SIEMENS

Synco™700

Heating Controllers   RMH760

KNX

- **Heating controller for medium-size and large buildings. The RMH760 is used as a heating circuit or primary controller. The controller is supplied with 105 preprogrammed heating plants**
- **Boiler temperature control, control of a second heating circuit and DHW heating with extension modules**
- **Menu-driven operation with separate operator unit (plug-in type or detached)**

Use

Buildings

- Office and administrative buildings
- Commercial buildings and shops
- Schools
- Hospitals
- Industrial buildings and workshops
- Apartment blocks and terraced houses

Plants

- Heating sections of ventilation and air conditioning plants
- Distribution zones of ventilation and air conditioning plants
- Heating systems with own heat source
- Heating zones of a larger plant
- Basic load heating systems

Functions

Note	Several of the functions listed require extension modules.

Room operating modes

Room operating modes are:
- AUTO: Automatic changeover between 3 setpoints according to the time program
- Comfort: Continuously heating to the Comfort setpoint
- Precomfort: Continuously heating to the Precomfort setpoint
- Economy: Continuously heating to the Economy setpoint
- Protective mode: Heating to the setpoint of Protective mode, if necessary

Clock functions

- Year clock with automatic summer-/wintertime changeover
- 7-day clocks for time program with a maximum of 6 switching points per day

Holiday functions

- Holiday and special day program with 16 periods per year
- Selectable room operating mode for the holiday periods
- Selectable DHW operating mode for the holiday periods
- Time program for special days

Ready configured inputs

2 ready configured inputs for:
- Flow temperature (averaging possible)
- Outside temperature

Freely configurable inputs

3 freely configurable inputs, optionally for:
- Reception of the following measuring signals:
  − Room temperature (averaging possible)
  − Return temperature
  − Wind speed
  − Intensity of solar radiation
- Connection of a remote setpoint adjuster with relative or absolute room setpoint adjustment
- Connection of an external switch for:
  − Operating mode changeover
  − Timer function
  − Changeover to holiday mode
  − Changeover to special day
  − Indication of faults

Note

If more than 3 configurable inputs are required, extension modules must be used.

Remote operation

Remote operation with multifunctional room unit via Konnex bus

Control functions

- Heating circuit controller
  − Weather-compensated flow temperature control via the heating circuit mixing valve, with adjustable setpoints of Comfort, Precomfort, Economy and Protective mode
  − Adjustable influence of room temperature, solar radiation and wind
  − Optimized setback and heating up
  − Boost heating and quick setback
  − Automatic heating limit for demand-dependent control of the heating with adjustable heating limits for the Comfort and Economy modes
  − Automatic changeover to summer operation (heating off)
  − Room model for room functions without room sensor
- Primary controller
  Demand-dependent precontrol via the mixing valve in the common flow, based on the received heat demand signals

Limitation functions

- Maximum limitation of the room temperature
- Minimum and maximum limitation of the flow temperature
- Minimum or maximum limitation of the return temperature

	• Limitation of the rate of flow temperature increase

Switching functions
- Control of an actuator with 3-position **or** DC 0…10 V control
- Pump control (system or heating circuit pump)
- Control of maximum 2 twin pumps
- Indication of heat demand
- Configurable relays

Supervisory and protective functions
- Mixing valve overrun, mixing valve kick
- Pump overrun, pump kick
- Outside temperature-dependent frost protection for the plant
- Frost protection for the building
- Overload supervision
- Fault relay
- Handling of status and error messages

Service functions
- Outside temperature simulation
- Wiring test
- Storage and reset of parameter sets

Boiler functions (requiring boiler module RMZ781)
- Demand-dependent boiler temperature control
- Boiler pump control
- Control of a 1- or 2-stage **or** modulating burner; modulating burner with 3-position **or** DC 0…10 V control

Second heating circuit (requiring heating circuit module RMZ782)
- Control of a second heating circuit
- Maintained boiler return temperature with own mixing circuit
- Control of an actuator with 3-position **or** DC 0…10 V control

DHW functions (requiring DHW module RMZ783)
- Storage tank charging with charging pump, with or without mixing valve control
- Storage tank charging via internal or external heat exchanger
- Time programs for DHW heating and the circulating pump
- Operating modes: AUTO, continuously Normal, continuously Reduced, Protective mode
- Legionella function

Note

For a more detailed description of all controller functions, refer to Basic Documentation P3131.

Type summary

Heating controller

Type of unit	Type reference	Data Sheet
Heating controller (default languages de, fr, it, es)	**RMH760-1**	N3131
Heating controller (default languages de, en, fr, nl)	**RMH760-2**	N3131
Heating controller (default languages sv, fi, no, da)	**RMH760-3**	N3131
Heating controller (default languages pl, cs, sk, hu)	**RMH760-4**	N3131

Operator and service units

Operator unit, plug-in type	**RMZ790**	N3111
Operator unit, detached	**RMZ791**	N3112
Servicetool	**OCI700.1**	N5655

Extension modules

Boiler module	**RMZ781**	N3135
Heating circuit module	**RMZ782**	N3135
DHW module	**RMZ783**	N3135
Twin pump module	**RMZ786**	N3145

Universal module with 4 universal inputs and 4 relay outputs	**RMZ787**	N3146
Universal module with 4 universal inputs and 2 analog and 2 relay outputs	**RMZ788**	N3146
Module connector for detached extension modules	**RMZ780**	N3138

Ordering

When ordering, please give type reference according to the above table.
The required operator unit and extension modules must be ordered as separate items.
Room units, sensors, actuator and valve must also be ordered separately.

