Technical instructions

connecting and using of GSM module
for alarm alert reports via a mobile network
(boilers PelTec / PelTec-lambda)

C E

CM-GSM
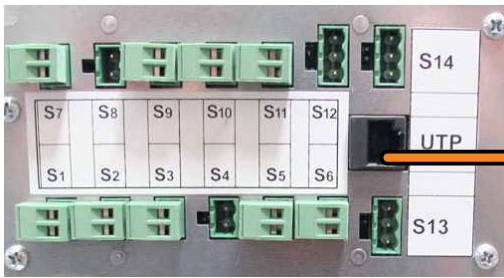
(for boilers PelTec/PelTec-lambda)

1.0 GENERAL

▪ CM-GSM is a device that allows sending of boiler reports through the GSM network in the form of calls and text messages. CM-GSM connects to the boiler PelTec / PelTec-lambda via bus (UTP cable).

▪ When connected (UTP cable) to the boiler, the CM-GSM turns on automatically if the main switch is on "1" because it receives power via the bus and exchange all information with the boiler. If the main switch is at "0" CM-GSM will automatically turn on only when the switch of the boiler is switched to "1".

▪ Equipped with a rechargeable battery, in order to send notifications in the event of a breakdown in communication/power supply of the boiler. Power loss CM-GSM module continues to work on the battery for the next 1h, in order to send all the necessary informations, and to respond to any queries. After that time it switches off automatically.

▪ Capacity of the battery is several hours, depending on how much is used. The battery is charged whenever the CM-GSM connected to the bus and switch of the boiler on "1".

▪ When CM-GSM is not connected to the boiler or the boiler switch is on "0", it can be switched on and off with the built-in button. Short press on button lights it up, and a long press on button turns it off.

▪ If power button is held longer, the device enters "firmware update/software upgrade" mode (this option may be used only by authorized service personnel).

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🔴 📶	**Red - indicates the state of GSM network**	- blinks slowly when not connected to a network (no signal or no SIM card inserted) - blinks fast when connected to network
🟢 🖥️	**Green - indicates bus activity**	- This light blinks when the boiler communicates with the module (approx every second)
🟢 💬	**Green - indicates activity** (sending SMS or call)	- This indicator lights when the CM-GSM sends a message or makes a call
⚪ 🌐	- is not used	

2.0 CONNECTING TO BOILER PelTec / PelTec-lambda

PelTec/PelTec-lambda bus

UTP cable

3.0 SETTING REGULATION ON BOILER (only by authorized service)

In order to allow communication between CM-GSM and boiler PelTec/PelTec-lambda, you must first turn on this option in the regulation of boiler PelTec/PelTec-lambda. This option is included in menu Installation, and is accessible only by authorized service personnel (by entering a PIN). Required version of the PelTec / PelTec-lambda software is v2.80b or later (point 3.0).
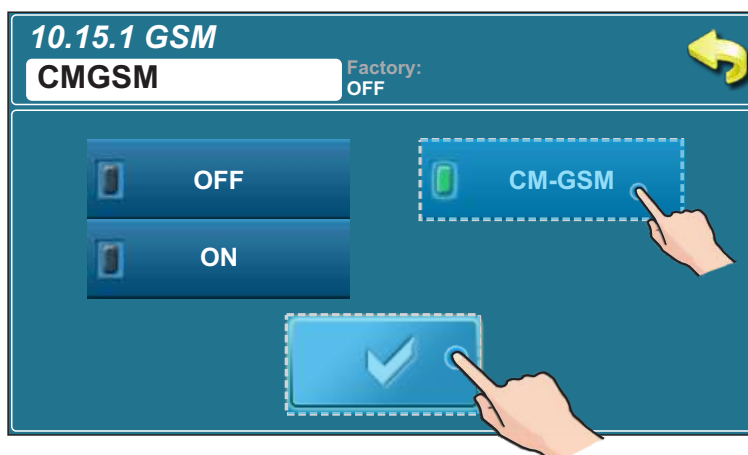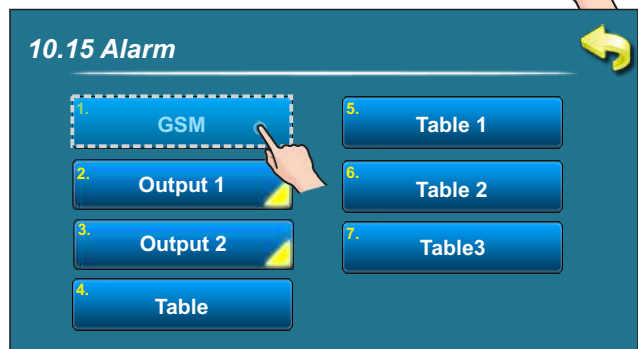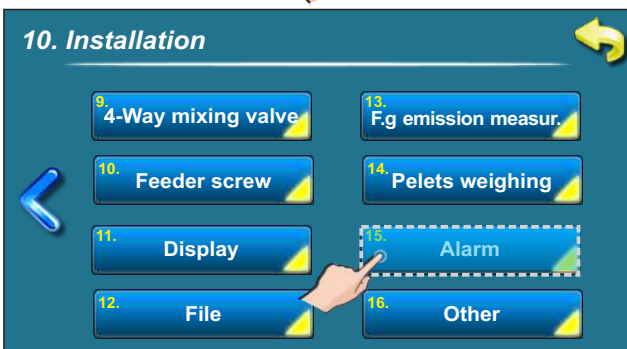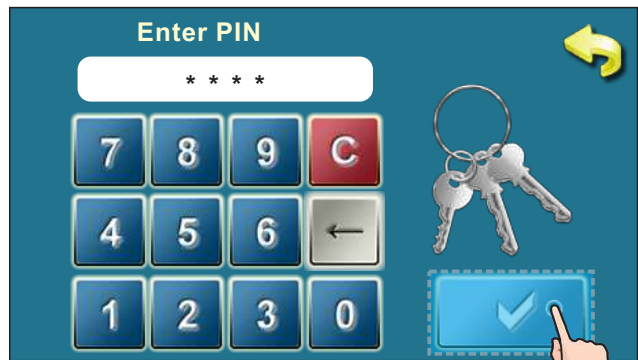
3.1 DISABLING LANGUAGE SELECTION OPTION

