

Synco™ living

Central apartment unit

QAX910

Series C

- Management of room control for one apartment including precontrol of heating for 2 room groups
- Management of ventilation plant
- Management of air conditioners (e.g. split units)
- Selection of operating mode, timer and holidays / special day function for the apartment
- Autonomous time switches and operating modes for 12 rooms
- Absence function (heating, cooling, ventilation, lights, blinds) with simulation of presence (lights)
- Monitoring of windows and doors
- Summer operation with preselected valve position for cooling mode
- Display of meteorological data
- DHW heating with time switch and selection of operating mode
- Wireless communication with the devices of the Synco living, GAMMA wave and Hager tebis TX ranges
- Switching groups with softkeys for the control of lights and blinds
- Choice of scenes for light and blind control
- Universal input and output
- Presentation of key data on Info pages
- Wireless (868 MHz, bidirectional) and wired connection for data transmission conforming to KNX standard
- Mains-powered AC 230 V

- Management of heating control for one apartment
- Increase of Economy room setpoint and of the minimum flow temperature setpoint as a function of the composite outside temperature
- Collection of heat requests from the individual rooms
- Generation of heat request signal and transmission to heat generation via wired bus, heat demand relay, or DC 0...10 V output to the RRV912 or RRV934 heating circuit controller
- Suited for heating plant with central heat distribution (e.g. floor heating) and radiators with decentralized connections
- Control of heating circuits with RRV912 / RRV918 heating circuit controllers and SSA955 radiator control actuators
- Flow temperature control of 2 independent room groups with limitation function (minimum / maximum)
- Maintained return temperature (high / low)
- Control of room group pumps via universal relay outputs
- Control of DHW pump / diverting valve via universal relay output. Acquisition of DHW temperature via universal input
- Management of ventilation plant via RRV934 multi-controller
- Night cooling function (bypass function of HR)
- Control of air conditioners (split units) via the universal outputs (locally and RRV91x) or S-Mode (KNX TP1)
- Release of cooling enable contacts per room depending on the composite outside temperature, the current HVAC level, the state of the windows, and a heat request
- Monitoring of door contacts, window contacts and smoke detectors
- Operation of lights and blinds via softkeys, time switch and events
- Simulation of presence through random switching of lights combined with permanent ON of one or several light sources
- Generation, storage and retrieval of scenes
- Display of progression of outside temperature and atmospheric pressure over the last 24 hours with the help of the QAC910 meteo sensor
- Display of open doors and windows
- Display of weather trend (sunny, cloudy, rainy)
- Remote access via Siemens OZW77x central communication units

Equipment combinations

The central apartment unit can be used in connection with the following RF products of the Siemens Synco living system and those of other suppliers of wireless KNX products:

Description	Product No.	Documentation
Room unit	QAW910	N2703en
Room temperature sensor	QAA910	N2701en
Meteo sensor	QAC910	N2702en
Heating circuit controller	RRV912	N2705en
Heating circuit controller	RRV918	N2706en
Multi-controller	RRV934	N2709en
Radiator control actuator	SSA955	N2700en
RF repeater	ERF910	N2704en
RF adapter plug, switching	KRF960-x	N2718de

Description	Product No.	Documentation
RF adapter plug, dimming	KRF961-x	N2719de
DELTA reflex smoke detector with wave UNI M 255 smoke alarm module	GAMMA wave	Siemens
wave AP260 door and window contacts	GAMMA wave	Siemens
Light and blind actuators	GAMMA wave	Siemens
Light and blind actuators	tebis TX Funk	Hager

The central apartment unit can be used in connection with the following wired products of the Siemens Synco 700 system:

Description	Product No.	Documentation
Synco 700 controls	RM..	S3110
Central communication units	OZW771 OZW775	N3117 N5663
Service tool	OCI700.1	N5655

Also refer to “Acvatix Valves and Actuators Range overview Z-C00020403EN”.

Additional KNX TP1 devices can be integrated via S-Mode (refer to document CE1Y3110en).

Description	Product No.	Documentation
Interface for air conditioners (split units)	ZN1CL-IRSC	ZENNiO

Ordering

When ordering, please give quantity, product name and product No.

Scope of delivery

The central apartment unit is supplied complete with Operating Instructions, Mounting and Commissioning Instructions and fixing material.

