

# Pellet and Wood Burners from RVR



**Pellet burners**

**Pellet boilers**

**Firewood boilers**

**Accumulators**





# The best solution for heating your home



*A bungalow with a Vedolux and three Aqualux accumulator tanks. When the accumulators are heated up they retain heat for a long time, making wood burning both convenient and environmentally friendly.*



*This couple changed their old multipurpose boiler for economical pellet heating with a Comet boiler and a Viking Bio pellet burner.*



*This family chose a Värmebaronen boiler instead of a geothermal heat pump. The low investment cost meant that they could also buy additional insulation and a new bathroom with a Jacuzzi.*



# Pellet burning

## simple, cheap and environment friendly

**Good quality pellets consist of wood which has been tightly compressed, nothing else. Waste sawdust from sawmills is compressed into small pellets which becomes an easily manageable fuel with a high energy content.**

While a tree grows it takes up carbon dioxide. When it dies it then releases the carbon dioxide back into the atmosphere. This is a process that has gone on for thousands of years without any effect on the environment. When pellets are burned the same thing happens. The carbon dioxide stored in the wood is released back into the atmosphere. Therefore, using pellets as a combustible fuel does not have a negative influence on the environment.

### Clean smoke

Burning pellets in densely populated areas is not a problem. A correctly adjusted unit produces clean smoke gases and does not cause any discomfort to neighbours.

### Economical

After firewood, pellets are the next cheapest type of energy on the market. In most cases, energy costs are much cheaper than heating a home with a heat pump. If the total cost for a pellet burning system is compared with that of a geothermal heat pump the price for the pellet system is less than half.

### Why doesn't everybody burn pellets?

Using pellets as a combustible fuel requires a little bit of work. Pellets, like all solid fuels, produce a certain amount of ash and soot while burning. The soot causes the smoke gas temperature to climb and the boiler should be cleaned when the flue temperature indicator shows 50°C higher than when it does when the boiler has just been cleaned. This applies to all pellet burning systems; even if some manufacturers claim that their burners work like oil burners and do not need to be cleaned.

### It is important to have an easily cleaned system

Värmebaronen's systems are cleaned in just ten minutes, thanks to the boiler's hinged door and easily accessible flues. The cleaning intervals vary, from once a month to once a week during the coldest weeks of the year.



Comet with Pellet Store 100





# VIKING BIO

## PELLET BURNER

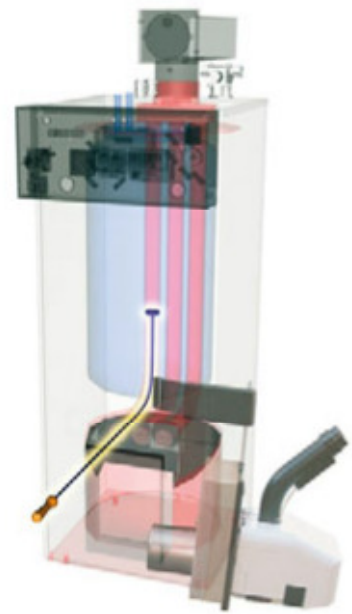
### All our pellet boilers are easily maintained

**With a boiler and burner from Värmebaronen you get a system that is easily maintained. And that's a good thing – because then the maintenance gets done.** All boilers, regardless of make, must be kept clean. Just a millimetre of soot reduces the system's efficiency. On all of Värmebaronen's boilers the heat-absorbing surfaces of the boiler tubes are very easy to get at. With the help of the accompanying brush the tubes are cleaned in just 30 seconds. Unbeatable! The soot falls down into the boiler's combustion chamber and can be swept up or vacuumed with the ash. Simple!

**Check how the pellet boiler is cleaned!** When you choose a boiler for burning pellets check carefully how cleaning is done. Even if pellets are cheap source of energy there is no point in letting all the heat disappear up the chimney. A clean boiler means you get to keep money for something else.



The burner can be swung in all directions.



Simple cleaning from the front.

# VIKING BIO

## PELLET BURNER



### Economy

- Normally, Viking Bio starts with a low output. If the burner notices that this is not enough (very cold outside) it automatically changes to a higher output.
- The Viking burner feeds in small amounts of pellets often instead of larger amounts less frequently. This gives a more even flame which, in turn, gives higher efficiency. Good pellet quality is a prerequisite.
- Viking BIO has been tested by the Swedish National Testing and Research Institute (SP) and has been shown to be highly efficient.