In order to CM-GSM function correctly, the "Language selection" must be switched off. To turn off this option, press the Display> Language selection> Off. With this option turned off, when you turn on the main switch regulation will be in last set language.
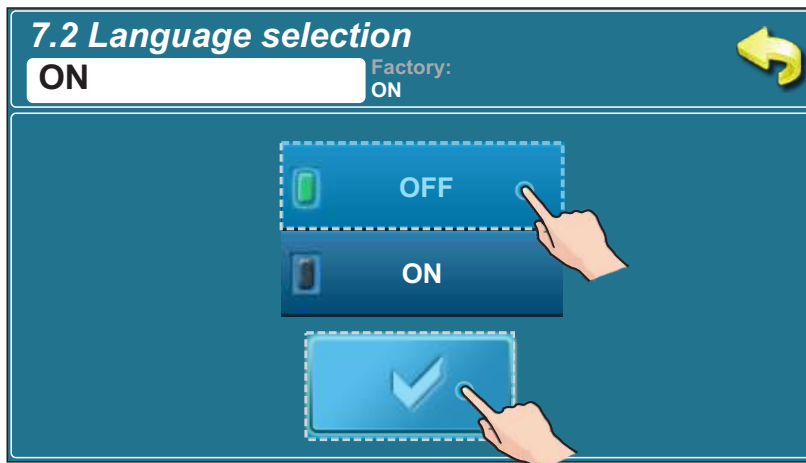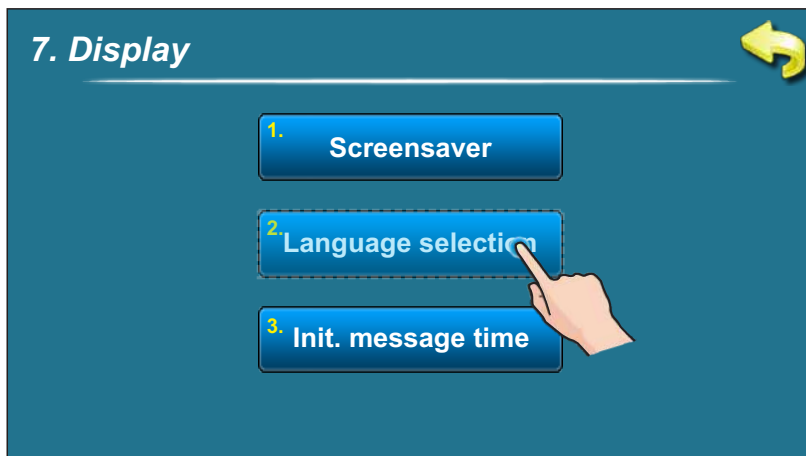
4.0 MANAGE AND CONFIGURE CM-GSM

Managing and configuring CM-GSM is done via SMS messages. Messages can be written in uppercase and lowercase letters or in combination of both. Before sending text messages, place the SIM card in the CM-GSM SIM slot. Modern SIM card factory have set up a PIN. Before placing the card in the CM-GSM is necessary to deactivate the PIN on a mobile device and activate a card with phone call.

