



# ELECTRIC HEATING

AREAS OF APPLICATION  
Process and industry

# Facts about Värmebaronen

✓ Värmebaronen began operations in 1975 and is now one of the leading manufacturers of heating systems in Sweden. Our products are known for their high quality and long service life. An extensive product range makes it possible to create carefully considered, reliable heating systems.

✓ Our development department works constantly to adapt our products to market requirements and demand.

✓ Our product range meets the maximum requirements for technical reliability, ecofriendliness and cost efficiency.

✓ Our products provide heating for satisfied customers on our Scandinavian domestic market and in the rest of Europe, Asia and the USA.

✓ Värmebaronen OEM manufactures customised solutions. We share all the knowledge and experience we possess.

Please contact us!



Connect several EP NG boilers together. This produces an extremely reliable heating package that also produces heat during repair or service. Output up to 3 MW.



EP NG 31-600

EK 13, EK 15 E, EP 26/42 E,  
IMMERSION HEATERS, 1.5-9 kW

## Wide range



**Värmebaronen has the widest range of electric heating products on the market. Everything from a 1.5 kW immersion heater to the largest electric boiler with an output of 600 kW.**

Not so long ago, electric heating was often installed as the primary heat source in houses and other properties. It is now often used as additional heating to one or more heat pumps, for example. The cost of installing an electric boiler is low and the job is fast and easy. When it is cold outside and the heat pump does not manage to maintain the heat, the topup heat from the electric boiler is invaluable.

### **Immersion heaters**

Economical and reliable. Suitable for most heating systems. Also for customised solutions for industry, for example.

### **Electric cartridges**

Output 13-15 kW. Easy to connect to the heating system.

### **Electric boilers, EP 26 E & EP 42 E**

Output 26-42 kW. An outdoor temperature compensator, UTK-E, is available as an accessory.

### **Electric boilers, EP NG 31-600 kW**

For a block of flats, business premises or hotel or simply as

a supplement/additional heating for a heat pump system.

### **Interconnectable to 3 MW**

Several EP NG electric boilers can be connected together to 3 MW (5 x EP 600 NG).

### **Customised**

We also build boilers in different materials for different temperatures and voltage options (230-690 V).

Object >



KLF  
Grain dryer,  
Rödaleid

# KLF Kristianstadortens Lagerhusförening

Six EP 750/690 V, total output 4.5 MW



**By switching from grain drying using oil as the fuel to drying with electric boilers, energy costs were reduced by SEK 400,000 in the first season.**

Electric boilers mean minimum annual maintenance and an even drying temperature, which contributes to cost reduction.

Electric boilers were chosen because oil is too expensive and drying with biofuel involves additional staff for operation and maintenance during the drying period for 4-6 weeks every summer. The local district heating network is unable to supply the process with sufficient energy and

maintain the desired temperature, approximately 100°C. KLF's Board decided, therefore, to invest in a transformer station to be able to buy high voltage, 12,000 V, at a low cost. This is then transformed to 690 V operating voltage.



“When we summarise the 2013 drying season, we can say that the decision to replace the oil-fired boiler with drying with electric boilers saved us time in terms of reduced maintenance work and also dramatically reduced energy costs.”

*Tommy Nilsson/Site Manager, Rödaleid*



Bäckaskog slott in north-eastern Skåne is perhaps best known as Charles XV's summer palace.

# BÄCKASKOG Slott

EP 52 output 52 kW additional heating for heat pump



**Bäckaskog slott in north-eastern Skåne is perhaps best known as Charles XV's summer palace.**

With a history going back to the 13th century, the palace has been a monastery, a fief and the official residence of the colonel of the Southern Skåne Cavalry, before it became a royal summer residence.

The palace and its rose garden are now open to the general public with a hotel, a restaurant and conference premises.

Ground source heat has been used to heat the palace and annex for several years.

The palace is heated by 3 NIBE Fighter 1320 of 40 kW each. In addition to the pumps, it was decided to install a Värmebaronen EP 52 NG electric boiler to provide additional heating when demand is high.





VLT  
Very Large  
Telescope

# TELESCOPE *Atacama Desert*

EP 150, EP 135, EP 119, EP 84 and EP 67



**The world's largest telescope, VLT, was put into use in Chile in March 1999.**

On Mount Paranal, 2,600 m above sea level in the Atacama Desert, researchers have optimum conditions for astronomical observations. Therefore, four

interconnected telescopes have been installed here in a European partnership. Together, they function as one gigantic telescope with a resolution that would allow you to see a mosquito in Lapland from Stockholm.



At a site such as Paranal, participation depends on the ability to meet high reliability requirements. ESO, which operates the system, chose Värmebaronen EP for its heating requirements.