Equipment combinations

Suitable sensors

Type of sensor	Type of sensing element, signal	Type reference	Data Sheet
Outside sensor	LG-Ni 1000	**QAC22**	N1811
Outside sensor	NTC 575	**QAC32**	N1811
Strap-on temperature sensor	LG-Ni 1000	**QAD22**	N1801
Immersion temperature sensor	LG-Ni 1000	**QAE2…**	N1791
Cable temperature sensor	LG-Ni 1000	**QAP21.3**	N1832
Room temperature sensor	LG-Ni 1000	**QAA24**	N1721
Room temperature sensor	LG-Ni 1000	**QAA64**	N1722
Wind effect sensor	DC 0…10 V	**QAV92**	N1946
Solar impact sensor	DC 0…10 V	**QLS60**	N1943

Suitable room units

Type of room unit	Type reference	Data Sheet
Room temperature sensor with setpoint adjuster	**QAA25**	N1721
Room temperature sensor with setpoint readjuster	**QAA27**	N1721
Room unit with Konnex interface	**QAW740**	N1633

Suitable remote setpoint adjusters

Type of remote setpoint adjuster	Type reference	Data Sheet
Remote setpoint adjuster, signal 0…1000 Ω	**BSG21.1**	N1991
Remote setpoint readjuster, ±3 K	**BSG21.5**	N1991

Suitable actuators

All types of electromotoric and electrohydraulic actuators from SBT HVAC Products can be used:
- Operating on AC 24…230 V
- 3-position control
- DC 0…10 V modulating control

For detailed information about actuators and valves, refer to Data Sheets N4000…N4999.

Product documentation

Type of document	Number
Product Range Description	**S3110**
Basic Documentation	**P3130**
Installation instructions	**74 319 0344 0**
Operating Instructions (de, en, fr, nl)	**74 319 0346 0**
Declaration of Conformity (CE)	**T3110**
Environmental Declaration	**E3110…01**

Mode of operation
The controller is supplied with 28 basic types of heating plant preprogrammed. They have been selected to cover the majority of standard applications. Some of them require extension modules.
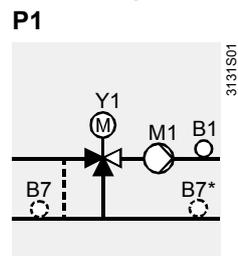
When commissioning a plant, the relevant basic plant type must be entered. All associated functions, terminal assignments, settings and displays will automatically be activated, and parameters not required will be deactivated.
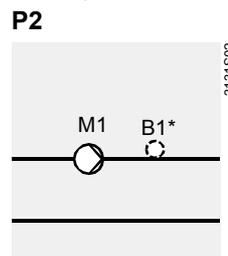
Use of individual devices

Precontrol
Precontrol can only be provided by the controller. There are 2 choices:

With mixing valve:
P1

With system pump:
P2

B1   Flow temperature sensor
B1*   Flow temperature sensor (optional, for display only)
B7   Return temperature sensor (optional, for minimum limitation)
B7*   Return temperature sensor (optional, for maximum limitation)
M1   System pump (can be a twin pump)
Y1   Mixing valve

Measuring input B7 for the return temperature can be configured for either minimum or maximum limitation.

Heating circuit control
The control of 1 or 2 heating circuits can be provided either by the controller or the RMZ782 heating circuit module. The available choices are the same with both types of unit, provided the required connection terminals for the desired auxiliary function are present.

Please also note the following:

• If the controller and heating circuit module do not have a sufficient number of configurable connection terminals, an additional extension module can be used
• If the controller is used as a primary controller, the RMZ782 heating circuit module must be used for the control of the heating circuit
• A second heating circuit must be controlled with the RMZ782 heating circuit module
• Measuring input B7 for the return temperature can be configured for either minimum or maximum limitation
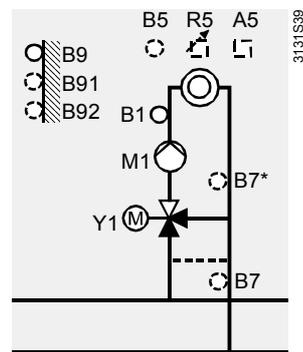
A5   Room unit (optional)
B1   Flow temperature sensor
B5   Room temperature sensor (optional)
B7   Return temperature sensor (optional, for minimum limitation)
B7*   Return temperature sensor (optional, for maximum limitation)
B9   Outside sensor
B91   Solar impact sensor (optional)
B92   Wind effect sensor (optional)
M1   Heating circuit pump (can be a twin pump)
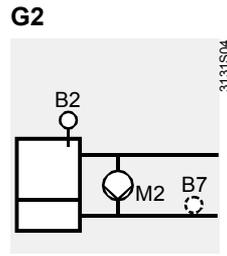R5   Remote setpoint adjuster (optional)
Y1   Mixing valve

Boiler temperature control

Boiler temperature control requires the RMZ781 boiler module. There are three choices:

Pump in the flow:
G1
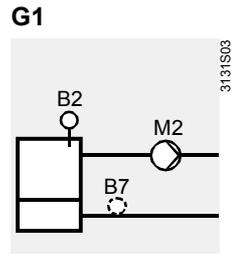
Boiler pump in the bypass:
G2

B2 Boiler temperature sensor
B7 Return temperature sensor (optional, for minimum limitation)
M1 Boiler pump or system pump (can be a twin pump)
M2 Bypass pump (can be a twin pump)

