

ELNUR

Automatic, manual and combined
STORAGE HEATERS



Gabarrón
Manufacturing Excellence

MAXIMUM EFFICIENCY IN HEAT STORAGE

Static storage heaters release heat by natural convection in two different ways. There is a primary convection controlled by a top flap that releases hot air after the storage heater is charged. But there is also a natural secondary convection that releases hot air 24 hours a day. This air is heated when it passes through the air chambers of the storage heater and is released through the top grille and the front and rear apertures. This natural secondary convection is generated by the design of the machine allowing a constant release of heat without leading to additional energy costs. Storage heaters only consume energy during off-peak hours at night.

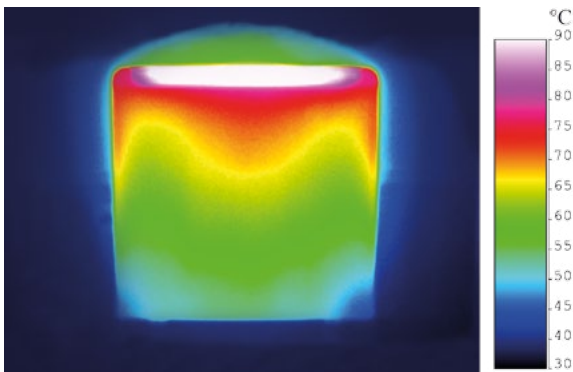
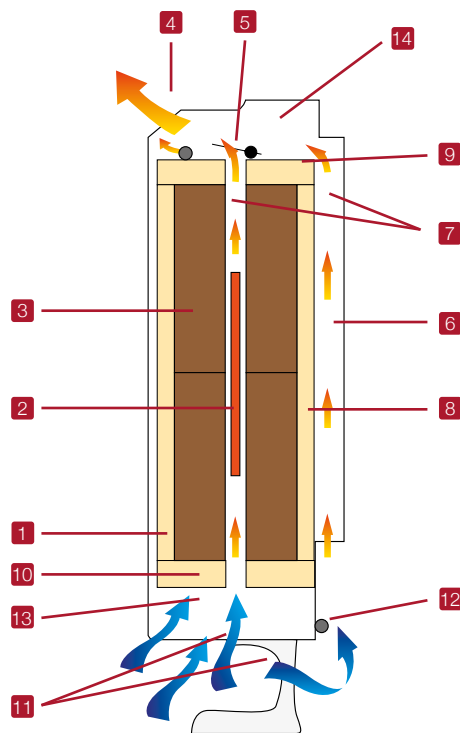
The high level of efficiency of **GABARRÓN** ranges of storage heaters can be seen in the following thermography thermal image obtained as a part of some of the tests carried out on the products.

In this image we see the evolution of the surface temperature (the equivalence of these temperatures and the colours appear in the column on the right).

Due to their high quality insulation, **GABARRÓN** ranges store and adequately retain the heat inside them during the charging off peak period, before releasing it during the discharging period.

STATIC STORAGE HEATER (Natural convection)

- 1 Front insulation.
- 2 Heating element.
- 3 Accumulation core.
- 4 Air flow out grill.
- 5 Discharge door, includes automatic damper control.
- 6 Air Chamber.
- 7 Air flow.
- 8 Rear insulation.
- 9 Vermiculite upper insulation.
- 10 Vermiculite lower insulation.
- 11 Fresh air inlet.
- 12 Dual sensor control thermostat.
- 13 Manual reset thermal safety cut-off.
- 14 Thermal limiter.



Static Storage Heater
Thermography

This thermography shows how the heaters maintain a high degree of control over the energy inside them. This heat is released through the top grille, and at the same time the rest of the storage heater remains at a moderate temperature.

Engineering of the **GABARRÓN** ranges of storage heaters is totally safe and provide maximum efficiency in their operation. They use only the energy stored in off-peak periods. These ranges are manufactured with storage blocks considerably better than the market average and with an insulation technology that it is definitely the best in the industry. This is why **ELNUR** can guarantee excellent heating comfort 24 hours a day.

STORAGE HEATERS

GABARRÓN storage heaters work while you are sleeping. At night, during the off peak period when electricity is cheaper, storage heaters internally charge their energy before slowly releasing it into the room.

