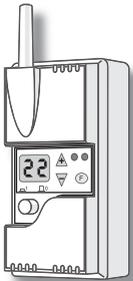
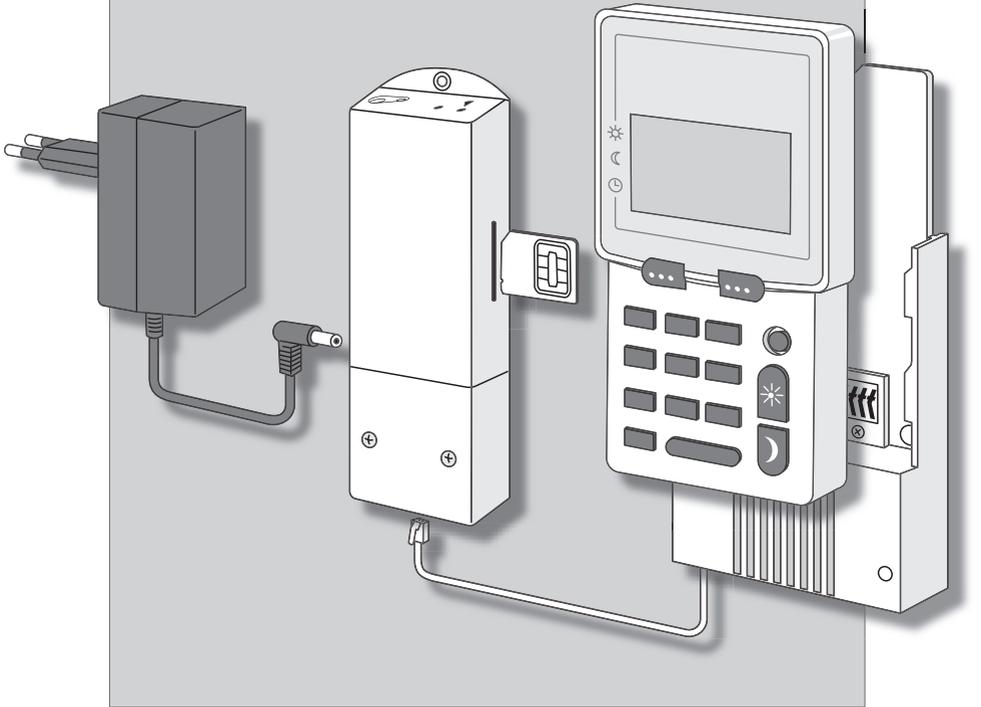
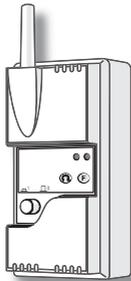


GLAMOX *heating*

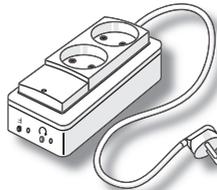
User Guide for GSMG



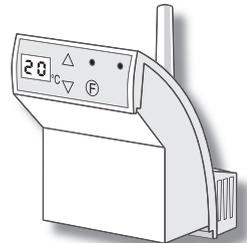
CFG
Thermostat for
underfloor heating



CXG
Relay for
fixed installation

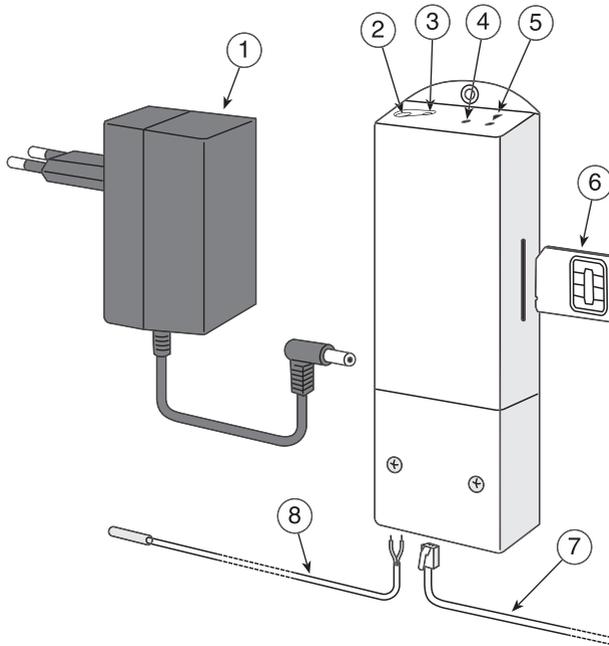


COG-j
Relay with
plug and lead



CRG
Plug-in thermostat
for Glamox series
3001 heaters

The GSM unit



1 Battery charger

2 Function key

- Press for one second: switch internal relay on/off. Turn off internal sound signal.
- Press for five seconds: switch off or on both alarm zones.
- Press for 40 seconds: reverts GSMG back to the factory default settings (reset).