Order numbers

QAX910 with accompanying documentation in the respective national language.

For example:

German: QAX910-DE
English: QAX910-EN

Functions

Main functions

The central apartment unit manages space heating, ventilation and DHW heating control of an apartment with up to 12 rooms.

In addition, it provides control of air conditioners (split units), light and blind actuators and monitors light actuators, door and window contacts as well as smoke detectors.

The QAX910 also serves as an operator and display unit for the apartment.

Specific functions for heating plants

Heat request	<p>The central apartment unit generates heat demand signals based on the collected heat requests and forwards the signals to the controller for heat generation. The heat demand signals can be delivered via the universal relay output (switching) or the DC 0...10 V output (modulating) of an RRV912 heating circuit controller or RRV934 multi-controller.</p>
Flow temperature control / limitation	<p>The flow temperature is controlled via the RRV934 multi-controller. It is regulated with the help of the heat demand signals. Also, minimum and maximum limitation of the flow temperature can be provided. If the temperature request is invalid, flow regulation will be deactivated and the controlling elements closed (no output). The central apartment unit supports 2 room groups (e.g. floor heating and radiators) which can be controlled independently of one another.</p>
Return temperature limitation	<p>Return temperature limitation is adjustable, enabling it to be kept at a high or low level. It is thus possible to prevent too hot water from returning to the heat source, for example. Return temperature limitation is given priority over flow temperature limitation. It acts on the mixing valve of the room group.</p>
Room unit / room temperature sensor	<p>If a room unit and 1 or 2 room temperature sensors are assigned to a room, the central apartment unit calculates the mean value and uses it for room temperature control.</p>
Parallel operation of heating circuit controllers	<p>Several heating circuits connected to an RRV912 / RRV918 heating circuit controller can be combined to one room and operated in parallel. In that case, the first channel ensures room temperature control and, at the same time, controls the other assigned channels.</p>
Parallel operation of radiator control actuators	<p>Up to 6 SSA955 radiator control actuators can be combined to one room and operated in parallel. In that case, the radiator control actuator connected first (lead controller) ensures actual room control plus wireless control of the other assigned radiator control actuators (lag controllers).</p>
Zone control	<p>Several heating circuits connected to a common heat distributor can be jointly controlled as one zone. The zone valve (3-position) is controlled based on the room temperature acquired by the room unit installed in the reference room and / or the room temperature sensor.</p>
Room group pumps	<p>The central apartment unit ensures release of the room group pumps. The pumps can be connected either to the internal relay output or a relay output of one of the RRV912 / RRV918 heating circuit controllers or the RRV934 multi-controller.</p>
Antilime function	<p>The QAX910 can trigger the antilime function at regular intervals, aimed at preventing valve plugs and pump impellers from seizing during longer off periods. The function ensures that the valve actuators will travel to the fully open and then to the fully closed position and that the pumps will be activated for short periods of time (valve kick). Both frequency and time of day at which the function is performed can be selected.</p> <p>The antilime function acts either locally or on plant components connected to the RRV912 / RRV918 heating circuit controller and the wireless SSA955 radiator control actuators.</p>

Outside temperature-dependent night setback	The Economy room temperature setpoint is increased as a function of the composite outside temperature. Changeover is adjustable and helps prevent load peaks when changing from Economy to Precomfort or Comfort for instance.
Minimum flow temperature setpoint	The minimum flow temperature setpoint is raised as a function of the composite outside temperature, thus ensuring a minimum flow temperature for uncontrolled rooms.
Summer operation	<p>The central apartment unit triggers summer operation. Changeover can be accomplished as follows:</p> <p>Manually, date-related, according to the attenuated outside temperature, via a digital input, or through active changeover to cooling mode.</p> <p>The heating circuit valves connected to an RRV912 / RRV918 heating circuit controller have the position 0% or 100% and the SSA955 radiator control actuators will be driven to the preselected valve positions.</p>
DHW charging / DHW control	<p>The QAX910 provides DHW control with the help of a specific DHW time switch. DHW heating is either enabled or disabled based on the temperature acquired by the DHW temperature sensor connected to the QAX910 or an RRV912 / RRV918 / RRV934.</p> <p>The signal for DHW charging or changeover is delivered either via the internal relay output or the relay output of an RRV912 / RRV918 heating circuit controller or RRV934 multi-controller. DHW charging can take place via diverting valve / charging pump and / or an electric immersion heater.</p>