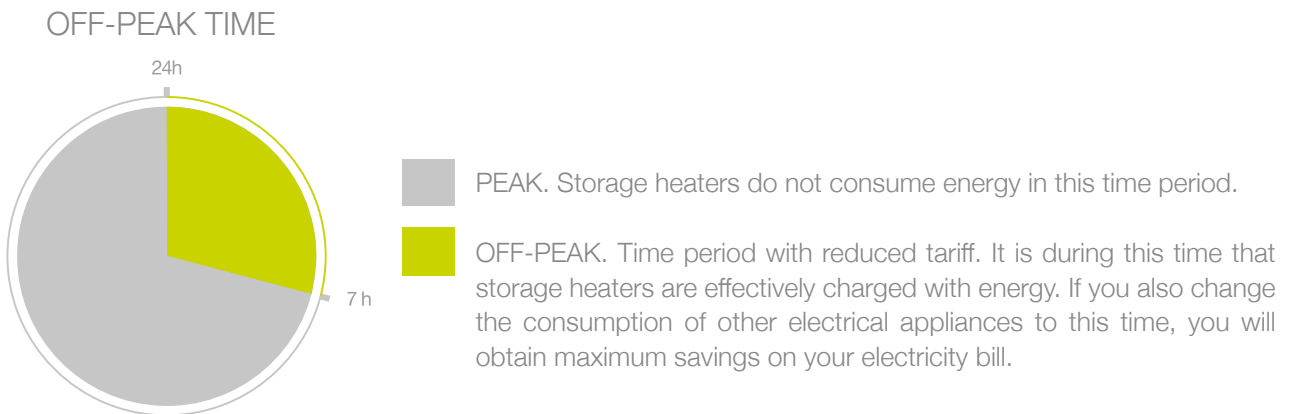
Especially designed for use during the off-peak period, GABARRÓN storage heaters are the ideal solution for obtaining constant heat 24 hours a day. They provide a warm and comfortable temperature that is ideal for cold climate zones, where heating is required not only for a few hours, but where a pleasant and warm temperature is preferable around the clock.

A storage heater charges energy internally for a set period of time, which usually coincides with the time in which electricity is cheaper (off-peak tariff), before releasing it into the room continuously throughout the day. The quality and quantity of the materials used in the construction of the storage heaters is crucial, as these machines must be capable not only of storing a large amount of heat internally under strict safety parameters, but also, and most importantly, of heating a room comfortably, over 24 hours.

Static Storage systems release the heat continuously over 24 hours. Their quick and easy installation, in new and old buildings alike, eliminates the risk of expensive alterations or modifications, as well as any needless inconvenience for the customer. They can be installed in a few hours.

It is very important to determine precisely the size and amount of units necessary to meet the heating demand of one or several rooms. An incorrect calculation (above or below what is needed) will have an adverse effect on the storage heater system and on the cost of the installation, as well as the levels of efficiency and comfort required. The correct calculation of heat requirements in each room by a professional will be key to optimising the installation and reducing running costs.

They do not require maintenance or any form of annual servicing, providing a considerable saving over the years compared to other heating systems. The storage heaters manufactured by ELNUR can be used with renewable energy sources coming from alternative resources such as sun or wind.



SH-M

Manual static storage heater

Designed to use the low cost off-peak electricity rates



Technical features

- Designed to use Off-Peak electricity.
- Grille painted in a heat resistant colour.
- Damper control device.
- Safety thermostat with manual reset.
- Class I insulation.
- Discharge thermostatic regulator. In the SH6-M this regulation is automatic, not including the discharge control.
- Charging thermostat with phial.
- Microtherm G 10 mm insulation, vermiculite and ecological fibre.
- Side, front and rear air chambers.
- High density storage blocks.
- Ultra slim, only 15 cm.
- Robust plastic fittings.
- Powder coated RAL 9010 steel structure.

Manual storage heaters are the entry level of the different storage heater types. The smallest model - SH6-M has a single user adjustable control for input charge with the output being automatic, the remainder models have two user adjustable controls – one for input charge and one for output control. These controls are simple rotary dials and operate from a minimum to maximum setting between 1 -5, therefore, each number equates to 20% of capacity. The heater is fitted with a manual “damper control device” and a charging thermostat and therefore, the settings applied by the user on the input and output controls will be exactly adhered to by the heater.

MODEL	MANUAL MODELS				
		SH6-M	SH12-M	SH18-M	SH24-M
Output 230 V / 240 V	W	800 / 871	1600 / 1742	2400 / 2613	3200 / 3484
Accumulated energy	kWh	6.4	12.8	19.2	25.6
Length	cm	31.5	54	76.5	99
Width*	cm	15	15	15	15
Height	cm	72.5	72.5	72.5	72.5
Total weight	kg	43	79	116	152
Number of Blocks 8kg		4	8	12	16
Frequency	Hz	50-60	50-60	50-60	50-60
EAN 13		8432336105104	8432336105302	8432336105500	8432336105708

*Plus 2cm space from the wall



SH-A

Automatic static storage heater

Designed to use the low cost off-peak electricity rates



Technical features

- Designed to use Off-Peak electricity.
- Grille painted in a heat resistant colour.
- Automatic damper control device.
- Safety thermostat with manual reset.
- Class I insulation.
- Discharge thermostatic regulator.
- Charging thermostat with Dual Sensor.
- Microtherm G 10 mm insulation, vermiculite and ecological fibre.
- Side, front and rear air chambers.
- High density storage blocks.
- Ultra slim, only 15 cm.
- Robust plastic fittings.
- Powder coated RAL 9010 steel structure.