3 Indicator for internal relay

Lit = ON
Unlit = OFF

4 Alarm indicator

Green light: Alarm 1 and 2 are “on guard”.
Red light: Alarm activated (or break in the cable).
Unlit: Alarm function is turned off.

5 GSM indicator

Steady light: Shows no contact with the GSMG base station.
Flashing every two seconds: Contact with the GSMG base station.
Rapid flashing: Receiving SMS.

6 SIM-card

7 Signal and charge cable to CTG

8 External temperature sensor

Quick user guide – getting started...

We assume that a number of panel heaters, underfloor heating and relays are to be regulated, and that these are installed and working.

Important!

Make sure that GSMG is equipped with a SIM-card without a PIN-code and is connected to the mains supply. The lamp with the antenna symbol gives a short flash every two seconds when GSMG is in contact with the base station.

CTG must be connected to GSM, and the red lamp, which indicates charging, should be lit. Zones which can be controlled by SMS-messages are 1-2-3-4 for *heating*, and 17-18 for *relays*. The remaining zones may be programmed but cannot be controlled by SMS.

There are two ways to use CTG and GSMG – to maintain a cosy warmth when you are in, and to set a low, energy-saving temperature when you are away from the cabin or house.

- 1) Let CTG's programme set a low temperature for "Away" (frost guard). An SMS-message is used to get a cosy, warm temperature for "Home".
- 2) Let CTG's programme set a cosy, warm temperature as well as day and night temperature reduction during "Home". Periodic override (or an SMS-message) is used to set a low temperature for "Away" (frost guard).

Alternative 1 – provides a constant comfort temperature when present, and frost guard when absent.

When we leave the cabin/house, and during our absence, the programming in CTG will regulate the system and maintain the temperature at a low, energy-saving and frost-proof level.

NB! First let us look at how CT- is programmed for "frost-guard". (See the CT- guide.)

Our example is based upon CT- being programmed for:

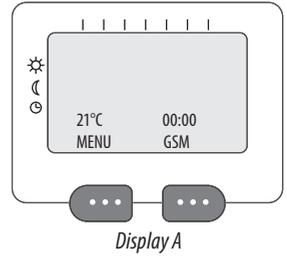
- four heating zones – zone 1, 2 and 3 (living rooms) that are to have 5°C, and zone 4 (bathroom) that is to have 7°C, during absences.
- two relay zones – zone 17 will switch a porch light on and off at fixed times, also during absences. Zone 18, an indoor lamp will be switched OFF during absences.

zone 1 = living/dining room -	economy temperature = 05°C - all days - times: 00:00 - 24:00
zone 2 = bedroom, adults -	economy temperature = 05°C - all days - times: 00:00 - 24:00
zone 3 = other bedrooms -	economy temperature = 05°C - all days - times: 00:00 - 24:00
zone 4 = bathroom -	economy temperature = 07°C - all days - times: 00:00 - 24:00
zone 17 = porch light -	ON - all days - times: 05:00- 09:00 and 17:00-23:00
zone 18 = indoor lamp -	OFF - all days - times: 00:00- 24:00

The programme is stored and remains active, even after lengthy power cuts.

This is therefore a safe method of making sure that the temperature will remain low during long absences. The display should be as in the figure – Display A. The thermostats in zones 1, 2 and 3 will show 5°C and in zone 4 is shown 7°C.

To increase the temperature to 22°C in zones 1, 2, 3 and 4, and switch relays ON in zones 17 and 18, the following SMS must be sent:



```
PASS
TEMP:
SWITCHint=ON      options = ON / OFF
Z1=22             options = 5 to 35°C
Z2=22             options = 5 to 35°C
Z3=22             options = 5 to 35°C
Z4=22             options = 5 to 35°C
R17=ON            options = ON or OFF
R18=ON            options = ON or OFF
```

TIP: to simplify making this SMS, send PASS to your GSMG. In return you will receive an SMS that you can modify and enter the values that you desire. It should then be stored under the name, e.g., “warm” for future use.