Maintained boiler return temperature

In plants with maintained boiler return temperature with own mixing valve, the following types of modules are required, in addition to the controller:
- Heating circuit module RMZ782; it controls the boiler return temperature via a mixing valve, depending on the temperature acquired with B1. The module also controls boiler pump M1
- Boiler module RMZ781; this module controls the boiler temperature depending on the temperature acquired with B2, and also controls system pump M2
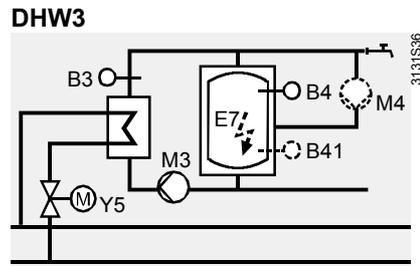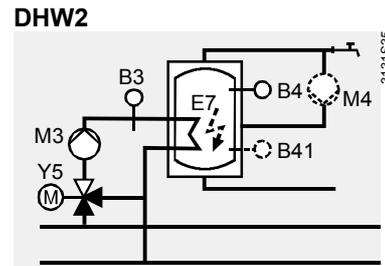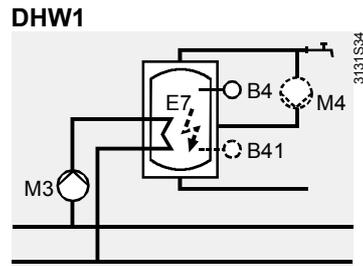
One of the basic types 4–… must be selected on the controller.

G3
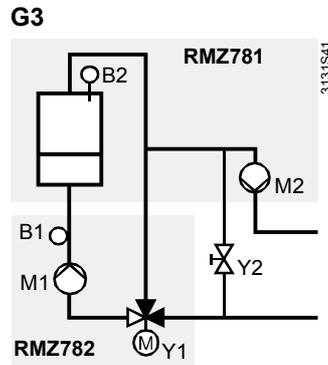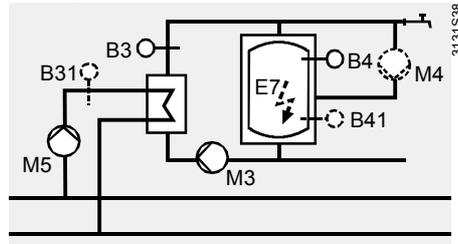

B1 Boiler return temperature sensor (controlled variable)
B2 Boiler temperature sensor
M1 Boiler pump (can be a twin pump)
M2 System pump (can be a twin pump)
Y1 Mixing valve
Y2 Balancing valve

DHW heating

DHW heating requires the RMZ783 DHW module. There are 5 choices:

DHW1

DHW2

DHW3

DHW4
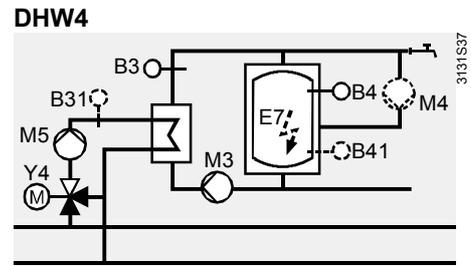
DHW5

B3   Charging temperature sensor
B31 Primary flow temperature sensor (optional)
B4   Storage tank sensor at the top
B41 Storage tank sensor at the bottom (optional)
E7   Electrical immersion heater (optional)
M3   Charging pump (can be a twin pump)
M4   Circulating pump (optional)
M5   Primary pump (can be a twin pump)
Y5   Mixing valve or 2-port valve

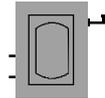## Basic types

Note on illustrations

The illustrations contained in this section use the following symbols for precontrol, boiler temperature control and DHW heating:
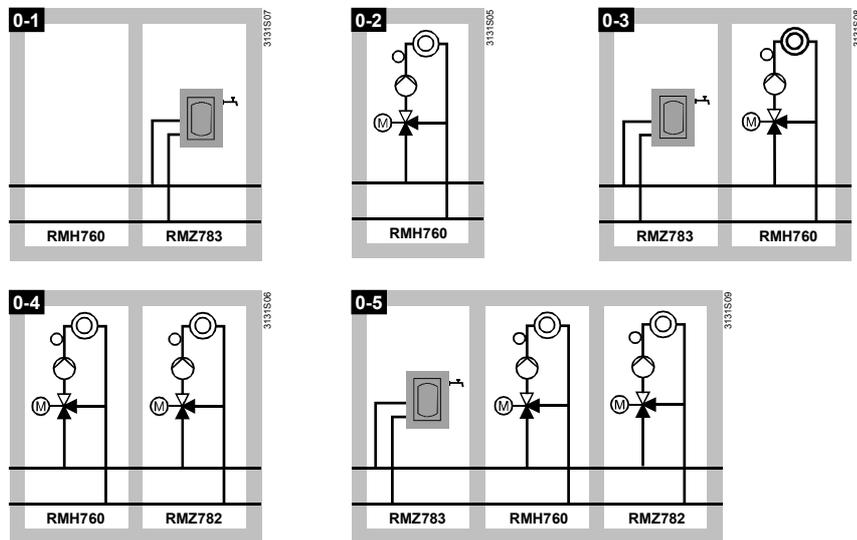

