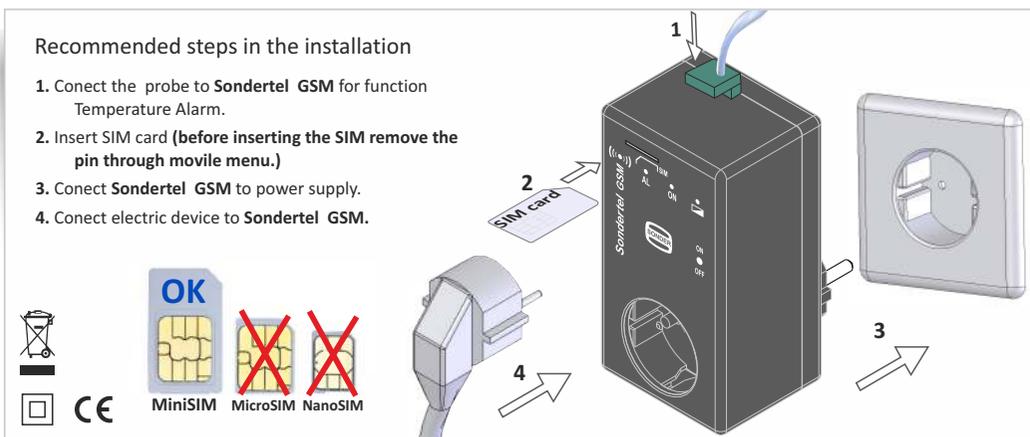| IN CASE OF:	SMS received	
- Make a call to **Sondertel GSM** from a phone that had previously made valid orders.	R1: on T1: 26.8C Alarm: off	SMS **Status query**: State relay Current temperature read by probe Alarm status
- Send an wrong SMS to the **Sondertel GSM** from a phone that had previously made valid orders.	pwrd + on - relay on off - relay off inform on - receive alarm test - status pass xxxx - change password	Password (set from factory to 0000) + followed by the command: order - (meaning that order)
- If a request to change languages includes an invalid number	ERROR: invalid language. 0-Castellano, 1-English.	
- The temperature exceeds the limit set by the user	Alarm: T1 T1: 33.5C	Probe set for alarm Reading probe alarm
- Message received periodically according to set time with the function **Alive** activated	T1: 26.8C R1: off	Temperature read by probe T1 Relay Off

- If the SMS received by the **Sondertel GSM** not start with numeric digits and comes from an unknown telephone is interpreted as a message from the phone company:
  - If the control is configured with the function PROMO in on, the SMS is forwarding to all phones set in Function Inofrm
  - If the control is configured with the function PROMO in off, is deleted.

- The **Sondertel GSM** saves the last 5 phone numbers that have given a correct order and if they make a lost call, the **Sondertel GSM** sends an SMS of state, but the SMS that an alarm has occurred only is sent to the numbers set in INFORM function.

Recommended steps in the installation

1. Conect the probe to **Sondertel GSM** for function Temperature Alarm.
2. Insert SIM card **(before inserting the SIM remove the pin through movile menu.)**
3. Conect **Sondertel GSM** to power supply.
4. Conect electric device to **Sondertel GSM**.

OK — MiniSIM — MicroSIM — NanoSIM

CE

TECHNICAL SPECIFICATIONS

Power Supply:...................................... 230V~ $^{+10\%}_{-15\%}$ 50/60Hz max. 2VA.
Probe:................. **PTC2000 3m. Accuracy 1,5%, without polarity (IP67).**
Regulating scale:.. **from -40 to 140°C.**
Environment humidity:... **from 20% to 85% R.H.**
Ambient temperature:.. **Tmin. 0°C, Tmax. 45°C.**
Storage temperature:... **maximmum 50°C.**
Breaking power (contacts):.. **16(5)A 250V~.**
Measurements with device plugged in.......................... **65x120x55 mm.**
Pollution Degree:.. **2.**
Degree of protection:... **IP40.**
Software Class A :.. **Action type 1.B.**
According normative:............. **EN 60730 / EN 301489-1 / EN 301489-7.**

CONDITIONS OF GUARANTEE

This device has 3 year warranty according to the date of manufacture, it is limited to replacement of faulty part. Transport not included.

We decline any responsibility for damaged equipment result of poor handling. Not included in the warranty:
- Equipment whose serial number has been damaged, deleted or modified.
- Devices whose connection or use has not been executed according to the instructions accompanying the appliance.
- Apparatus modified without the consent of the manufacturer.
- Devices whose deterioration is the result of impact or liquid or gaseous emanations.

This control is not a safety device, and can not be used as such, it´s the installer responsibility incorporate adequate protection to every type of installation (**HOMOLOGATED**)

Reserved the right to change without prior notice and for the rest of general conditions visit our web.