Specific functions for ventilation equipment and air conditioners

Ventilation	<p>The QAX910 controls ventilation plant with a maximum of 3 stages via an RRV934 multi-controller. The ventilation stages can be controlled either manually, via a 7-day program, indoor air quality sensor or humidity sensor. Ventilation can be influenced by absence, the holiday function or an open window.</p> <p>The following operation and control functions are available:</p> <ul style="list-style-type: none"> – The apartment timer activates apartment operating mode Comfort for an adjustable period of time – Forced ventilation activates the highest ventilation stage for a predefined period of time – In summer operation, cooler outside air passes through the HR bypass during the periods of time night cooling is active – Counting the number of operating hours for delivering a service message – Release of kitchen exhaust hood via an open window to ensure sufficient amounts of air are made available – Display of active fireplace ventilation mode (external plant)
Release contact for cooling	<p>Each room can be assigned one cooling release contact for switching an air conditioner (e.g. split unit).</p> <p>Release can take place via the local relay contact of the central apartment unit, the relay contacts of the RRV912 / RRV918 heating circuit controllers, the RRV934 multi-controller, the RF adapter plug KRF960-x, or via S-Mode.</p>
Air conditioner via ZENNiO module	<p>By integrating the ZENNiO interface (S-Mode TP1), operating mode, setpoint and release of the air conditioner (e.g. split unit) per room can be controlled via the central apartment unit. Heating and cooling mode of the air conditioner can be supported.</p> <p>The air conditioner ensures autonomous room temperature control.</p>

Specific functions for monitoring and operation

Door and window contacts

The central apartment unit monitors the connected door and window contacts. A monitoring delay time can be parameterized for the door / window contacts and, in addition, a message delay time for the door contacts. The opening of a monitored door / window contact can be used for triggering a switching group (event-driven) and for generating an alarm message.

In addition, the door and window contacts are used for the window airing function. As soon as a window monitored by a window contact is opened, the heating circuits of the respective room prevents their valves from opening further, even if the room temperature drops for short periods of time. When an adjustable period of time has elapsed, the room temperature drops to the level of Protection mode until the window is closed again. Then, "normal" control mode is resumed. An open window can also impact operation of ventilation plant or an air conditioner. This prevents unnecessary heat losses during the airing phase and subsequent overheating.

Smoke detectors

The central apartment unit monitors the connected smoke detectors. A responding smoke detector can be used for triggering a switching group and for switching the ventilation plant (event-driven) and sets off an alarm in any case.

Weather station

The central apartment unit acquires the outside temperature and atmospheric pressure transmitted by the meteo sensor or via KNX-TP1.

The current measured values of atmospheric pressure and outside temperature, as well as the trend of atmospheric pressure, can be displayed in the quiescent picture. The picture shows the atmospheric pressure changes over the last few hours, indicated by an arrow.

In addition, the weather trend (sunny, cloudy, rainy) is ascertained based on the change of atmospheric pressure and absolute pressure, and displayed in the quiescent picture.

The progression of outside temperature and atmospheric pressure over the last 24 hours can be called up via 2 Info pages.

Light control

Every connected lamp can be individually switched or dimmed via the central apartment unit or external switches (transmitters).

In addition to manual operations, the light settings can be made via the internal time switch (time switch can "Always" be processed or "Only if absent"), presence simulation, scenes or events (e.g. twilight, absence).

Suited are Siemens GAMMA wave and wireless Hager tebis KNX light actuators, as well as KNX TP1 light actuators.

Blind control

The central apartment unit or external switches (transmitters) can be used to adjust the blinds in a stepwise fashion, or to fully raise or fully lower them by pressing a button.

In addition to manual adjustments, the blinds can be set via the internal time switch (time switch can "Always" be processed or "Only if absent"), scenes or events (e.g. twilight, absence).

Suited are Siemens GAMMA wave and Hager tebis blind actuators, as well as KNX TP1 blind actuators.

Scenes The different blind positions (fully raised or fully lowered) and different light settings (on, off, dimming state) can be saved as scenes and retrieved later.

