SIEMENS

QAA50.110   QAA70

ALBATROS

Room Units for Boiler   QAA50.110
Temperature Control   QAA70

PPS Interface

Digital, multifunctional room units for enhancing the functionality of boiler controllers.
With integrated temperature sensor, heating program and a number of control functions.

Use

Use
: Used in combination with boiler or heating controllers (RVA...). Room temperature control in:
  - Single or 2-family houses
  - Smaller multifamily houses
  - Holiday houses and villas

Application
: Standard heating systems, such as radiator, convector, underfloor and ceiling heating systems, and radiant panels.

Market
: The room units are designed for the OEM market. They are supplied directly to the boiler manufacturer.

Functions

		QAA70	QAA50.110
Operating functions	• Operating levels based on ergonomic and functional considerations	x	x
	• Operating mode, setpoint adjustment and occupancy button	x	x
	• Every setting or change is displayed and thus acknowledged	x	x
	• 7-segment display	x	x
	• A number of actual values can be accessed via the Info button	x	
	• Additional functions can be programmed after opening the cover	x	
	• Special service level with protected access	x	
	• One 7-day program per heating circuit and up to 3 switching cycles per day can be selected on an individual basis	x	
	• Holiday program	x	
	• Resetting to default values, if required	x	
	• Programming lock (e.g. for child-proofing)	x	
Other features	• Elegant housing made of recyclable plastic	x	x
	• Communication with the boiler temperature controler over PPS	x	x
	• Powered via PPS	x	x
	• Straightforward installation	x	x
	• Cable entry for wall mounting or mounting on a recessed conduit box	x	x

Type summary

Type	Type reference	Compatible with
QAA70 QAA50.110	Room unit bus (PPS)	RVA...
QAW44	Remote room sensor	QAA70

Technical features

Additional function descriptions

For a more detailed description of the technical design, refer to documentation CE1P1638.
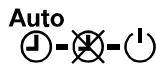
Mechanical design

Room unit

The unit consists of the following components:
• Housing with integrated electronics and operating elements
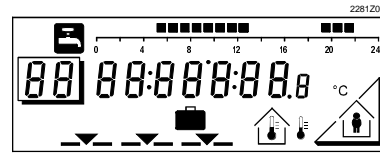• Base for wall mounting with the connection terminals

Operating elements	• Button for selecting the operating mode
	• Setting knob for adjusting the setpoint
	• Occupancy button for temporary changeover
	• Info button (QAA70)
	• Line selection and adjustment of values with buttons behind the housing front (QAA70)

Display

Auto

QAA50.110   QAA70

Technical data

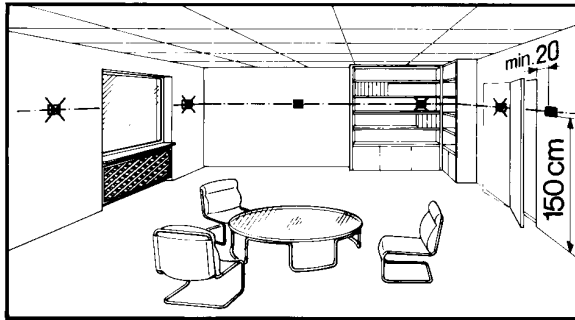|		
Operating voltage	PPS	
	Terminals	2-wire connection (interchangeable)
	cable length	max. 75 m with a cross-section of 0.5 mm^2
	Cable resistance	max. 2 x 3 Ohm
	Power consumption	QAA50.110: 45 mW (typically)
		QAA70: 100 mW
Protection	Safety class	III to EN 60730 (when mounted correctly)
	Degree of protection of housing	QAA50.110: IP 20 to EN 60529
		QAA70: IP 30 to EN 60529
	Contamination	environment to EN 60730
Environmental conditions	Operation	IEC 721-3-3 class 3K 5
	Temperature	0...50 °C
	Humidity	< 85 % r.h.
	Transport	IEC 721-3-2 class 2K 3
	Temperature	-25..70 °C
	Humidity	< 95 % r.h.
	Storage	IEC 721-3-1 class 1K 3
	Temperature	-25..70 °C
	Humidity	< 95 % r.h.
Standards	$C\!E$ conformity	
	EMC directive	89/336/EEC
	Immunity	EN 50082-1, EN 50082-2, EN 60730-1
		EN 50090-2
	Emissions	EN 50081-1, EN 50081-2, EN50090-2-2
	Low voltage directive	73/23/EEC
	– Electrical safety	EN 60730-1, EN 60730-2-9
Room sensor	Measuring range	QAA50.110: 0..45 °C
		QAA70: 0..32 °C
Other features	Backup of time switch	QAA50.110: None
		QAA70: min. 12 h
	Software class	A to EN 60 730
	Weight	QAA50.110: approx. 0.17 kg
		QAA70: approx. 0.22 kg