⚠	**Be sure that the SIM card account is active and there is valid credit on the account (allows you to send SMS and making calls).**

⚠	**Be sure that the SIM card PIN is turned OFF. In case where PIN is needed for turning on, CM-GSM will not be able to send SMS messages.**

⚠	**Be sure that the option "Language selection" in boiler regulation is turned OFF. In case this option is enabled, the CM-GSM will not work properly.**

SMS text messages (commands)	Command description	Return SMS: (CM-GSM)
ADD!	- Add my number to list of numbers where will SMS be sent in the event of an alarm. Mark «S» (as my number implies the number from which the SMS was sent)	- List of numbers where will SMS be sent in case of alarm, including number which is added with this command. In front of each number is mark S or C. In case there is no mark C, it prints SX-number of phone. Example of return SMS: *SX+3859XXXXXX* *SC+3859XXXXXX* *Mark **SX**- number is on list for SMS alarm alert* *Mark **SC**- number is on list for SMS + CALL alarm alert* **Important: Before any other messages from a new number, you first need to send this command, because if the number is not on the list, CM-GSM ignores the everything else received.**
DEL!	- delete my number from list of numbers where SMS will be sent.	- CM-GSM sends a return message with a list of numbers. Number list does not contain the number from which command delete my number is sent.

SMS text messages (commands)	Command description	Return SMS: (CM-GSM)
CADD!	- Add my number to the list of numbers who recieve SMS + CALL in case of alarm alert. (add mark SC)	- List of numbers where will SMS and/or CALL be sent in case of alarm alert, including number which is added with this command.
CDEL!	- delete my number from the list of numbers that recieve CALL. (delete mark C from my number)	- CM-GSM sends a return message with a list of numbers. Number from which this command was sent does not contain mark "C" anymore.
STATUS?	- query about state of the boiler (ON/OFF, list of errors, current temperature values)	- CM-GSM sends a return message with information about the state of the boiler.
SIGNAL?	- query about signal strenght and software version.	- CM-GSM sends a return message with information about the signal strength and software version.
NUM?	- command to print current list of numbers	- CM-GSM sends a return message with a list of numbers.
CMD ON!	- commant for turning the boiler ON	- CM-GSM sends a return message with command confirmation ("CMD ON EXECUTED ")
CMD OFF!	- command for turning the boiler OFF	- CM-GSM sends a return message with command confirmation ("CMD OFF EXECUTED")

5.0 EXAMPLES OF SMS ALARM MESSAGE (ERRORS)

APPEARANCE OF ERROR IN THE BOILER

>>> ALARM <<<

E1- "DHW SENSOR ERROR"

19.Aug.2015g
06:09:20

BOILER ERROR REMOVED

< ALARM CEASING>

E1- /DHW SENSOR ERROR/

19.Aug.2015g
06:43:20

LOST COMMUNICATION WITH CM-GSM
(power failure or the boiler main switch turned OFF)

>>> ALARM <<<

ERROR E1000 -
COMMUNAICATION LOST!

19.Aug.2015g
08:25:10

COMMUNICATION IS RE-ESTABLISHED

communication OK!

Important! The error code E1000- loss of communication between the boiler and CM-GSM due to power failure or boiler main switch turned OFF, SMS alarm of this error will always be sent in English.

6.0 NOTES

- The first registered number on the list marked with "C", has priority over the following numbers when calling. If the first number does not answer within 10 minutes, only then module calls other numbers.

- If any number answers the call, all other calls cease.

- If the dialed number does not answer or is busy they will be immediately recieve another call and then every following call will be sent after 1min, 2 min, 4 min, 8 min ...

- After 8 attempts calls to that number stop.

- Answer from voice answering machine is also registered as a successful call. It is impossible to distinguish it from the normal answering which means that the answering machine must be turned off.

- Alarm alert text is the same as the error text on the regulation of the boiler.

- Text of the error sent by alarm is printed in the language which is set on regulation of the boiler, except for error E1000- "COMMUNAICATION LOST" for power failure or the main switch turned OFF.

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