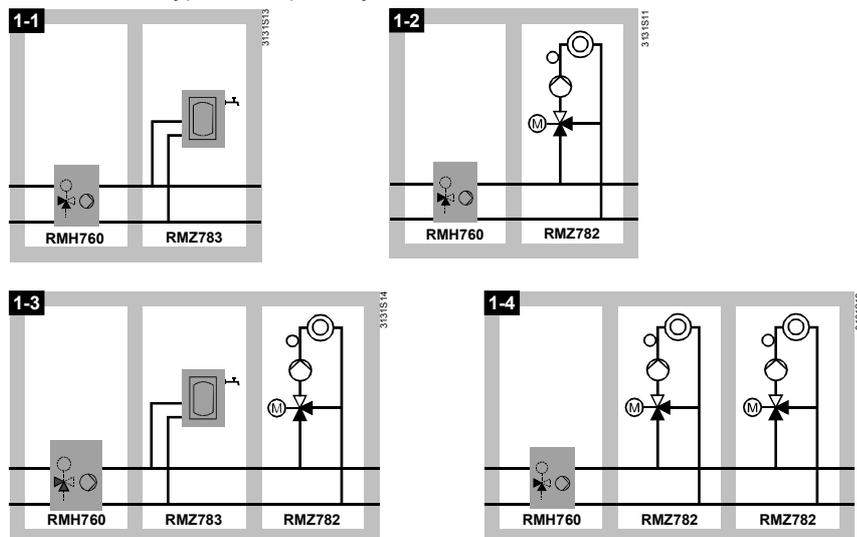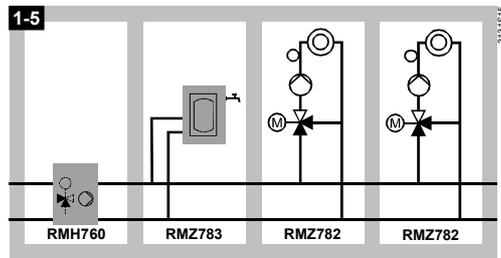Precontrol   Boiler temperature control   DHW heating
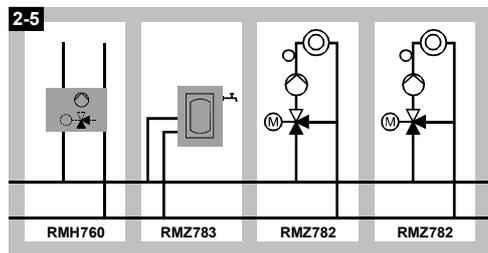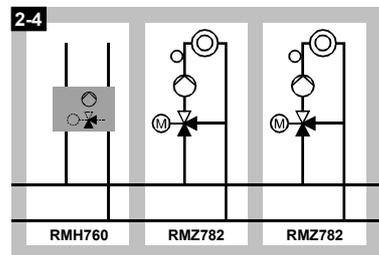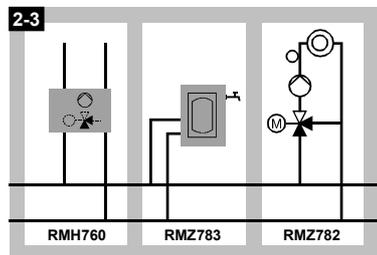
Basic types 0–x

Basic types 1–x

With all basic types 1–x, primary controller variants P1 and P2 can be selected.
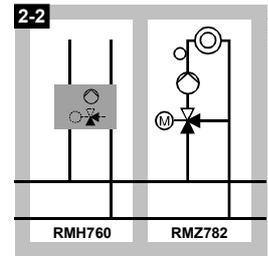
1-5 | RMH760 | RMZ783 | RMZ782 | RMZ782

Basic types 2–x

With all basic types 2–x, primary controller variants P1 and P2 can be selected.

2-0 | RMH760

2-1 | RMH760 | RMZ783

2-2 | RMH760 | RMZ782

2-3 | RMH760 | RMZ783 | RMZ782

2-4 | RMH760 | RMZ782 | RMZ782

2-5 | RMH760 | RMZ783 | RMZ782 | RMZ782
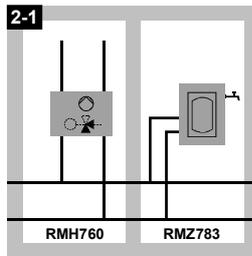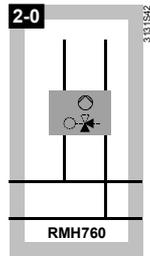
Basic types 3–x

With all basic types 3–x, boiler pump variants G1 and G2 can be selected.
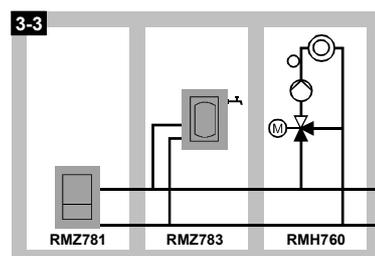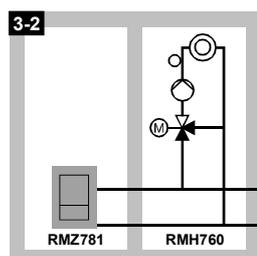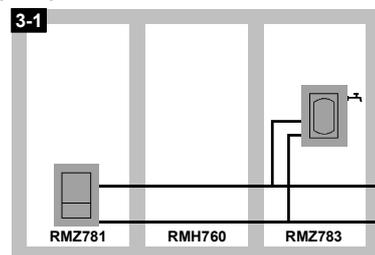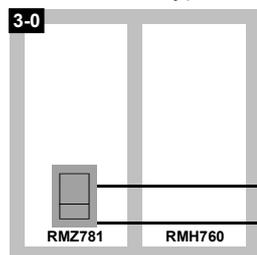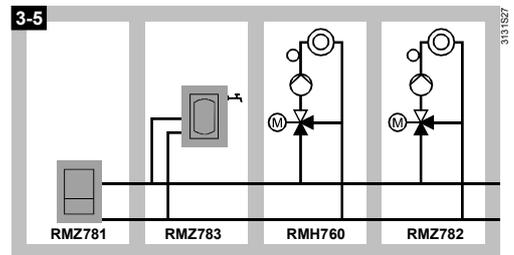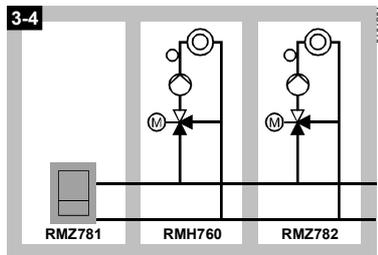
3-0 | RMZ781 | RMH760

3-1 | RMZ781 | RMH760 | RMZ783

3-2 | RMZ781 | RMH760

3-3 | RMZ781 | RMZ783 | RMH760

| 3-4 | | | 3131S24 |
| RMZ781 | RMH760 | RMZ782 |

| 3-5 | | | | 3131S27 |
| RMZ781 | RMZ783 | RMH760 | RMZ782 |

For minimum limitation of the boiler return temperature, basic types 4–x have their own mixing circuit.

