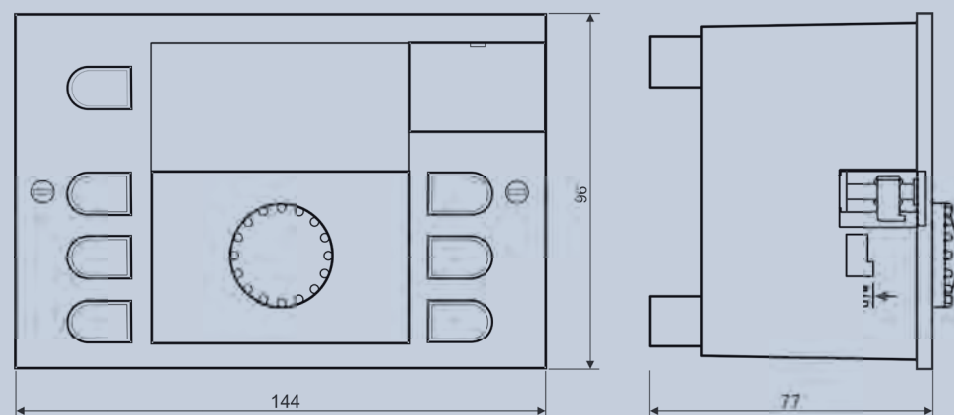


Technical data

Power supply voltage:	230V ~ +6%/ -10%
Rated frequency:	50 - 60Hz
Power consumption:	max. 5,8VA
Bus interface:	T2B zfor connection to external devices in the network system (room unit, PC, modem, or gateway), depending on the equipment model with heat generator interface
Overvoltage category:	III at the mains connection, II at the relay terminal
Ambient temperature:	0...+60°C
Storage temperature:	-25...+60°C
Protection type according to EN 60529:	IP 40
Protection class according to EN 60730:	Central unit=II
Software class:	A
Spark arrestor:	EN 60730 EMV
Interference immunity:	EN 60730
EC conformity:	89/336/EWG
Mode of action:	Type 1.C
Pollution level:	2
Housing dimensions (WxHxD):	Central unit: 144 x 96 x 75 mm
Housing material:	ABS with an antistatic agent, flame retardant
Ball pressure test temperature:	+125°C
Connections:	Central unit: plug-in screw terminal connections
Rated current:	6 A

Dimensions



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THETA

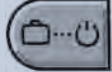
Control systems
for heating
installations



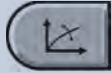
The logic of the operation...

A distinctive feature of the THETA control system is its logical and ergonomically perfect operating controls. Large and clearly defined operating buttons and a centrally placed control knob with pushbutton functionality in the dialogue with a large, high-contrast display are all significant factors in the approval rating of this versatile range of control units.


Easy programme selection...

 The programme selector button allows you to choose between short-term operating modes, such as holiday, party, or absence, and continuous operating modes, such as automatic, heating, or setback. You can overwrite the three different pre-programmed and non-erasable default time-switching programmes to suit any of your own lifestyle habits. These settings are saved automatically. The standby mode shuts down the entire heating system to protect it from freezing; using its own programme, manual operation always provides for warm water.

Easy adjustment to building conditions...

 The correct setting of the heating characteristic curve is essential for a lasting feeling of wellbeing at consistent room temperatures. If necessary, the owner/operator can make the necessary corrections with the characteristic curve pushbutton, without the help of a specialist.

Information at the push of a button...

 All system temperatures, including their set point values and the current operating conditions of heat generators, pumps, and controllers are immediately available via the information pushbutton. In addition, individual information, such as the hours of operation of the heat generators, consumption data, and maintenance instructions forms the basis for economical and safe heating operation.

All information in plain text...


The THETA control system uses a large-sized and informative LCD display that provides the user with the best possible support in plain text. Distinctive, unmistakable symbols provide information about operating conditions such as summer mode or the activation of frost protection. The current temperature of the heat generator is displayed on the central unit and the current room temperature on the room unit. Here, under the current date, a time bar with the heating cycles of the corresponding day is also displayed. An arrow marks the currently active heating programme; the subtle backlighting gives the instrument a stylish appearance. The most striking feature of the THETA control system is the centrally placed control knob with its integrated push-button function.

The functions selected with the keys can be directly and immediately adjusted in the user level with this operating element. A higher-level menu selection level is called up in the operator or heating engineer level, in which the required menu, such as time-switching programming, time/calendar setting or the parameters of the heating or warm water circuits can be selected. The easy-to-follow menu guide enables even layman operators to competently master all the functions step by step. All parameter lists can be selected upwardly and downwardly, and the corresponding values can be adjusted instantaneously. The selected values are stored by briefly pressing the button, or adopted automatically after some time.


Intuitive controls...

Clearly labelled buttons without dual functions ensure intuitive operating without the risk of misunderstanding. The user always makes the right selection.

Emission measurement – precautionary measures...

 The emission button allows the chimney sweep to service the heater without problems. An automatic switch-back function restarts the heating mode after no later than 20 minutes. By keeping this button pressed for a longer time, the unit can be switched to manual mode in case of a malfunction.

Easiest temperature setting...

 A quick tap on one of the three temperature buttons displays the last-selected day or set-back room temperature or warm water temperature. By using the central knob, this can immediately be adjusted, if required, for all circuits together as well as for each individual heating circuit.