In addition to manual retrieval, the scenes can also be called up via the internal time switch (time switch can "Always" be processed or "Only if absent"), presence simulation or events (e.g. twilight, absence).

Device and system functions

Inputs and outputs Synco living has a number of inputs and outputs that can be used either via the universal input / output of the central apartment unit (locally), the universal inputs / outputs of the RRV912 / RRV918 heating circuit controllers or the RRV934 multi-controller.

The inputs and outputs can be assigned the following functions:

Inputs

- Changeover of operating mode (apartment operating mode and / or DHW operating mode)
- Changeover to summer operation
- Heating / cooling changeover
- Flow and return temperature sensor
- Ventilation contact 1 and 2 (e.g. hygrostat)
- Fireplace mode
- Triggering the absence function
- Twilight function (e.g. by means of a twilight switch) for triggering a switching group or for enabling presence simulation)
- Fault inputs 1 – 8
- DHW sensor
- Indoor air quality sensor (CO₂ sensor)
- Humidity sensor

Outputs

- Transmission of heat demand (switching)
- Transmission of heat demand (DC 0...10 V)
- Switching the room group pump 1 - 2
- Primary controller mixing valve 1 - 2
- Step switch
- HR bypass
- Release of kitchen exhaust hood
- Release of air conditioner 1 - 12
- Transmission of changeover to summer operation
- Status output (on / off) for reporting events that can be defined
- Window s/ door state output (on / off) for signaling open windows and doors
- DHW charging pump / DHW diverting valve
- Electric immersion heater
- Switching group relays 1 - 8
- Fault outputs 1 - 2

Fault inputs / fault outputs

The central apartment unit has 8 fault inputs and 2 fault outputs which can be used via the universal input / output of the QAX910 (locally), the universal inputs / outputs of the RRV912 / RRV918 heating circuit controllers or the RRV934 multi-controller.

Faults of external system components, such as a faulty oil tank level switch, can be transmitted to the central apartment unit via 8 fault inputs.

System-internal faults can be transmitted to external components via the fault outputs.

Communication

The central apartment unit is capable of communicating via a wireless bus (KNX RF) or a wired bus (KNX TP1).

Service interface

The OCI700 service tool can be connected to the service interface (RJ45) located on the underside of the central apartment unit.

Establishing the wireless connections

The individual RF components are connected to the central apartment unit by selecting the room / switching group / function to which the new component shall be assigned and then pressing the binding or function button on the respective system component.

When connecting devices from the Hager tebis RF range, the TX100 configurator is required (supplied by Hager).

Displaying the wireless connections

To check the connections made, a list with all devices can be displayed for each room. In addition, device lists with the smoke detectors, meteo sensors, switching group relays and fault inputs and outputs are available.

Binding test

Using the binding or multifunction buttons, a binding test can be triggered on the individual devices. The central apartment unit indicates error-free connections both optically and audibly.

Monitoring devices

The connected RF devices are monitored at certain intervals.

If the transmit signal is missing, the central apartment unit will display an error message.

Radio communication failure

If radio communication between the central apartment unit and the system components to be controlled is interrupted, control is no longer ensured.

If communication breaks down, the position of the actuators connected to an RRV912 / RRV918 heating circuit controller or RRV934 multi-controller is maintained and can only be changed manually through mechanical action on the actuators.

Using the built-in room temperature sensor, the SSA955 radiator control valves continue to provide control, maintaining a room temperature setpoint of 21 °C.

The ventilation plant continues to operate at the current stage for another 30 minutes and then shuts down.

The RF adapter plugs can be switched via external buttons (GAMMA wave), handheld transmitters (GAMMA wave) or directly with the plug's own function button.

When radio communication is reestablished, the system components will resume normal control operation

Mains failure

In the event power supply to the central apartment unit is interrupted, control is no longer ensured.

If there is a mains failure, the positions of the actuators connected to an RRV912 / RRV918 heating circuit controller or RRV934 multi-controller are maintained and can only be changed manually through mechanical action on the actuators.

Using the built-in room temperature sensor, the SSA955 radiator control valves continue to provide control, maintaining a room temperature setpoint of 21 °C.

The ventilation plant continues to operate at the current stage for another 30 minutes and then shuts down. With the air conditioner, the equipment's own remote control can be used for operation.