SONDER
Energy Control

Sondertel GSM 3G

Telephonic Control GSM, 1 channel & 1 alarm   Code: 19.094
Manual of Instruction & Use

3 YEARS WARRANTY — Sonder Regulación S.A. Energy Control

0000 version

Sondertel GSM v3.6
Quectel § Ltd
Revision: UG95EB2A08
Cobertura: 80.8%
Promo: off

The easiest to install

Control 1 channel and temperature probe

*SIM and mobile not included

OPERATIVE

Sondertel **GSM** is remote control via GSM that works by sending and receiving SMS (configurable in 2 languages, Spanish / English). Has 1 channel (relay 16A) and a temperature sensor (-40 ... 140°C). The uses that can be applied are many: heating, air conditioning, automatic watering, lighting, cameras frozen ... etc. *Sondertel* **GSM**, also has help messages if you do not remember how to write an order.

Relay: You can activate/deactivate manually or by SMS, activate /deactivate timed and query the status of the relay.
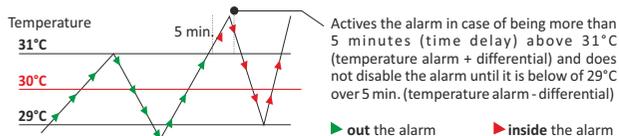
Probe: allows receive warnings of a temperature alarm, the relay can be linked to temperature alarm and view the history of temperatures for the last 4 hours via SMS.

Operating temperature alarm

First off set the temperature for alarm for example 30°C ± 1°C (differential of activation) may also indicate the time that has to remain above or below to consider that is in alarm. You can define two different values or the same for the delay time (Delay). Factory goes to 0 and alerts at the same time the temperature goes from temp alarm ± 1°C. Delays are very useful to discriminate when a temperature alarm of a product load in cold rooms where there are short peaks and temperature are controlled. Exemple:

SMS

0000 alarm t1 30	Temperature alarm: 30°C + Dif. fixed: ±1°C
0000 delay t1 5	Activation and deactivation delay 5 minutes
0000 delay t1 5 10	Delay: Activation 5 / deactivation 10 minutes

Must comply with 2 factors: Temperature + Time Set

Temperature
31°C   5 min.
30°C
29°C

Actives the alarm in case of being more than 5 minutes (time delay) above 31°C (temperature alarm + differential) and does not disable the alarm until it is below of 29°C over 5 min. (temperature alarm - differential)

► **out** the alarm   ► **inside** the alarm

Features

LED´s

Signal GSM

(((●))) GSM
- on   → inserted and operational
- off   → without SIM card
- blinking → SIM card has PIN

Probe

● AL
- on   → in temperature alarm
- off   → without temperature alarm
- blinking → connection error
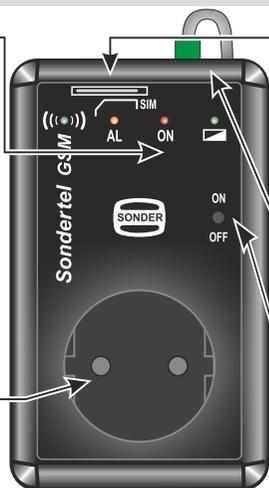
Power supply PWR

● ON
- on → with power supply
- off → without power supply

Relay

● on → activated
▭ off → deactivated

Application (RELAY)

16(5)A 250V~. The relay contacts are powered and provide a voltage of: **230V~ +10% -15% 50Hz máx. 2VA** to the aplication connected.

SIM card

Cardholder to insert a Mini-SIM that is operational and any company. Does not work with Mini-SIM card or the phone number doubled. Before installing the card, you should test it in a mobile phone. Specifically:
- Make sure it does not require a PIN for access
- Check the prepaid balance on the card
- Send a test SMS message and check that it is received.
- To insert SIM card, the control must be without power supply
Do not insert or remove the SIM card with the Sondertel powered.

Probe connection for temperature alarm

Connection for temperature sensor PTC2000 (-40°C...+140°C). When the sensor detects that the temperature has exceeded the limit set by the user, it actives or not (F. meet) the relay and sends an SMS to the phone number that activated the function.

ON / OFF button

Turns the relay on or off manually, without having to send a message.

Power supply connection

Before connecting to a power source, please insert SIM card and complete all connections required for the installation process.
230V~ +10% -15% 50Hz máx. 2VA

USE SMS MESSAGES TO CHANGES SETTINGS

The programming is done via SMS messages through a mobile phone. It is imperative to introduce exactly the same characters as they are written in the description. Phones with call in hidden number identification can only send orders and can not receive confirmation messages. When *Sondertel GSM* receives the order, it returns an SMS to the sender with confirmation of the new configuration, if you want to override this SMS (saving money card that manages the *Sondertel GSM*) must only add an asterisk (*) at the end of each order (not for relay status query and History temperatures)..

IMPORTANT: to receive SMS alarm, alive and other than shipping immediately has to register the phone number on control with the function inform.

