SIEMENS

OEM

Room Unit for Boiler Temperature Control

QAA73.210

With OpenTherm interface

- **Digital, multifunctional room unit for functional enhancement of boiler controllers**
- **With integrated room temperature sensor, heating program and a number of control functions**

Use

Use	Used in combination with boiler or heating controller. Room temperature control in: • Single or 2-family houses • Smaller multifamily houses • Holiday houses and villas
Application	For use in all standard heating systems, such as radiator or convector heating systems. Especially suited for heating plants with pump heating circuits. If the boiler control systems feature integrated mixing valve control, it is also possible to control mixing heating circuits.
Market	The room units are designed for the OEM market. They are supplied directly to the boiler manufacturer and enhance the functionality and the level of control of small gas-fired appliances with integrated boiler temperature controllers.

Functions

Control functions

- Calculation of flow temperature setpoint
- Pure room temperature control
- Weather-compensated flow temperature control while giving consideration to the building's thermal dynamics
- Weather-compensated flow temperature control with room compensation
- Effect of room temperature deviation can be adjusted
- ECO functions (24-hour limit switch, automatic summer / winter changeover)
- Quick setback
- Room temperature switching differential for limiting the room temperature
- Adjustable maximum limitation of the flow temperature (especially in connection with floor heating systems)
- Frost protection for the building
- D.h.w. control with release and preselection of setpoint for the boiler controller
- Legionella function
- Integrated clock with backup (minimum 12 hours)

Operating functions

- Operating levels based on ergonomic and functional considerations
- Operating mode, setpoint adjustment and occupancy button
- Segment display with symbols
- A number of actual values can be accessed via the Info button
- Additional functions can be programmed
- Special service level with protected access
- 7-day program for the heating circuit with up to 4 switching cycles per day
- 24-hour d.h.w. program with up to 4 switching cycles
- Holiday program

General functions

- Special mode for setting the parameters of Siemens boiler control systems
- Communication with the boiler control via OpenTherm interface
- Power supply via OpenTherm bus
- Straightforward installation

Product documentation

For a more detailed description of the technical design,
refer to user manual U2283.

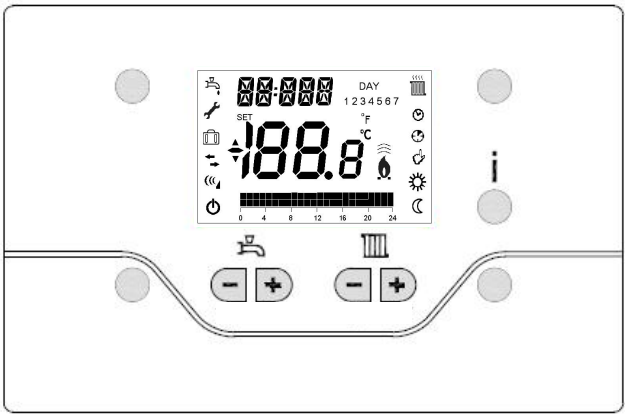
Mechanical design

Room unit

The unit consists of the following components:

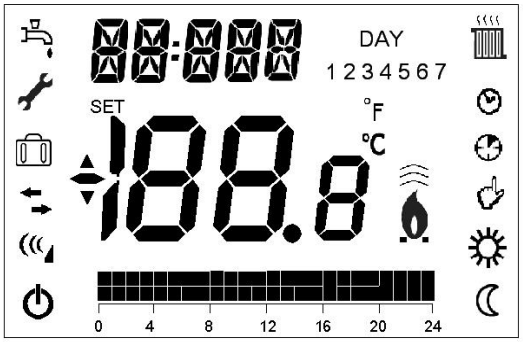
- Front housing with integrated electronics and operating elements
- Back housing with the connection terminals for wall mounting

Operating elements



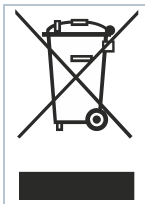
- Button for selecting the heating operating mode
- + / - buttons knob for adjusting the heating setpoint
- Button for selecting the DHW operating mode
- + / - buttons knob for adjusting the DHW setpoint
- Info button
- Occupancy button for temporary changeover

Display



Notes

Disposal



The device is considered electrical and electronic equipment for disposal in terms of the applicable European Directive and may not be disposed of as domestic garbage.