Automatic storage heaters benefit from an automatic damper control device and a dual sensor thermostat. In real terms, this means that when charging, the outlet damper (cover) inside the heater closes automatically reducing the heat emission during charging to conserve more heat for the days' use. The dual sensor thermostat measures the temperature inside the heater and also the room temperature, by understanding this, the automatic storage heater will adjust its' charging capacity as required. These factors result in an automatic storage heater providing greater user comfort levels and reducing energy consumption by up to 15%

MODEL	AUTOMATIC MODELS			
		SH12-A	SH18-A	SH24-A
Output 230 V / 240 V	W	1600 / 1742	2400 / 2613	3200 / 3484
Accumulated energy	kWh	12.8	19.2	25.6
Length	cm	54	76.5	99
Width*	cm	15	15	15
Height	cm	72.5	72.5	72.5
Total weight	kg	79	116	152
Number of Blocks 8kg		8	12	16
Frequency	Hz	50-60	50-60	50-60
EAN 13		8432336106309	8432336106507	8432336106705

*Plus 2cm space from the wall



CSH-A

Automatic combined storage heater

Designed to use the low cost off-peak electricity rates

Technical features

- ↘ Automatic storage heater with integral convector heater.
- ↘ Independent thermostatic control convector.
- ↘ Designed to use Off-Peak electricity.
- ↘ Grille painted in a heat resistant colour.
- ↘ Automatic damper control.
- ↘ Safety thermostat with manual reset.
- ↘ Class I insulation.
- ↘ Charging thermostat with DUAL SENSOR.
- ↘ Microthem G 10mm insulation, vermiculite and ecological fibre.
- ↘ Side, front and rear air chambers.
- ↘ High density storage blocks.
- ↘ Robust plastic fittings.
- ↘ Powder coated RAL 9010 steel structure.



Elnur combined storage heaters are the perfect solution for main living spaces such as a lounge area. They are also automatic and provide all of the features and benefits detailed on the last page. These heaters also have the addition of an "on-peak" emitter (heating element) built in. The on-peak emitter is separately controlled from the storage side and its operation and temperature setting is user regulated.

In the milder weather of Autumn and Spring, a user may not feel that the temperature is low enough to warrant over-night charging but, may occasionally require short bursts of heat during the day. With this addition, the user can manage their heating more effectively and with greater flexibility.

MODEL		CSH12-A	CSH18-A	CSH24-A
Output 230 V / 240 V	W	1600 / 1742	2400 / 2613	3200 / 3484
Accumulated energy	kWh	11.90	17.85	23.8
Length	cm	54	76.5	99
Width*	cm	18.5	18.5	18.5
Height	cm	73	73	73
Total weight	kg	80	117	154
Number of Blocks 8kg		8	12	16
Frequency	Hz	50-60	50-60	50-60
EAN 13		8432336104305	8432336104503	8432336104701

*Plus 2cm space from the wall

PERFECTLY ADAPTED TO CUSTOMER REQUIREMENTS

GABARRÓN storage heaters are the perfect heating system for temperate, cold and very cold climate zones, where the user can enjoy a pleasant and warm feeling of comfort 24 hours a day.

Thanks to their operation during off-peak hours, you will have permanent heat in your home, reducing your electricity bill as well as recovering your initial investment in the heater in a short period of time.

Their quick and easy installation, in new and old buildings alike, eliminates the risk of expensive alterations or modifications, as well as any needless inconvenience for the customer. They can be installed in a few hours.

They do not require regular maintenance or any form of annual servicing, providing a considerable saving over the years.

100% SAFE AND ENVIRONMENTALLY FRIENDLY

GABARRÓN storage heaters are a heating solution that, while providing heat 24 hours a day, avoids consuming fossil fuels such as diesel heating oil or gas. They have no fuel tanks or hydraulic circuits, and therefore there is no risk of leaks.

They can be used and operated with renewable energy sources coming from alternative resources such as sun or wind. Furthermore, they neither emit CO₂ nor pollute the environment.

They are 100% safe. Each and every storage heater that we manufacture is rigorously tested to ensure its proper functioning and compliance with the strictest international requirements with regard to electrical safety.





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