The RF adapter plugs can be switched via external buttons (GAMMA wave), handheld transmitters (GAMMA wave) or directly with the plug's own function button.

When power is restored, the central apartment unit and its components will resume normal control operation.

Error messages

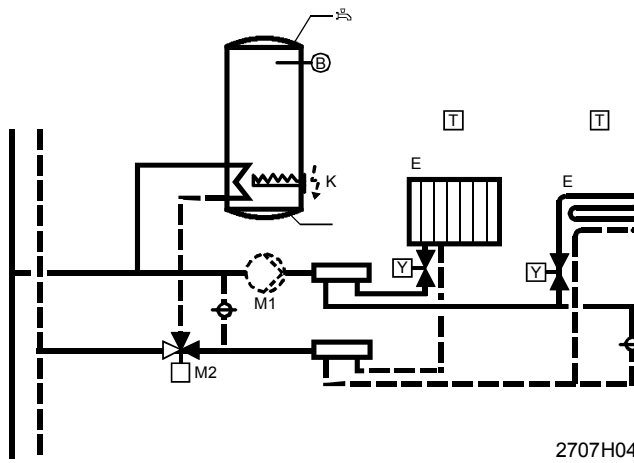
To facilitate fault tracing, the QAX910 delivers detailed error messages. They are output as clear-text messages, thus simplifying the interpretation of messages by the user or the heating engineer. Error messages can be used for triggering other events, such as optical or audible alarms. The last 10 error messages are saved as a history and can be individually retrieved.

Supply state

The central apartment unit can be reset to its supply state via an operating line.

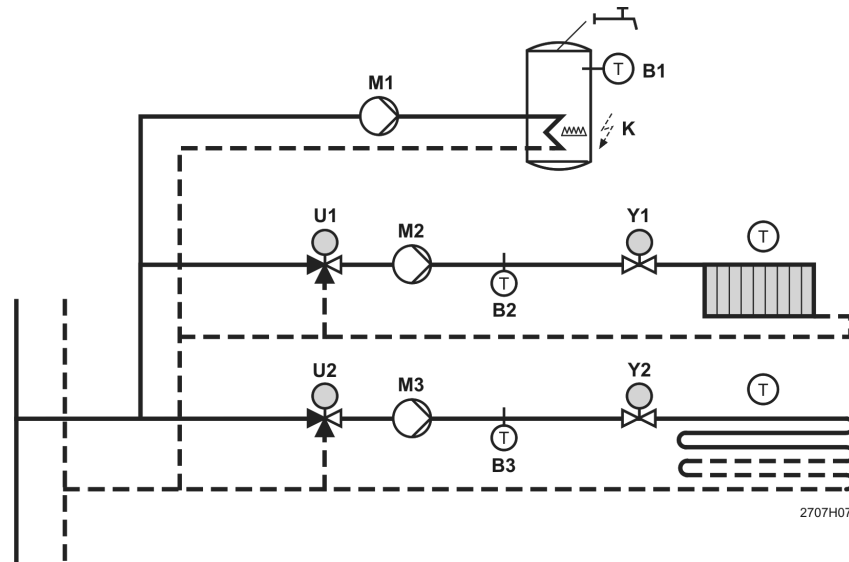
Application examples

1 room group with room temp. control and DHW heating without precontrol



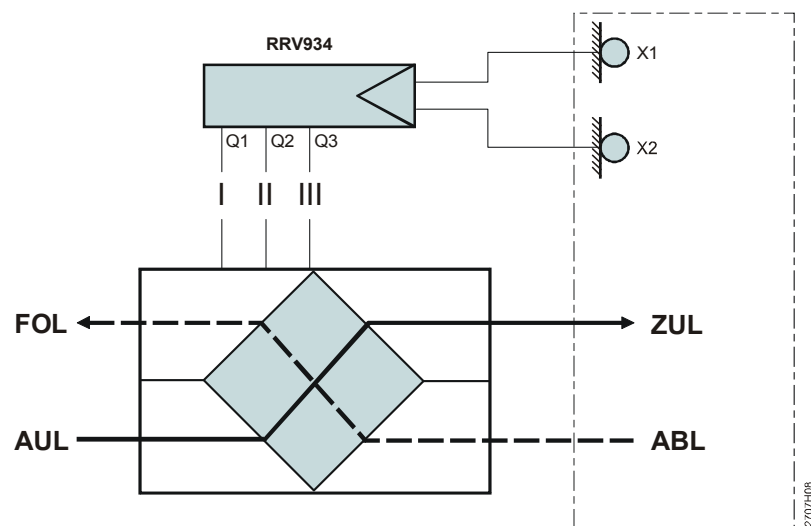
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|----|--|---|--|
| M1 | Room group pump | Y | Heating circuit valve (2-position) or radiator control actuator SSA955 |
| M2 | DHW diverting valve | B | DHW sensor |
| E | Heating circuit | K | Electric immersion heater |
| T | Room unit and / or room temperature sensor | | |