HMS VISBY  
Corvette  
Photo: Kockums

# CORVETTE HMS Visby

EP 42 stainless 42 kW



**Visby class or Corvette type Visby is a series of five corvettes designed by the Swedish Defence Materiel Administration, FMV.**

The ships are being made by Kockums AB in Karlskrona and have stealth functionalities.

They are designed to be able to perform many different types of task. The hulls of the 600-tonne ships are made of carbon fibre-reinforced plastic laminate instead of steel. The ships do not have conventional propellers and instead use water jet units that are a driven

by combination engines consisting of both diesel engines and gas turbines. The first ship in the series was launched on 8 June 2000 and the first two ships were delivered to the navy on 16 December 2009. Another ship was delivered on 18 December 2013.

Corvettes of type VISBY are fitted with stainless, modified EP 42 that have to cope with 6 G, among other things.





**DE-ICING**  
Snow and ice  
are removed

# DE-ICING Winter maintenance of trains

EP 70 with exchanger, 70 kW



**Efficient, fully automatic de-icing system.**

De-icing is a patented solution for removing snow and ice efficiently. Eco-friendly, biodegradable propylene glycol is heated with an electric boiler via a plate heat exchanger in a closed system.

After de-icing, a thin film is left on the chassis to prevent refreezing. The system is extremely energy-efficient and allows the train to be serviced fast.



In the winter, a train's chassis ices up, reducing its functionality.



Timsfors  
Frost protection  
for sluice gates

# SLUICE GATES Timsfors

Seven Thermoflow, total 77 kW



**The power station in Timsfors-Markaryd has electric boilers to protect the sluice gates against frost.**

Each electric boiler has 11 kW output and is supplied complete with integrated expansion tank, safety equipment and a circulation

pump that pumps a warm glycol mixture through stainless pipes that are welded to the rebates on each sluice gate. The total power requirement is 77 kW, divided between 7 Thermoflow NG electric boilers.

Stainless cabinets are installed on seven of the posts in the photo above. Each of the cabinets contains a Thermoflow NG electric boiler.





**POOL**  
Aggressive  
chlorinated water

# WAVE POOL Skara Sommarland

Two EP 255, total 510 kW



**Skara Sommarland wave pool with a 60-metre shore line and capacity for up to 700 bathers.**

The system is heated by two electric boilers connected in series with total output of 510 kW. As chlorinated pool water is an aggressive medium, a plate heat

exchanger made of titanium has been installed to protect the parts of the electric boilers in contact with water. The heating system ensures that the water is kept at approximately 35°C, allowing visitors to enjoy pleasantly warm water throughout the season.



The biggest wave pool in the Nordic region is 1,500 square metres in area with a 60-metre long beach, 1-metre high waves and a lovely sun beach.

**These are a few of the customers currently using Värmebaronen products:**

**Aarhus Karlshamn Sweden  
ABB Corporate Research  
Akzo Nobel  
Alfa Laval  
Astra Zeneca  
Fortum  
IFÖ verken  
Kockums-ThyssenKrupp  
LKAB  
Outokumpu  
R-Contracting  
SAAB  
SAPA  
Technical Research Institute of Sweden,  
Borås  
Volvo**



# We heat all types of liquid medium

**We also make electric boilers that we customise to a greater or lesser extent to meet our customers' requirements.**

This may be a series of electric boilers as part of complete system supplies or a single boiler for a specific industrial process. In all cases, we share all the knowledge

and experience we possess.

In principle, we are able to heat all liquid media. This is done either with flow directly through the electric boiler or indirectly via an exchanger, where the boiler is connected to the primary circuit and the medium circulates through the secondary circuit. The electric

boiler is fitted with a heat exchanger so that it is not damaged by the medium it is to heat. We have well-established partnerships with manufacturers of heat exchangers.

**CONTACT VÄRMEBARONEN'S OEM DEPARTMENT WHEN YOU HAVE A PROJECT THAT NEEDS HEATING.**



The head office and modern production plant are in Österslöv,  
10 km north of Kristianstad in north-eastern Skåne

**WE MANUFACTURE ALL PRODUCTS IN OUR OWN FACTORY  
IN SWEDEN.**

At Värmebaronen, we believe it is important to have full control over the entire production chain from drawing to delivery. We also think it is important to protect Swedish jobs and our environment. Therefore, all of our activities are located in the small village of Österslöv in north-eastern Skåne.

At Värmebaronen, you can find pellet-fired, wood-fired and combination boilers. As well as pellet burners, solar panels, electric boilers and additional heating for heat pumps.

You should also know that Värmebaronen will always give you personal service from our heating consultants. Please do not hesitate to give us a call!



[www.varmebaronen.com](http://www.varmebaronen.com)



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