Basic types 4–x

For minimum limitation of the boiler return temperature, basic types 4–x have their own mixing circuit

| 4-0 | RMZ781 | 3131S28 |
| RMZ782 | RMH760 |

| 4-1 | RMZ781 | 3131S31 |
| RMZ782 | RMH760 | RMZ783 |

| 4-2 | RMZ781 | 3131S29 |
| RMZ782 | RMH760 |

| 4-3 | RMZ781 | 3131S32 |
| RMZ782 | RMZ783 | RMH760 |

| 4-4 | RMZ781 | 3131S30 |
| RMZ782 | RMH760 | RMZ782 |

| 4-5 | RMZ781 | 3131S33 |
| RMZ782 | RMZ783 | RMH760 | RMZ782 |
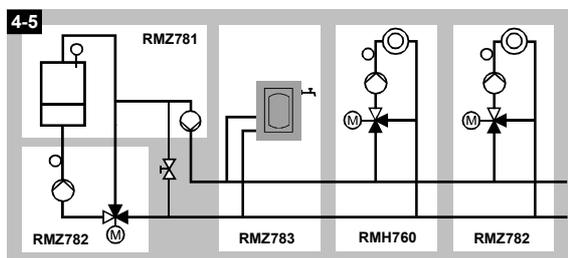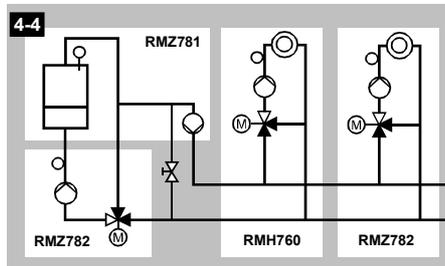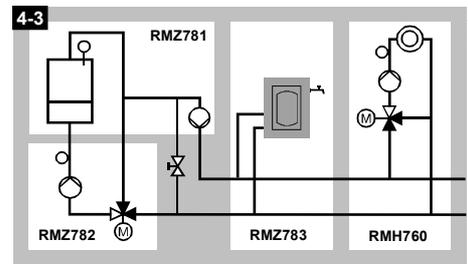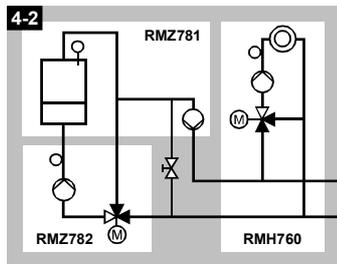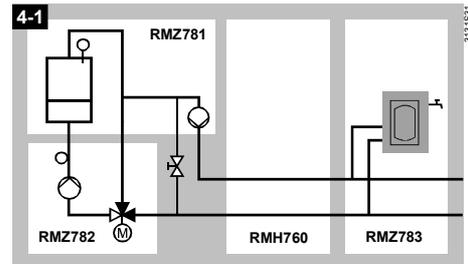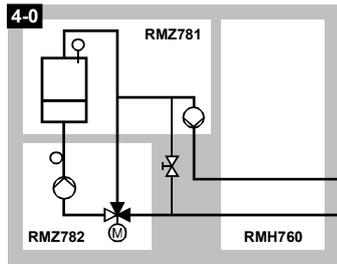
Mechanical design

Basic design

The controller consists of terminal base and controller insert. It has a plastic housing with the printed circuit boards, 2 terminal levels and carries the connecting elements (electrical and mechanical) for an extension module.

The controller can be fitted to a top hat rail conforming to EN 60 715-TH35-7.5, or can be mounted directly on a wall.

Operation takes place with either a plug-in type or detached operator unit (refer to section "Type summary").

Operating, indicating and connecting elements
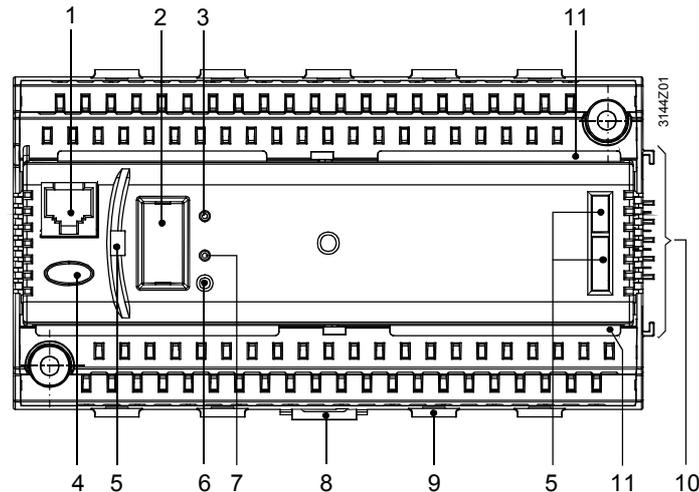
1   Connection facility for the service interface (RJ45 socket)
2   Connection facility for the operator unit (with removable cover)
3   LED (green) for indication of operation
4   Fault button with LED (red) for indication of faults and for resetting
5   Openings for plug-in type operator unit RMZ790
6   Button for assignment of the device address
7   LED (red) for indication of the programming process
8   Mounting facility for fitting the controller to a top hat rail
9   Fixing facility for a cable tie
10 Electrical and mechanical connection elements for the extension module
11 Rest for the terminal cover