NB! In this example, we have removed some text lines leaving the minimum of what the message must contain. This will be a typical SMS to “call the cabin up warm”. (All lines in the SMS answer may be kept, but will then entail more work when revising it.)

When this message is sent, thermostats will adjust themselves to 22°C and relays will switch ON, and you may let the system remain like this while you are staying in the cabin/ house. The display on CTG shows GSM OVERRIDE! On departure, press CANCEL and all thermostats will revert to their low, energy-saving settings and relay zone 18 will switch OFF. Zone 17 follows its programming.

You will receive the following SMS when you send PASS to your GSMG:

Typical SMS answer	Alternatives	Explanation
PASS		The password always precedes answers from your GSMG.
TEMP:		Indicates that the following text relates to temperature.
INT:??	--	Shows the temperature at the internal sensor.
EXT:??	--	Shows the temperature at the external sensor. NC is displayed if no such sensor is connected.
ALARM1:0	1 / 0	0 denotes that the alarm is not switched on (all is well). 1 denotes that the alarm is switched on. (On some GSMG models ON and OFF are shown instead of 1 and 0.)
ALARM2:0	1 / 0	0 denotes that the alarm is not switched on (all is well). 1 denotes that the alarm is switched on. (On some GSMG models ON and OFF are shown instead of 1 and 0.)
(POWER:ON)	(ON / OFF)	(Not applicable to this version of GSMG)
SWITCHint=ON	ON / OFF	Shows whether the internal relay is ON or OFF.
Z1=5	5–35	Shows the desired temperature in zone 1.
Z2=5	5–35	Shows the desired temperature in zone 2.
Z3=5	5–35	Shows the desired temperature in zone 3.
Z4=7	5–35	Shows the desired temperature in zone 4.
R17=OFF	ON / OFF	Shows whether the relay in zone 17 is ON or OFF.
R18=OFF	ON / OFF	Shows whether the relay in zone 18 is ON or OFF.

Alternative 2 – provides day and night temperature reduction when at home, and frost guarding during absence.

As we desire day and night temperature reduction while we are occupying the cabin, we will first look at how CTG is programmed for “temperature reduction” (see details in the CTG user guide).

Our example is based upon CTG being programmed for:

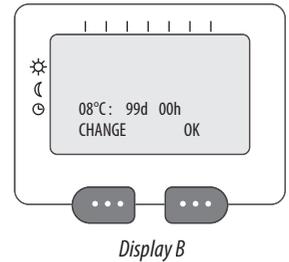
- four heating zones – zones 1, 2, 3 and 4.
1 = living/dining room. 2 = bedroom, adults. 3 = other rooms. 4 = bathroom.
- two relay zones – zones 17 and 18. 17 = porch light, 18 = indoor lamp.

zone 1: normal temperature = 22°C all days, times 06:00–10:00 and 15:00–23:00. Economy temperature = 16°C
zone 2: normal temperature = 20°C all days, times 05:00–08:00 and 20:00–23:00. Economy temperature = 12°C
zone 3: normal temperature = 21°C all days, times 06:00–09:00 and 18:00–23:00. Economy temperature = 15°C
zone 4: normal temperature = 25°C all days, times 05:00–10:00 and 15:00–23:00. Economy temperature = 19°C
zone 17: ON all days, times 05:00–09:00 and 17:00–23:00.
zone 18: ON all days, times 06:00–11:00 and 15:00–00:15.

When we leave the cabin/house, and during our absence, the programming in CTG will regulate the system and maintain the temperature at a low, energy-saving and frost-proof level.

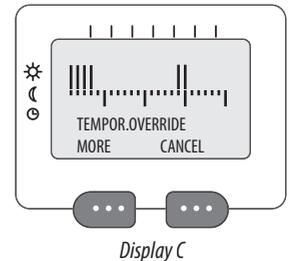
Put CTG into temporary override mode like this:

Press the MENU option key until TEMPOR.OVERRIDE? appears. Choose YES. Type in a NUMBER OF DAYS that is more than the time till your next visit (99 will do nicely). Choose OK. For the NUMBER OF HOURS, press OK. CHOOSE ZONE TYPE by pressing HEAT. CHOOSE TEMPERATURE by typing, e.g., 08. Press OK. The display will now be as in the figure – display B.



Press OK and then ALL if you want zones 1, 2, 3 and 4 to have the same temperature. The display will now be as in the figure – display C. The zones that are now actively controlled will be flashing.