### Comfort

- In the case of a high hot water requirement, such as when the whole family takes a shower during a short period of time, the burner automatically senses the increase in consumption and starts to heat the water before the boiler demands more heat (accessory). This is important if you have a heat exchanger.
- Viking BIO has an outlet for an external audible or light signal. Good to have if, for example, you have forgotten to fill up with pellets.
- The Viking bio runs very quietly and is easy to clean.

### Environment

- Viking BIO has been tested by the Swedish National Test and Research Institute (SP) with good results.

### Safety

- When starting up, the burner checks that the boiler and chimney are safe to burn in. If, for example, these are blocked with soot the burner does not start.

- Safety has been tested by SP. Of course, Viking Bio is marked with SP's P-mark (meets legal and authority requirements).

### Reliability

- The only part that moves in the burner is the fan. All parts that become hot are manufactured using stainless steel of the highest quality.
- Viking Bio has a highly reliable electric starter. The start element is monitored so it does not overheat. Therefore, it is unusual that the start element ever needs changing, a problem that occurs on many pellet burners.

### Easy maintenance

- The burner is secured with easily accessible quick-release fasteners. Electrical connections and the pellets feeder pipe also have quick-release fasteners. You can easily release the burner from the boiler in approximately 10 seconds. The burner is light and easy to carry.

### Information

- about the cause of any problem can be easily read on the boiler's panel. It is easy to correct the problem.
- The burner's unique ignition process eliminates the risk of smoke gases collecting and then igniting with explosive force (a common problem with pellet burners). The burner ventilates both itself and the boiler when starting up. Then it starts slowly and carefully. The flame slowly builds up to the desired effect.
- The burner continually senses if the temperature in the pellets fall pipe or ambient temperature is too high. The back pressure in the burn chamber is checked. The flame is monitored by a photo-electric cell. Should the burner not start for some reason it automatically blows out all the smoke gases out of the boiler before starting.





# Environment friendly, economical and safe pellet burning

**Viking Bio pellet burner is designed to burn stably, economically and safely. Where other burners have problems with "puffs" and blow-backs Viking Bio burns steadily.**

By monitoring the boiler and chimney before start, during operation and after the burn phase, the burner makes sure it always burns in a safe environment.

The burner's panel indicates problems such as chimneys blocked with soot and problems with supply air BEFORE an incident takes place. Do not take risks - check carefully which pellet burner gives you the best security.

**Safety and high efficiency were of the utmost importance to the designers during the whole of Viking Bio's development phase.**

*Per-Åke Lindstrand*  
Product Manager, Development Department



*Quick-release fasteners make the burner easy to keep clean.*



*Quick-connector for the pellet feeder*

*Temperature monitored feeder pipe.*

*Low weight makes the burner easy to handle*

*Burner head with a turbulent flame*

*An informative panel*

*Quick connect fastener.*

*Modulated operation*

*Electrical connections with quick-connectors*

## A GOOD TIP!

**Buy your burner and installation from a knowledgeable heating installation specialist. In that way you get the best economy – and your Viking Bio will last longer.**

An incorrectly installed burner will turn your boiler sooty, burn more fuel and cost money. In addition, the life length of the burner's vital components will reduce considerably. A readjustment of a correctly installed installation is included after about a week.

**Make sure** it is installed correctly and you will get a problem-free burner that burns as economically as possible.

### **Choose a quality installer!**

If you do not already have a reputable installer in mind, RVR can recommend one for you.

**Look upon adjustment as an investment.**



# Apollo | Star

## Pellet Boilers

### **Apollo and Star are efficient, easily managed multipurpose pellet boilers.**

Apollo and Star are controlled by a mechanical thermostats. The boilers have been developed to meet high reliability requirements.

### **Pellets mode**

Firing with solid fuel produces ash which must be removed if good fuel economy is to be maintained. These boilers are easy to manage thanks to a burner door with snap latches and quick-release connectors for electricity and pellets.