(*) *It means that this order has the option to override the confirmation message by adding an asterisk at the end of the message*

acces code = **0000** (from factory, change by personal code)   ∪ = 1 space   Relay: **r1**   Temperature probe: **t1**

Change of acces code

	Exemple of SMS	
acces code ∪pass∪new code	0000 pass 1234	Changes the access code (from the factory default of 0000) and returns a confirmation message to the sender

Operative status (*)

acces code ∪alive ∪No days	0000 alive 1	Sends a test message every number of hours configurated to communicate that status of device is operative (SIM has money and works correctly). If programmed to 0, the function is off. Range: 0 (off) ... 45 days.
acces code ∪alive ∪No days*	0000 alive 1*	*Example of order without return SMS of confirmation (adding * at the end of the SMS order)* Programm the sending of test message without SMS of confirmation
acces code ∪alive	0000 alive	Sends a SMS with the time remaining for the next send of sms alive

To turns relay ON (*)

acces code ∪on	0000 on	Turns the relay on and returns a status message to the sender

Timed relay activation (*)

acces code ∪on ∪No minutes	0000 on 15	Turns the relay on for the number of minutes specified in the message and then switches it OFF. (Adjustable: 1 ...64 800 minutes.) This command returns two status messages to the sender: the first to confirming receipt of the command, and a second message when the relay status changes to OFF.

USE SMS MESSAGES TO CHANGES SETTINGS

To turns relay OFF (*)

acces code ∪off	0000 off	Turns the relay off and returns a message to the sender indicating the new status.

Timed relay deactivation (*)

acces code ∪off ∪No minutes	0000 off 15	Turns the relay OFF for the number of minutes specified in the message and then switches it ON. (Adjustable: 1...64800 minutes.) This command returns two status SMS to the sender: the first to confirming receipt of the command, and a second message when the relay status changes to ON.

Relays behaviors, MEET (*) You can link the relay to temperature alarm

acces code ∪meet	0000 meet	It returns a message with the status of the function on/off and device is connected as the operation of the relay
acces code ∪meet ∪off	0000 meet off	The relay operation is independent. The relay is activated by SMS or manually pressing the front button of *Sondertel GSM.*
acces code ∪meet ∪on	0000 meet on	When it detects an temperature alarm (rising or falling humidity) activates the relay permanently until there is a forced manual or by SMS.

Status Query If you missed a call the number on the SIM, SMS returns a test

acces code ∪test	0000 test	Send an SMS to the sender reporting the status of the relay, the time it is connected (if programmed), status of the GSM signal and current temperature.

Version

acces code ∪version	0000 version	SMS to the sender informing the program version, modem type and signal, status of PROMO.

Log telephone number for receiving SMS (*) To receive SMS alarm must register the phone number with the function inform on

acces code ∪inform ∪on	0000 inform on	Save the phone number that sent this order to send SMS alarm to occur. Save up to 4 phone numbers, then you have to clear before sending a new one.

Remove phone numbers for receiving SMS (*)

acces code ∪inform ∪off	0000 inform off	Delete the phone number you sent the order for receiving sms alarm.

Reset all phone numbers in memory for receiving SMS (*)

acces code ∪inform ∪reset	0000 inform reset	Deletes ALL the phone numbers stored in memory for alarm notification via SMS.

List of number of phones that receive SMS

acces code ∪inform	0000 inform	Returns an SMS to the sender reporting phone numbers that will send the SMS for alarm temperature

Alarm Settings Query

acces code ∪alarm	0000 alarm	Returns a text message informing the sender of the setting, on / off and values of temperature alarm

Alarm activation (*)

acces code ∪alarm ∪temperature °C	0000 alarm 45	Activates the Temperature alarm function, sets the temperature limit to that sent by the user and returns an SMS to confirm the new status. *If you also want to alert you when the alarm occurs it is necessary to send the order to inform on.*

Alarm deactivation (*)

acces code ∪alarm ∪off	0000 alarm off	Deactivates the alarm function and returns an SMS to confirm the new status.

Delay for activation/deactivation alarm (*)

acces code ∪delay	0000 delay	Returns an SMS to the sender informing of delays programmed to alarm temperature
acces code ∪delay ∪minutes ∪minutes	0000 delay 2 5	Delays on / off contacts alarm (default 0, disabled = reported immediately). You can set a common value for activation and deactivation (0000 delay 5) or different in each case, two values of minutes: 0000 delay 5 10). Range (0 ... 240 minutes).

Checkingaverage temperatures

acces code ∪avg	0000 avg	Returns SMS with the current temperature & the average temperature for the past 1, 4, 15 mins, 1 hr and 4 hrs. If you have already sent a valid command from the same number, you can obtain the status by phone. The **control** hangs up and sends an SMS with the above temperature data.

Calibration temperature probe t1

acces code ∪cal ∪value to subtract or add	0000 cal -0.3	Allows you to adjust the probe reading. Using a precision pattern thermometer, look at the current temperature reading and then adjust the probe reading to the reading of the standard thermometer. Scale: -10.0 to 10.0, factory set to 0.0.

To change SMS language

acces code ∪lang ∪n° nuevo idioma	0000 lang 0	Changes the language setting (default Spanish) to the selected language No: 0=Spanish, 1=English

Receiving messages Commercials (*) from factory setting in on

acces code ∪promo ∪off	0000 promo off	Sets the control to delete all commercials messages received
acces code ∪promo ∪on	0000 promo on	The control sends at the telephone number registered in function inform, all received messages that start with text.