THETA-NORM central units

- Standard controller for installation in boiler control panels for single or two-stage heat generators for heating and warm water operation, with either one or two mixed heating circuits
- Additional versions for multi-mode operation (solar and solid fuel)
- Can be used as a cascade controller for multiboiler systems
- Universal application options through wide-spectrum device platform
- External dimensions (LxW xD) 144x96x70 mm
- Plain text lettering in 16 European languages.
- Combination option with WEBcontrol and WEBportal



Shared features

- Two-wire data bus for networking with other devices within the THETA control system
- Electronic control unit for multiboiler systems in data bus network cascadable up to ten levels
- Suitable for heat generators with conventional oil burners, or atmospheric or gas burners
- Suitable for modulating heat generators
- Heating circuit expansion with a maximum of four other THETA central units of different design in a data bus network
- Individual monitoring and remote control possibilities with powerful and efficient room units for each heating circuit
- Remote data transmission by means of WEBcontrol and SMScontrol
- Various application options by means of gateways

The single-stage...

THETA-2 B



- Weather-compensated boiler temperature control for heating and warm water operation in sliding operation mode for unmixed heating mode.
- Integrated pump logic controller
- Cascadable with other central units

THETA-23 B



- Weather-compensated boiler temperature control for heating and warm water operation in sliding operation mode for an unmixed heating circuit with an additional heating circuit for activating a mixer or mixing valve (3-point PI controller).
- Integrated pump logic controller
- Cascadable with other central units

THETA-233 B



- Weather-compensated boiler temperature control for heating and warm water operation in sliding operation mode for an unmixed heating circuit with an additional heating circuit for activating a mixer or mixing valve (3-point PI controller).
- Integrated pump logic controller
- Cascadable with other central units

THETA-1 B



- Boiler temperature control for consistent or room-compensated heating mode combined with a room thermostat with or without a timer.
- Integrated warm water control
- Integrated pump logic controller

And the two-stage...

THETA-2233 B VVC (OT)



- Weather-compensated boiler temperature control for heating and warm water operation in sliding operation mode for an unmixed heating circuit as well as two additional heating circuits for activating mixers or mixing valves (3-point PI controller).
- Integrated pump logic controller
- Cascadable with other central units for multiboiler system
- With two variable outputs for the control of additional system components, such as the timer, solar charge pump, feeder pump, circulation pump, electric heating element, error signal output, and many more.
- An OEM interface or the standard OpenTherm interface is available for the connection of communicating heat generators. These can slidingly activate heat generators via temperature set point values and cascaded with up to 40 stages.

Legend

- Single-stage heat generator
- Two-stage heat generator
- Unmixed boiler heating circuit
- Warm water circuit
- Mixed heat circuit (1)
- Mixed heat circuit (2)
- Two variable outputs
- WEZ-OEM interface or OPENTHERM interface



THETA-RS room unit

The implementation of any requirement imaginable to a multifunctional remote control. This compact and intelligent terminal allows for perfect two-way communication between the operator and control system.

- High-performance remote control with built-in room sensor for measuring the ambient temperature as a control variable
- Unrestricted operating comfort due to absolutely identical operation to the central unit
- For each circuit, a separate room unit can be connected to the shared two-wire data bus
- Activation of spatial parameters such as heating and switch-off optimisation, heating characteristic curve adaptation, spatial effect, spatial minimum and maximum temperature, etc.
- Extensive system information and operating indicators as in the central unit
- Access to other heating circuits in the data bus network and shared operating mode switching with corresponding access authorisation

Wall-mounted housing WG 500

The most comfortable solution for wall mounting: THETA wall-mounted housing for all standard THETA central units with standard dimensions of 144 x 96 mm with additional control elements, such as network switches, hand/automatic switch and dedicated mains fuse, and cable entry with a grommet from the bottom.

The mounted housing is completely factory pre-wired; a clearly labelled connection terminal strip with ample terminal space ensures quick and safe installation.

Standard THETA mounting base

Easy and inexpensive mounting base without additional control elements to accommodate all standard THETA central units or THETA special units in the standard dimensions of 144 x 96 mm.

Rear bracket for attachment to 35 mm mounting rails, and cable entry with a grommet.



Room sensor with remote control THETA-RFF

- Easy-to-use remote control with a built-in room sensor for measuring the ambient temperature as a control variable
- Can be used for every heating circuit, and every unit is connected to the shared two-wire data bus.
- Button to switch operating mode (heating – automatic – setback) with visual LED feedback



SMScontrol

The SMScontrol module is available for the transmission of the current system data (sensor data) to the selected mobile unit. The operating mode of each selected control unit can be adjusted via SMScontrol. This is particularly useful in properties that are only used occasionally (vacation, weekend houses, etc.). The base set point value can also be corrected via SMScontrol.

(For further information, please see our special SMScontrol brochure)



WEBcontrol

Combined with WEBportal, WEBcontrol allows you to monitor the complete system over the Internet. With WEBcontrol, all standard technologies available in the Internet sector are at your disposal. This can be used to accelerate improved monitoring and efficiency, while the benefits to the customer are further enhanced through improved services.

(For further information, please see our special WEBcontrol brochure)