2 room groups each with flow temperature precontrol and DHW heating



- | | | | |
|---------|---|---------|---|
| M1 | DHW pump | Y1 | Radiator control actuator SSA955 |
| M2 - M3 | Room group pump | Y2 | Heating circuit valve (2-position) |
| T | Room unit and / or
Room temperature sensor | B1 | DHW sensor |
| K | Electric immersion heater | B2 - B3 | Flow temperature sensor |
| | | U1 | Mixing valve for radiator, DC 0...10 V |
| | | U2 | Mixing valve for floor heating, DC 0...10 V |


Integration of a ventilation plant





- | | | | |
|---------|--|-----|-------------|
| Q1 - Q3 | 3-stage step selector of ventilation plant | FOL | Exhaust air |
| X1 | Indoor air quality sensor, DC 0...10 V | AUL | Outside air |
| X2 | Humidity sensor, DC 0...10 V | ZUL | Supply air |
| | | ABL | Extract air |





Function of operating elements


- 


DHW / ventilation button
 Double-function button for DHW heating and ventilation.
 For selecting the DHW operating mode (Auto / Normal / Reduced / Protection), ventilation (Auto / Off / Stage 1 / Stage 2 / Stage 3) and for manually triggering (longer push) one-time DHW forced charging or forced ventilation.
- 


Absence button
 To select the monitoring function (inactive, partly monitored, all monitored) and to trigger the set scenarios (heating, ventilation, cooling, light and blinds) for presence or absence.
- 


Apartment timer button
 This button is used to set and activate the timer function for selected rooms. During the period of time the timer function is active, the room Comfort setpoint is maintained and ventilation is switched to Comfort mode.
- 

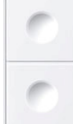
Mode button
 This button is used to select the apartment's operating mode (Auto / Comfort / Precomfort / Economy / Protection). The apartment's operating mode acts simultaneously on heating, cooling and ventilation.
- 

Info button
 This button is used to scroll through the Info pages and to display Help text on the menu level.
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Arrow button up
 This arrow button is used to navigate upward on a menu level, to scroll backward on the Info pages, and to set (increase) values.
- 

Arrow button down
 This arrow button is used to navigate downward on the menu level, to scroll forward on the Info pages, and to set (decrease) values.
- 

Esc button
 This button is used to navigate back to the next higher menu level, to quit the main menu, or to abort entry of values.
- 

Menu / ok button
 This button is used to enter the main menu, to navigate to a lower menu level, or to confirm entry of values.
- 

Universal pair of softkeys 1 - 4
 These buttons are used to trigger the switching group functions (e.g. for switching or dimming the lights) defined during commissioning, or to retrieve predefined info displays.

Display

- Fully graphic backlit display
- Visualization of information with symbols and clear-text output
- Info pages for:
 - Progression of outside temperature
 - Progression of atmospheric pressure
 - Temperature display of maximum 3 sensors
 - Windows / doors
 - Light state
 - Apartment
 - Ventilation
 - Room
 - DHW
 - Business card
 - Assignment of buttons (softkeys)
 - Device state
 - Fault status message bus
- Selectable format of quiescent picture

Engineering and operation notes

Mounting location

- The central apartment unit is designed for wall mounting
- Mount the QAX910 in a space that is easily accessible (e.g. in the living room or in the hall). The mounting height above the floor should be chosen such that the unit is easily accessible. The central apartment unit does not house a temperature sensor. The mounting height has no impact on the control performance
- The permissible environmental conditions must be observed
- The QAX910 must not be exposed to dripping water

Note

For notes relating to engineering and mounting RF devices of the Siemens Synco living system, refer to Data Sheet N2708en.

