Integrated bus coupling units
- Bus connection via bus terminal
- Surface mounting
- Degree of protection: IP54

Data sheet

A6V10416100

Dimensions (W x H x D)

72 x 110 x 54 mm

Warranty

24 Months

Stock no.

Product no.

5WG1254-3EY02

AP 254/02