### **Hot water with a heater – Apollo**

The copper hot water heater supplies up to 300 litres of water at 45°C. Boilers with water heaters like Apollo are relatively insensitive to lime in the water and can quickly provide large amounts of hot water.

### **Hot water with a heat exchanger – Star**

The heat exchanger produces hot water according to need. The water is heated as it passes through the exchanger on its way to the tap.

### **Lime in the water?**

#### **Choose a hot water heater!**

Lime deposits in the exchanger reduce both its heat transfer properties and its hot water capacity. Check your water or have it tested if you are unsure.

### **Easy installation**

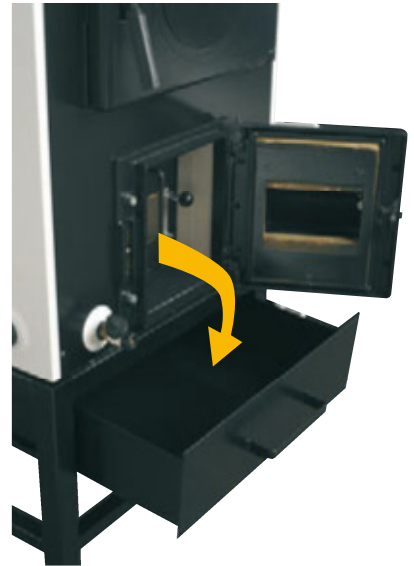
Thanks to their compact size Apollo and Star are simple to install in your boiler room. Star is only 120 cm tall and all connections are easy to get at.

### **A damper increases the efficiency**

To prevent unnecessary ventilation and cooling of the boiler when the burner is not operational there is an air damper fitted in the flue pipe.



*On all wood-fired burners in our range the heat-absorbing pipes are cleaned through the same door. There are no inaccessible doors on the top or sides of the boiler. You can stand comfortably and have full control over what you are doing.*



*After cleaning with the accompanying brush you rake out the ash and soot into the ash pan which sits in the stand (accessory). There, the hot ash is safely stored until it is time to empty the ash pan.*

## Save time, hassle and your pocket by choosing an easily managed installation

**An easily cleaned firewood burner saves a lot of time and work.** All of Värmebaronen's firewood boilers are tested and have been shown to have high efficiency – but the most important thing is that the boiler is easily cleaned. Otherwise, soot and deposits can cause heat to leak out of the chimney instead of staying in the boiler where it is put to good use. Regular cleaning takes just a few minutes, so you can do it as often as you want. As a result you consume less wood and spend less time firing the boiler!

**Always check how cleaning is carried out when you choose a wood fired boiler!** An easily cleaned boiler will save your back and knees, give good fuel economy and save a lot of time and effort in the boiler room. Remember that you are going to be friends with your boiler for a long time. What seems easy now can become an unpleasant task when you get older. A wood-fired boiler should be cleaned from the front, not from above or from the side where it is cramped and difficult to get in. Then there is a big risk that the cleaning never gets done.

**Did you know that it takes just around one minute to light the boiler?** With the accompanying LPG lighter the boiler is quickly lit and, therefore, environmentally friendly. As the boiler becomes fully operational in such a short time the amount of smoke produced is minimal. Good for the environment and you remain friends with the neighbours!



*With the accompanying LPG lighter you light the burner in around one minute. Quick and environment friendly.*



Firewood boilers with a fan

# Vedolux 30 Vedolux 37



Vedolux 37

Vedolux 30

## Two fan assisted firewood boilers for 500mm logs.

These boilers, like all other firewood boilers from Värmebaronen, are designed to make wood firing simple and uncomplicated by making them easy to clean and keep free from soot. This means you save wood – and spend less time swinging an axe.