Engineering notes

⚠

- The controller operates on AC 24 V. Operating voltage must conform to the requirements of SELV/PELV (safety extra low-voltage)
- The transformers used must be safety isolating transformers featuring double insulation to EN 60 742 or EN 61 558-2-6; they must be suited for 100 % duty
- Fuses, switches, wiring and grounding must be in compliance with local regulations
- Sensor wires should not be run parallel to mains carrying cables powering actuators, pumps, etc.
- The controller can be used with a **maximum of 4** extension modules
- The reference room for control with a room temperature sensor should be the room that cools down quickest. That room may not be equipped with thermostatic radiator valves; manual valves must be locked in their fully open position

Mounting and installation notes

- Controllers and extension modules are designed for:
  – Mounting in a standard cabinet as per DIN 43 880
  – Wall mounting on an existing tophat rail (EN 50 022-35×7.5)
  – Wall mounting using two fixing screws
  – Flush panel mounting
- Not permitted are wet or damp spaces. The permissible environmental conditions must be observed
- If the controller shall not be operated inside a control panel, use the detached operator unit RMZ791 in place of the plug-in type operator unit RMZ790
- Disconnected the system from the power supply prior to mounting and installation the controller
- **The controller insert may not be removed from the terminal base!**
- If extension modules are used, they must be attached to the right side of the controller in the correct order. This means in agreement with ascending type reference

numbers:
RMH760 – RMZ781 – RMZ782 – RMZ782 – RMZ783 – RMZ786 – RMZ787 – RMZ788.

Low-voltage side

Mains voltage side

- The extension modules require no wiring between one another or to the controller; the electrical connections are made automatically when attaching the modules. If it is not possible to arrange the extension modules side by side, the first of the detached modules must be connected to the last previous module or to the controller using the RMZ780 module connector. In that case, the maximum cable length is 10 m
- All connection terminals for protective extra low-voltage (sensors, data bus) are located in the upper half of the unit, those for mains voltage (actuators and pumps) at the bottom
- Each terminal (spring cage terminal) can accommodate only one solid wire or one stranded wire. For making the connections, the cables must be stripped for 7 to 8 mm. To introduce the cables into the spring cage terminals and to remove them, a screw driver size 0 or 1 is required.
  Cable strain relief can be provided with the help of the fixing facility for cable ties
- The controller is supplied complete with Installation Instructions and Operating Instructions
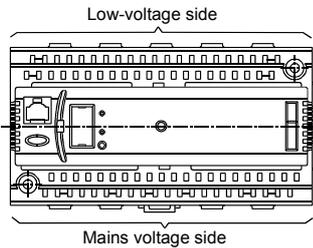
Commissioning notes

- The operator unit can be removed and plugged in or connected while the controller is in operation
- For commissioning, there are several auxiliary functions available (refer to "Service and operating functions")
- Commissioning is carried out with the RMZ79… operator unit or the OCI700.1 service tool

Disposal notes

Larger plastic parts carry material identifications conforming to ISO/DIS 11 469 to facilitate environment-compatible disposal.

Technical data

Power supply (G, G0)	Rated voltage	AC 24 V ±20 %
	− Safety extra low-voltage (SELV) / Protective extra low-voltage (PELV) to	HD 384
	− Requirements for external safety isolating transformer (100 % duty, max. 320 VA) to	EN 60 742 / EN 61 558-2-6
	Frequency	50/60 Hz
	Power consumption (excl. modules)	12 VA
	Supply line fusing	10 A max.
Functional data	Reserve of clock	12 h
Analog inputs (B…, X…)	Sensors	
	Passive	1 or 2 LG-Ni 1000
	Active	DC 0…10 V
	Signal sources	
	Passive	0…2500 Ω
	Active	DC 0…10 V
Digital inputs (X…)	Contact sensing	
	Voltage	DC 15 V
	Current	5 mA
	Requirements for status and impulse contacts	
	Signal coupling	potential-free
	Type of contact	maintained or impulse contacts
	Insulating strength against mains potential	AC 3750 V to EN 60 730

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	Perm. resistance	
	Contacts closed	max. 200 Ω
	Contacts open	min. 50 kΩ
Positioning output Y9	Output voltage	DC 0…10 V
	Output current	±1 mA
	Max. load	continuous short-circuit
⚠ **Switching outputs (Q…)**	External supply line fusing	
	Non-renewable fuse (slow)	max. 10 A
	Automatic line cutout	max. 13 A
	Release characteristic	B, C, D to EN 60 898
	Cable length	max. 300 m
	Relay contacts	
	Switching voltage	max. AC 265 V / min. AC 19 V
	AC current	max. 4 A res., 3 A ind. (cos φ = 0.6)
	– At 250 V	min. 5 mA
	– At 19 V	min. 20 mA
	Switch-on current	max. 10 A (1 s)
	Contact life at AC 250 V	guide values:
	At 0.1 A res.	$2×10^7$ cycles
	At 0.5 A res.	$4×10^6$ cycles (N. O.)
		$2×10^6$ cycles (changeover)
	At 4 A res.	$3×10^5$ cycles (N.O.)
		$1×10^5$ cycles (changeover)
	Red. factor at ind. (cos φ = 0.6)	0.85
	Insulating strength	
	− Between relay contacts and system electronics (reinforced insulation)	AC 3750 V, to EN 60 730-1
	− Between neighboring relay contacts (operational insulation), Y1 ⇔ Y2; Q1 ⇔ Q7	AC 1250 V, to EN 60 730-1
	− Between relay groups (reinforced insulation), (Y1, Y2) ⇔ (Q1, Q7)	AC 3750 V, to EN 60 730-1
Power supply external devices (G1)	Voltage	AC 24 V
	Current	max. 4 A
Interfaces	Konnex bus	
	Type of interface	Konnex-TP1
	Bus loading number	2.5
	Bus power supply (decentral, can be switched off)	25 mA
	Power failure of short duration to EN 50 090-2-2	100 ms with 1 extension module
	Extension bus	
	Connector specification	4 contacts SELV/PELV
	Number of plugging cycles	max. 10
	Service tool connection facility	RJ45-connector
Perm. cable lengths	For passive measuring and positioning signals	
	LG-Ni 1000	max. 300 m
	0…1000 Ω	max. 300 m
	1000…1235 Ω	max. 300 m
	Contact sensing	max. 300 m
		(measuring errors can be corrected on the "Settings > Inputs" menu)
	For DC 0…10 V measuring and control signals	refer to Data Sheet of the signal delivering device
	For Konnex bus	max. 700 m
	Type of cable	2-core without screening, twisted pairs
Electrical connections	Connection terminals	spring cage terminals
	For wires	0.6 mm dia. …2.5 mm^2
	For stranded wires without ferrules	0.25…2.5 mm^2
	For stranded wires with ferrules	0.25…1.5 mm^2
	Connection facility for Konnex bus	wires cannot be interchanged