If relays are to be switched ON or OFF during the same period, select MORE and you may choose whether relays are to be set to ON or OFF. NB! Should you, when selecting MORE, alter the number of days, this new number will also apply to heating zones. When relay zones have also been selected, they too will flash.



To increase the temperature again to 22°C, and switch relays ON, send the following SMS:

PASS
TEMP:
SWITCHint=ON options = ON / OFF
Z1=22 options = 5 to 35°C
Z2=22 options = 5 to 35°C
Z3=22 options = 5 to 35°C
Z4=22 options = 5 to 35°C
R17=ON options = ON / OFF
R18=ON options = ON / OFF

TIP: to simplify making this SMS, send PASS to your GSMG. In return you will receive an SMS that you can modify and enter the values that you desire. It should then be stored under the name, e.g., “warm” for future use.

You will receive the following SMS when you send PASS to your GSMG:

Typical SMS answer	Alternatives	Explanation
PASS		The password always precedes answers from your GSMG.
TEMP:		Indicates that the following text relates to temperature.
INT:??	--	Shows the temperature at the internal sensor.
EXT:??	--	Shows the temperature at the external sensor. NC is displayed if no such sensor is connected.
ALARM1:0	1 / 0	0 denotes that the alarm is not switched on (all is well). 1 denotes that the alarm is switched on. (On some GSMG models ON and OFF are shown instead of 1 and 0.)
ALARM2:0	1 / 0	0 denotes that the alarm is not switched on (all is well). 1 denotes that the alarm is switched on. (On some GSMG models ON and OFF are shown instead of 1 and 0.)
(POWER:ON)	(ON / OFF)	(Not applicable to this version of GSMG)
SWITCHint=ON	ON / OFF	Shows whether the internal relay is ON or OFF.
Z1=5	5–35	Shows the desired temperature in zone 1.
Z2=5	5–35	Shows the desired temperature in zone 2.
Z3=5	5–35	Shows the desired temperature in zone 3.
Z4=7	5–35	Shows the desired temperature in zone 4.
R17=OFF	ON / OFF	Shows whether the relay in zone 17 is ON or OFF.
R18=OFF	ON / OFF	Shows whether the relay in zone 18 is ON or OFF.

On arrival at the cabin/house, press CANCEL on CTG where the display shows “GSM OVERRIDE”. Normal programming stored in CTG will take over. On departure, when you again intend to use TEMPORARY OVERRIDE, enter a larger number of days with economy temperature than the actual length of time to the next visit (max. 99 days). If a longer absence than 99 days is anticipated, the method described under “Alternative 1” must be used.

Here are the settings available on you CSMG – “Configuring”

When you (for the first time) send the message PASS CONF, the GSM-unit will reply with the default, factory settings:

```
PASS=PASS
REPLY=ON
ALARM1=ON
ALARM2=ON
ALARMTEMPint=5
ALARMTEMPext=5 – 0?
SWITCHint=3
BUZZER=3
HEARTBEAT=OFF
HEAT=0 (Not applicable to GSMG)
SMSCOUNTER=0
PHONE=+47
```

TIP: to simplify making this SMS, send PASS CONF to your GSMG. In return you will receive an SMS that you can modify and enter the values that you desire. It should then be stored under the name “CONF” for future use.

If you wish to make changes, make them in the message you have received and send them to the GSMG unit. Table A shows what options are available. (Your message should be stored on your mobile under the name “CONF” so that it may be used for later alterations.)