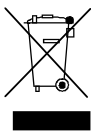
Mounting

The central apartment unit is designed for wall mounting with a minimum of 3 fixing screws.

Maintenance

The QAX910 is maintenance-free.

Disposal



In terms of disposal, the QAX910 and the various partner devices are classified as electronic scrap conforming to the European Directive 2002/96/EC (WEEE) and must not be disposed of as domestic waste. The relevant national legal requirements must be complied with and the units must be disposed of through the relevant channels. Local and currently valid legislation must be observed. Exhausted batteries must be disposed of in compliance with environmental regulations.

System limitations

System limitation (TP1 bus)	126	central apartment units QAX910
Limitations per QAX910	1	meteo sensor
	12	rooms
	2	door contacts
	4	light actuators with status display (only on KNX TP1 (S-Mode))
	3	RF repeaters
	64	RF components (total)

Note In addition to the units listed above, switching, dimming and blind actuators as well as RF adapter plugs can be used in unlimited numbers.

Limitations per room	1	room unit
	2	room temperature sensor
	1	heating circuit controller (maximum 6 channels can be used) *
	6	radiator control actuators *
	6	window contacts
	1	smoke detector

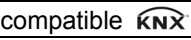


Note * Radiator control actuators and heating circuit controllers cannot simultaneously be used in the same room.

Warranty

Application-related technical data are warranted only in connection with the Siemens Synco living system.

When using the QAX910 central apartment unit together with devices of other manufacture not specifically mentioned, correct functioning must be ensured by the user. In that case, Siemens does not provide any service or warranty.

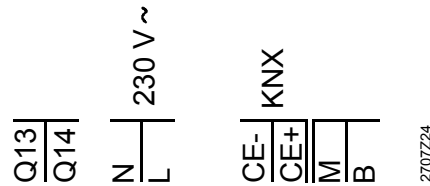
Technical data

Power supply	Operating voltage	AC 230 V ($\pm 10\%$)
	Frequency	50 Hz
	Power consumption	Max. 7 VA
	Fusing of supply line	10 A
	Reserve of clock	Typically 72 hours
RF	Frequency	868.3 MHz (bidirectional)
	Range	Typically 30 m in buildings
	Protocol	KNX RF-compatible 
Wired communication	Bus protocol / type	KNX TP1 
	Bus power supply	Simplified bus power supply, 12.5 mA; bus power supply may only be switched on for operating an OZW771
	Service interface	RJ45 socket on underside of housing
Display	Fully graphic backlit display (white background)	
Universal input	Type	LG-Ni1000 resistor, on / off
	Quantity	1
	Measuring range	0...120 °C
Permissible cable length to sensor or external switch	Copper cable 0.6 mm dia.	Max. 20 m
	Copper cable 1 mm ²	Max. 80 m
	Copper cable 1.5 mm ²	Max. 120 m
Relay output	Type	NO contact AC 24...230 V, AC 0.02...2 (2) A
	Quantity	1
Electrical connections Standards	Screw terminals for	Max. 1.5 mm ²
	 conformity to	
	EMC directive	2004/108/EC
	- Immunity, Emissions	- EN 60730-1, EN 50090-2-2
	Low-voltage directive	2006/95/EC
	- Electrical safety	- EN 60730-1, EN 50090-2-2
	RTTE (Radio & Telecom. Equipment)	1999/5/EC
- Wireless communication	- EN 300220-2, EN 301489-1, EN 301489-3	
Environmental compatibility	Environmental product declaration	ISO 14001 (Environment)
	CE1E2707en provides information on environmentally compatible product design and assessment (RoHS compliance, products)	ISO 9001 (Quality) SN 36350 (Environmentally compatible)
	composition of substances, packaging, environmental benefit and disposal)	2002/95/EC (RoHS)
Protection	Safety class	II to EN 60730
	Degree of protection of housing	IP20D to EN 60529
	Degree of pollution	2 to EN 60730
Dimensions	Refer to "Dimensions"	
Weight	Unit complete with enclosures	0.857 kg
Housing material	Plastic ASA+PC	
Housing color	White NCS S 0502-G	