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Degrees of protection	Degree of protection of housing to IEC 60 529	IP 20 (when mounted)
	Safety class to EN 60 730	device suited for use with equipment of safety class II

Environmental conditions	Operation to	IEC 60 721-3-3
	Climatic conditions	class 3K5
	Temperature (housing and electronics)	0…50 °C
	Humidity	5…95 % r. h. (non-condensing)
	Mechanical conditions	class 3M2
	Transport to	IEC 60 721-3-2
	Climatic conditions	class 2K3
	Temperature	−25…+70 °C
	Humidity	<95 % r. h.
	Mechanical conditions	class 2M2

Classifications to EN 60 730	Mode of operation, automatic controls	type 1B
	Degree of contamination, controls' environment	2
	Software class	A
	Rated surge voltage	4000 V
	Temperature for ball-pressure test of housing	125 °C

Materials and colors	Terminal base	Polycarbonate, RAL 7035 (light-gray)
	Controller insert	Polycarbonate, RAL 7035 (light-gray)
	Packaging	corrugated cardboard

Norms and standards	Product safety	
	Automatic electrical controls for household and similar use	EN 60 730-1
	Special requirements for energy controllers	EN 60 730-2-11
	Home and Building Electronic System (HBES)	EN 50 090-2-2
	Electromagnetic compatibility	
	Immunity (industrial sector)	EN 61 000-6-2
	Emissions (domestic sector, light industry)	EN 61 000-6-3
	Home and Building Electronic System (HBES)	EN 50 090-2-2
	CE-conformity to	
	EMC directive	89/336/EEC
	Low-voltage directive	73/23/EEC
	C-conformity to	
	Australian EMC Framework	Radio communication act 1992
	Radio Interference Emission Standard	AS/NZS 3548

Weight	Excl. packaging	0.404 kg

Connection terminals

Configured connection terminals

For the power supply

Terminal	Function	Voltage
G	Operating voltage for controller incl. all external units	AC 24 V
G1	Output voltage for external active units	AC 24 V
G0	System neutral	AC 24 V
M	Ground for active and passive sensors	–
N1	Auxiliary terminal for 3-position actuators	AC 24…230 V

For the sensors and the data bus

Terminal	Measuring variable	Signal source	Measuring range
B1	Flow temperature	1 or 2 sensors LG-Ni 1000	−50…+150 °C
B9	Outside temperature	1 sensor LG-Ni 1000 or NTC 575	−50…+50 °C
CE+	Bus data	Konnex bus	
CE−	Bus ground		

For the actuating devices	Terminal	Function	Signal receiver	Type of contact
	Y13	Input for Y14	3-position actuator	N.O.
	Y14	Mixing valve opens		
	Y23	Input for Y24	3-position actuator	N.O.
	Y24	Mixing valve closes		
	Q13	Input for Q14	Heating circuit pump M1	N.O.
	Q14	Heating circuit pump on		

Configurable connection terminals

X3, X4 and X5 for input signals

Analog input signals

Measuring variable, function	Signal source	Range
Return temperature	1 or 2 sensors LG-Ni 1000	–50…+150 °C
Wind speed	Wind effect sensor 0…20 m/s	DC 0…10 V
Intensity of solar radiation	Solar impact sensor 0…1000 W/m^2	DC 0…10 V
Room temperature	1 or 2 sensors LG-Ni 1000	–50…+50 °C
Room temperature setpoint	Room unit QAA25	5…35 °C
Room temperature setpoint	Remote setpoint adjuster BSG21.1	0…50 °C
Room setpoint readjustment	Room temperature sensor QAA27	±3 K
Room setpoint readjustment	Remote setpoint adjuster BSG21.5	±3 K
Heat demand	Consumer	DC 0…10 V

Digital input signals

Function, variable	Signal source	Range
Room operating mode	External contact	On / off
Timer function	External contact	On / off
Heat demand	External contact	On / off
Special day	External contact	On / off
Holidays	External contact	On / off
Error message 1	External contact	On / off
Error message 2	External contact	On / off
Error message 3	External contact	On / off
Error message 4	External contact	On / off

Y9 for continuous output signal DC 0…10 V

| Type of signal	Signal receiver	Range
Positioning signal	Modulating actuator	0…100 %
Heat demand	Primary controller	Configurable

Q71 / Q72 / Q74 for changeover contacts

| Changeover to connection Q71–Q74 …	Rated voltage range
in the event of an urgent error message	AC 24…230 V
in the event of an error message that is not urgent	AC 24…230 V
when reaching the heating limit of heating circuit 1	AC 24…230 V
when reaching the heating limit of heating circuit 2	AC 24…230 V
during occupancy time of heating circuit 1	AC 24…230 V
during occupancy time of heating circuit 2	AC 24…230 V
when the outside temperature falls	AC 24…230 V
when there is a heat demand	AC 24…230 V