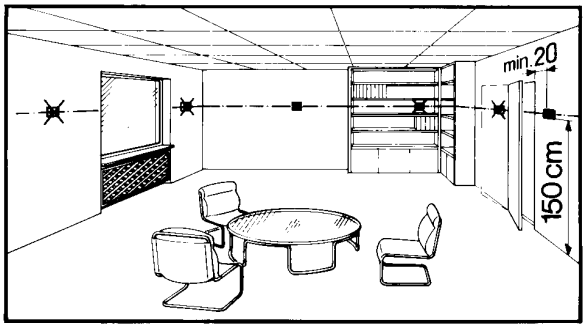
- Dispose of the device through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

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



Mounting (wall)

Open the unit at the bottom and remove the base from the housing front.

Connect the bus cable to the screw teminals.

Fit the base to the wall with the help of screws.

Engage the housing front at the top of the base and close the unit to the bottom.

General

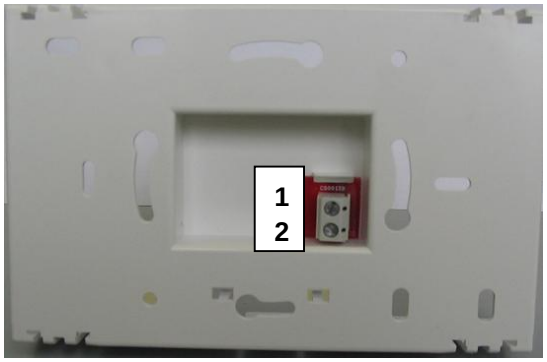
- The controller may not be exposed to dripping water
- Permissible ambient temperature: 0...50 °C
- The local regulations for electrical installations must be complied with

Technical data

Power supply, interface	OpenTherm Bus	
	Terminals	2-wire, interchangeable
	Cable length	max. 50 m
	Cable resistance	max. 2 x 5 Ω
	Power consumption	20 mW (typically)
Room temperature measurement	Measuring range	0...50 °C
	According to EN12098:	
	Range 15...25 °C	within tolerance of 1.3 K
	Range 0..15 °C or 25...50 °C	within tolerance of 1.6 K
	Resolution	1/10 K
Protection data	Housing protection	IP20 to EN 60529
	Protection class	III to EN 60730-1
	Degree of contamination	Normal contamination to EN 60730-1
Ambient conditions	Storage as per EN 60721-3-1 class 1K3	-20…70 °C
	Transportation as per EN 60721-3-2 class 2K3	-25...70 °C
	Operation as per EN 60721-3-3 class 3K5	0…50 °C (without condensation)
Standards, directives and approvals	Product standard	EN 60730-1 Automatic electronic controls for household and similar use
	Electromagnetic compatibility (Applications)	For use in residential, commercial, light-industrial and industrial environments
	EU conformity (CE)	CE1T2283xx
Other features	Backup of time	min. 12 h
	Software class	A to EN 60 730
	Weight with / without packaging	0.125 kg / 0.120 kg
	Dimensions	130 x 86 x 31 mm

Diagrams

Connection diagram



1	COA	OpenTherm terminal A (interchangeable)
2	COB	OpenTherm terminal B (interchangeable)

⚠ 23 mA max

Regulations for installation

The local regulations for electrical installations must be complied with.

Dimensions

Room unit

External dimensions: 130 x 86 x 31 mm

Panel cutout

For special applications it is possible to integrate the device in the boiler panel.

Dimensions of cut-out

The controller's mounting dimensions are 81.5 x 125.5 mm.
The mechanical mounting facility allows the controller to be fitted in front panels having a thickness of 1 to 2 mm.

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