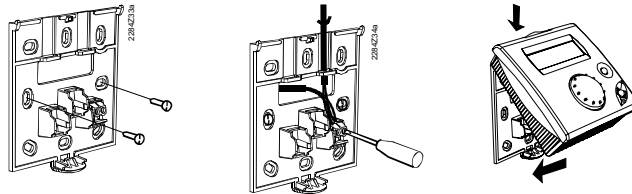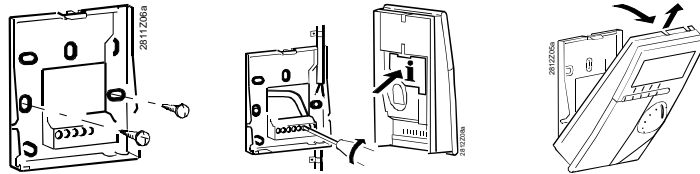|	
Product liability	• The products may only be used in building services plant and applications as described above.
	• When using the products, all requirements specified under "Technical data" must be observed.
	• The local regulations for electrical installation must be complied with.
Engineering	• In the main living room or reference room.
	• The place of installation should be chosen so that the sensor can capture the room temperature as accurately as possible, without being affected by direct solar radiation or other heating or cooling sources.
	• Mounting height is about 1.5 meters above the floor.
	• The unit can be fitted to most commercially available recessed conduit boxes or directly on the wall.

installation	• Wall mounting
QAA50.110	

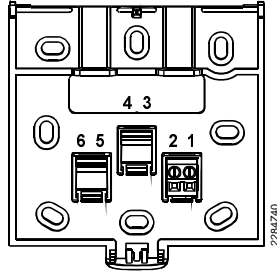|	
QAA70	

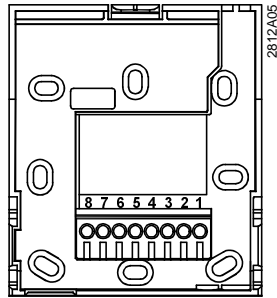|	
	• The controller may not be exposed to dripping water.
Installation	• The local regulations for electrical installations must be complied with.

Connection diagram

QAA50.110

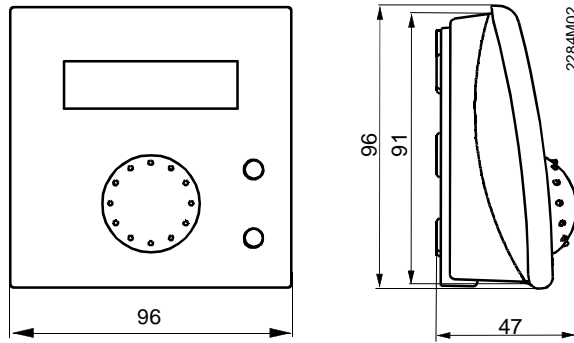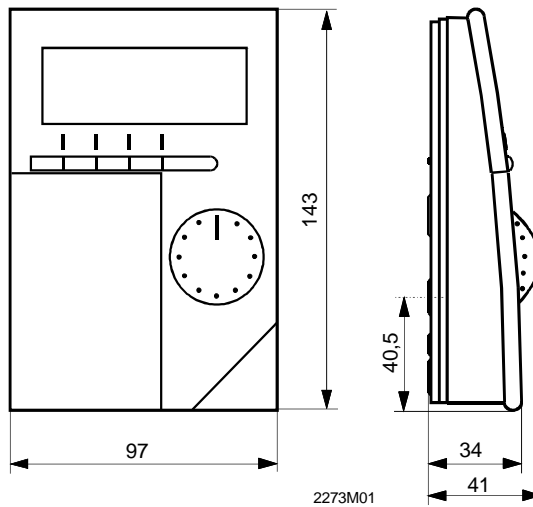|		
1	A6	PPS (interchangeable)
2	MB	PPS (interchangeable)
3	-	-
4	-	-
5	-	-
6	-	-

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QAA70

1	A6	PPS for boiler control (interchangeable)
2	MB	PPS for boiler control (interchangeable)
3		Room temperature sensor QAW44 / potentialfree contact
4		Room temperature sensor QAW44 / potentialfree contact
5	-	-
6	-	-
7	-	-
8	-	-

Dimensions

QAA50.110

QAA70

**Remote room sensor
QAW44**

100

40,5

90

32

2273M03