Table A

	Default setting	These are the options you have...	Possible settings
CODE	PASS	Free choice of PASSword: Must consist of four CAPITAL letters. All SMS-messages must start with the password.	
REPLY	ON	Choose if you want a reply from the GSM- unit when you send commands.	ON / OFF
ALARM1	ON	Choose if you want ALARM1 switched on or not.	ON / OFF
ALARM2	ON	Choose if you want ALARM2 switched on or not.	ON / OFF
ALARMTEMPint	5	Temperature sensor built into the unit; choose which temperature will trigger a warning should it drop to under this value.	1 – 50 NB! 0= alarm turned off
ALARMTEMPext	5	Extra temperature sensor that may be coupled to the connector block; choose which temperature will trigger a warning should it drop to below this value.	1 – 50 NB! 0= alarm turned off
SWITCHint	3	Built-in connection for 5 amp. (1100W) which can switch heaters or other appliances on and off. The connection may also be set to ON at various ALARM conditions. 0 = controlled by SMS 1 = ON if ALARM1 = activated 2 = ON if ALARM2 = activated 3 = ON if ALARM1 or ALARM2 = activated 4 = ON if ALARMTEMPint = activated	0-1-2-3-4
BUZZER	3	Built-in audible signal which may be activated by the various ALARM conditions. 0 = OFF 1 = ON if Alarm1 = activated 2 = ON if ALARM2 = activated 3 = ON if ALARM1 or ALARM2 = activated	0-1-2-3
HEARTBEAT	0	Choose whether you want a status report sent automatically to your mobile. The figure represents the number of hours between reports.	1 – 9999
(HEAT)	0	(This is a function that is currently not available on CTG and may be ignored.)	(1 – 9999)
SMSCOUNT	0	You will be informed as to how many SMS that have been sent from the unit since the last time SSMSCOUNT was set to zero. It may be useful to zero the count when using a pay-as-you-go account and need to know how many SMS remain.	0 – 99
PHONE	+47	Here, you enter the mobile number you wish your GSMG-unit to send ALARM-messages to. Remember to use the national prefix.	Max. 14

Available options when regulating heating, appliances and alarms

To be accepted by GSMG, all SMS must be formulated as follows.

(You may change values and options that appear after the equals sign "=", as desired.)

SMS with *all lines* included:

PASS
TEMP:
TEMPint:
TEMPext:
ALARM1:ON
ALARM2:ON
SWITCHint=ON
Z1=22
Z2=22
Z3=22
Z4=22
R17=ON
R18=ON

SMS with *necessary lines only* included:

PASS
TEMP:
SWITCHint=ON Options: ON / OFF
Z1=22 Options: 5–35°C
Z2=22 Options: 5–35°C
Z3=22 Options: 5–35°C
Z4=22 Options: 5–35°C
R17=ON Options: ON / OFF
R18=ON Options: ON / OFF

Table B

	Options	These are the options you have...
PASS		The password must precede all messages to your GSMG. May be changed in the message PASS CONF – see table A.
TEMP:		Denotes that the next text refers to temperature.
INT:??	--	Shows the temperature at the GSMG's internal sensor. For information from GSMG only.
EXT:??	--	Shows the temperature at the external sensor. NC denotes that a sensor is not connected. For information from GSMG only.
ALARM1:0	1 / 0	0 denotes that the alarm is not switched on. (All is well.) 1 denotes that the alarm is switched on. (On some GSMG models, ON and OFF are displayed instead of 1 and 0) For information from GSMG only.
ALARM2:0	1 / 0	0 denotes that the alarm is not switched on. (All is well.) 1 denotes that the alarm is switched on. (On some GSMG models, ON and OFF are displayed instead of 1 and 0) For information from GSMG only.
(POWER:ON)	(ON / OFF)	(Not applicable to this GSMG model.)
SWITCHint=ON	ON / OFF	Choose here whether the internal relay is turned ON or OFF.
Z1=22	5-35	Select the desired temperature for zone 1.
Z2=22	5-35	Select the desired temperature for zone 2.
Z3=22	5-35	Select the desired temperature for zone 3.
Z4=22	5-35	Select the desired temperature for zone 4.
R17=ON	ON / OFF	Choose here whether relays in zone 17 are turned ON or OFF.
R18=ON	ON / OFF	Choose here whether relays in zone 18 are turned ON or OFF.

Other useful hints

- If you wish to send an SMS that sets temperatures to lower values and switches relays OFF, use the following:

PASS

TEMP:

SWITCHint=ON Options: ON / OFF

Z1=7 Options: 5–35°C

Z2=7 Options: 5–35°C

Z3=7 Options: 5–35°C

Z4=7 Options: 5–35°C

R17=OFF Options: ON / OFF

R18=OFF Options: ON / OFF

- If you wish to cancel the settings that are made by an SMS, and let CTG's programming for day and night temperature reduction to take over, send the following:

PASS CANCEL (If the code has been changed and is no longer PASS, use the valid one.)

The reply will be:

CANCEL Done

- If an invalid message should be sent, the following reply is received:

MESSAGE FAILED

CHECK COMMAND

RESEND

- **Important – concerning the alarm function**

When you arrive at the cabin and the alarm is triggered, the sound may be switched off by holding down the key with the “hand” symbol for appr. five seconds.