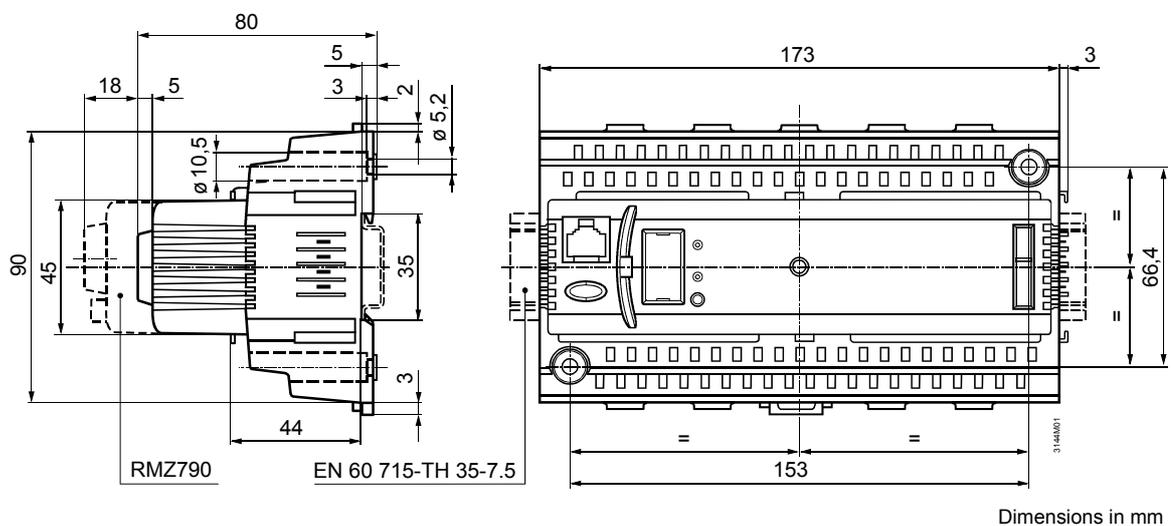## Connection diagrams

Low-voltage side
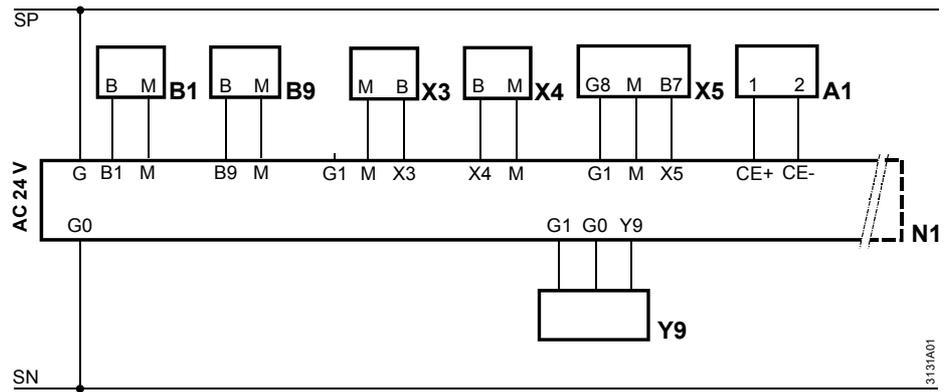
Averaging
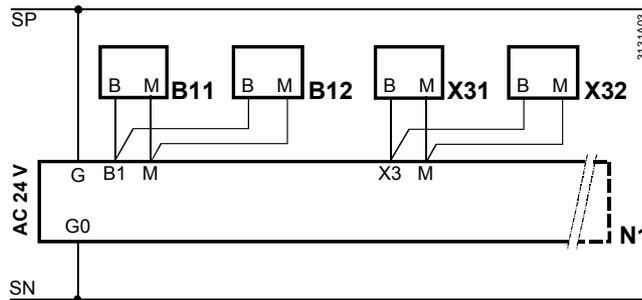
A1　　　　Room unit QAW740
B1　　　　Flow temperature sensor, e.g. QAD22
B11, B12　E.g. 2 flow temperature sensors for averaging
B9　　　　Outside sensor, e.g. QAC22
N1　　　　Heating controller RMH760
X3　　　　E.g. room temperature sensor (configurable input)
X31, X32　E.g. 2 room temperature sensors for averaging
X4　　　　E.g. return temperature sensor (configurable input)
X5　　　　E.g. solar impact sensor QLS60 (configurable input)
Y9　　　　E.g. actuator with DC 0…10 V input (configurable output)

Mains voltage side
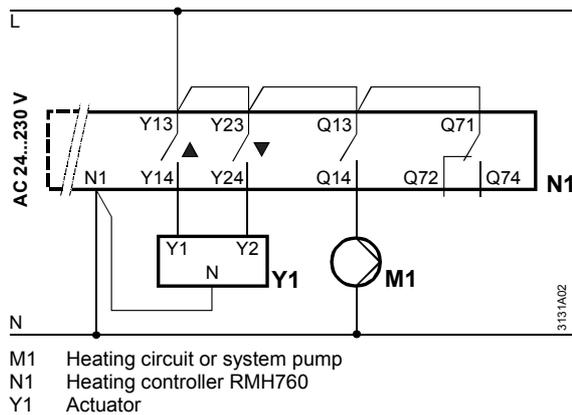
M1　Heating circuit or system pump
N1　Heating controller RMH760
Y1　Actuator

Dimensions

80
5
18 5
3 2
ø 5.2
ø 10.5
90
45
35
3
44
RMZ790
EN 60 715-TH 35-7.5

173 3
66,4
=
=
= =
153
3144A01

Dimensions in mm