Environmental conditions

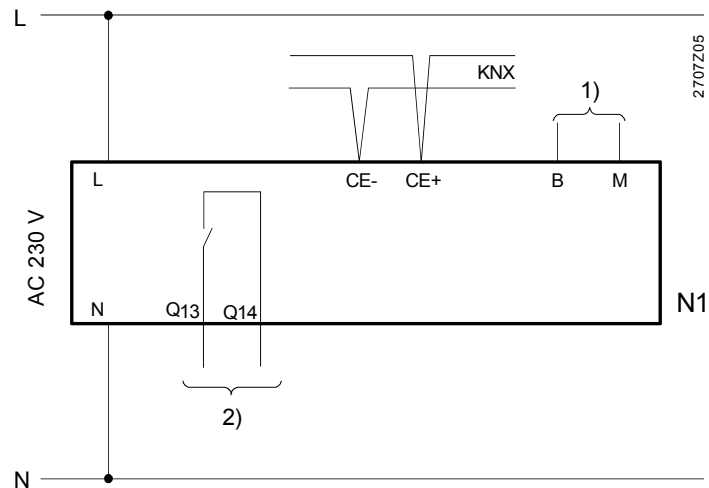
	Operation	Transport	Storage
	IEC 60721-3-3	IEC 60721-3-2	IEC 60721-3-1
Climatic conditions	Class 3K5	Class 2K3	Class 1K3
Temperature	0...+45 °C	-25...+70 °C	-20...+65 °C
Humidity	5...95% r.h. (noncondensing)	<95% r.h.	5...95% r.h.
Mechanical conditions	Class 3M2	Class 2M2	Class 1M2
Use above sea level	min. 700 hPa, corresponding to an altitude of max. 3000 m above sea level		

Connection terminals



- Q13, Q14 Universal potential-free relay output
- N Operating voltage, neutral conductor AC 230 V
- L Operating voltage, live conductor AC 230 V
- CE-, CE+ Connection of data bus (KNX TP1- and KNX TP1+)
- M Ground for universal input
- B Universal input

Connection diagram

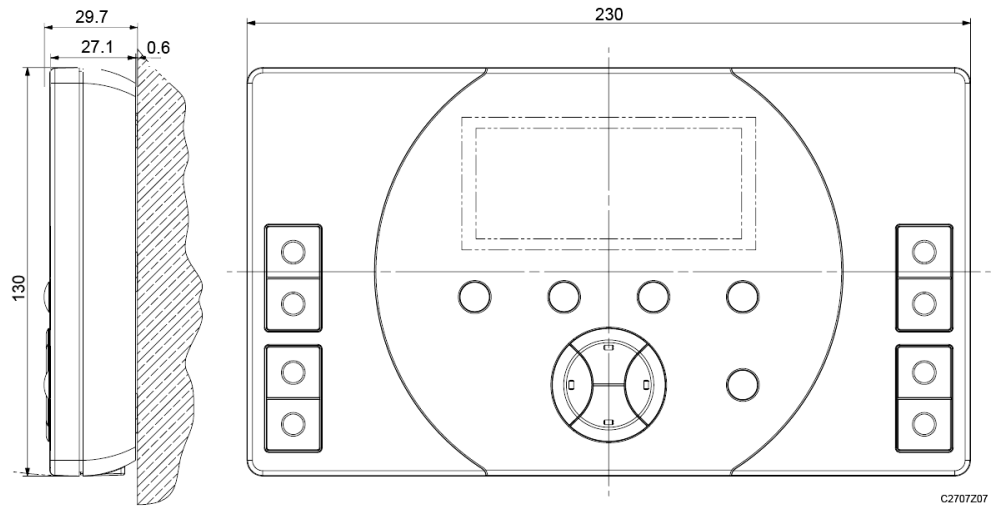


- N1 Central apartment unit QAX910
- 1) Universal input, for temperature measurement / digital input
- 2) Universal potential-free relay output for mains or low-voltage
- L Live conductor AC 230 V
- N Neutral conductor AC 230 V
- CE- / CE+ Connection of wired bus (KNX TP1- and KNX TP1+)

Dimensions

Dimensions in mm

Central apartment unit



Base