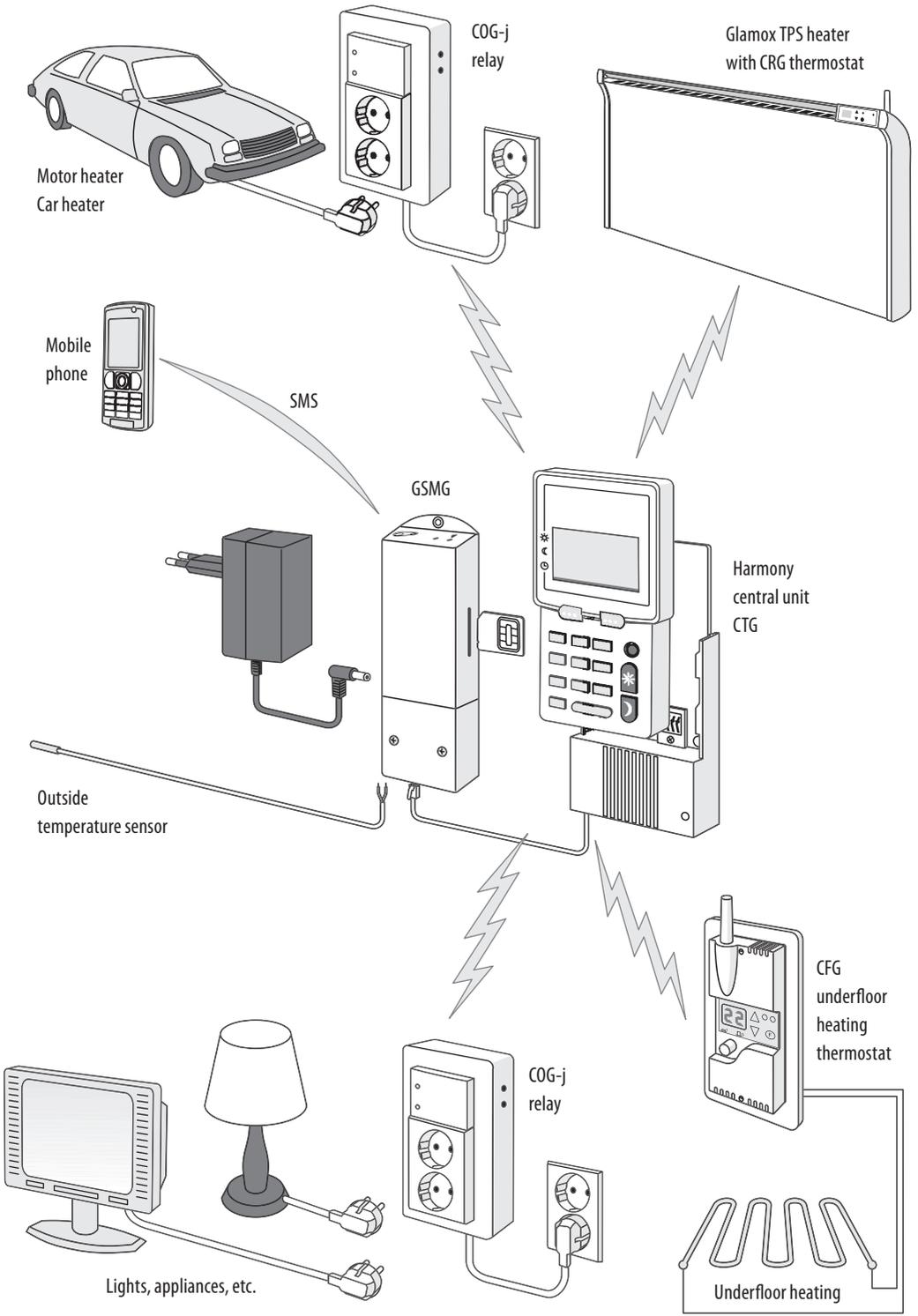
In any case, an SMS with the following text will be sent:

PASS

ALARM(2)=ACTIVE

You must switch off the automatic warning using a PASS CONF message where ALARM1 and ALARM2 are set to OFF. Otherwise, an alarm SMS will be sent every time somebody passes a motion detector that turns itself on and off depending on the proximity of a person.

Notes:



Motor heater
Car heater

COG-j
relay

Glamox TPS heater
with CRG thermostat

Mobile
phone

SMS

GSMG

Harmony
central unit
CTG

Outside
temperature sensor

COG-j
relay

CFG
underfloor
heating
thermostat

Lights, appliances, etc.

Underfloor heating