### Fan flue means excellent combustion.

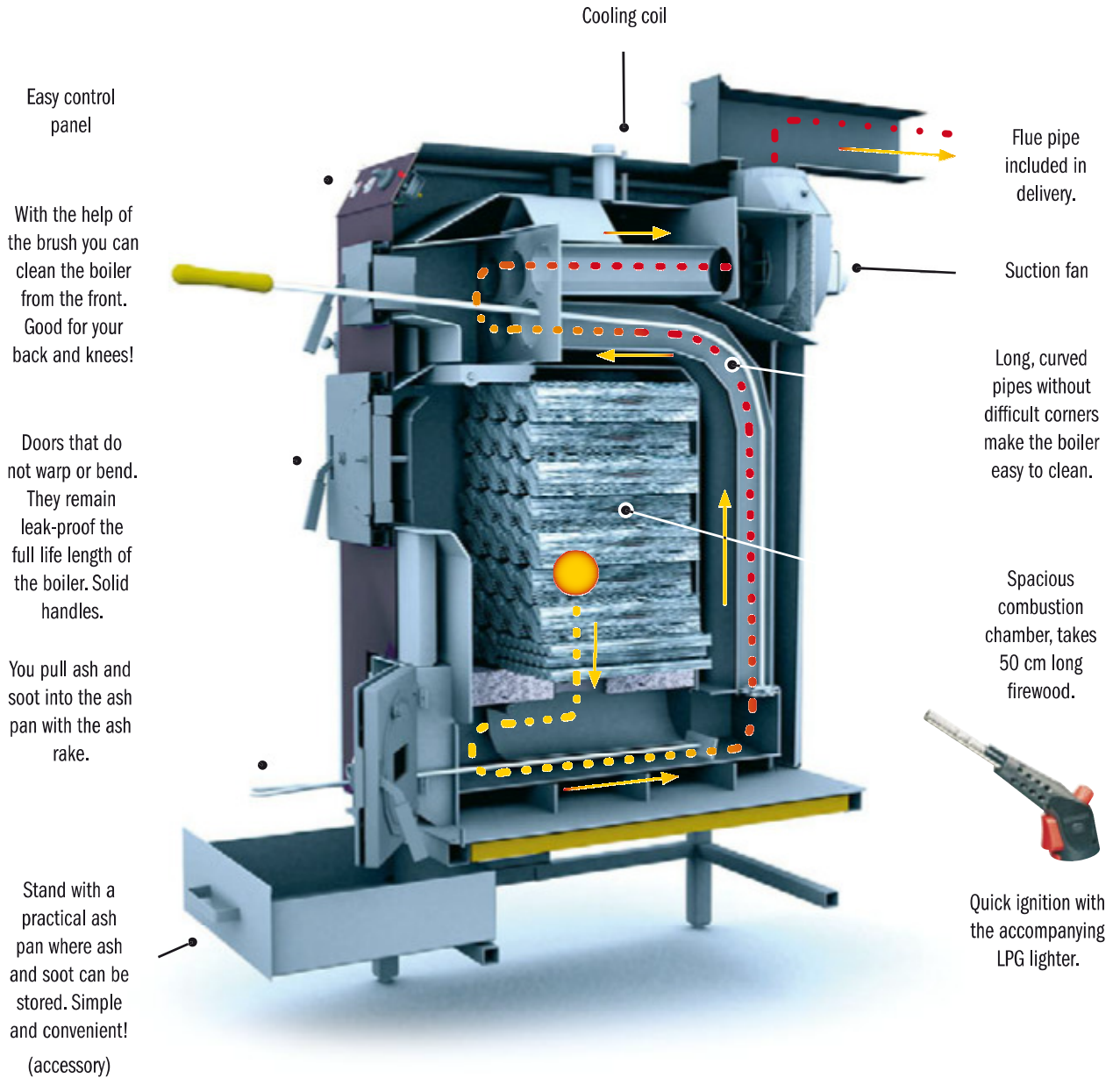
Vedolux 30/37 works through reverse combustion with the help of a suction fan. Therefore, they can be connected to a chimney that does not meet requirements for natural ventilation. This is good if you have a low and narrow chimney.

The fan stops automatically when the fire has died which reduces unnecessary heat extraction.

## Convenient and economical heat with a buffer tank.

Vedolux 30/37 should be fired together with buffer tanks. Most suitably, the boiler should have one or more buffer tanks supplemented with automatic filling and a hot water heater. In this way you get a high degree of efficiency.

The buffers hold heat for a long time and wood-firing becomes simple and convenient (you do not have to put wood into the boiler so often). The volume of the buffers should be dimensioned to suit the size of the house. RVR can help you calculate what your home requires.



*Cutaway picture of Vedolux 37. Vedolux 30 has the same functions but the doors are of a different design.*

### Vedolux 30/37 in general

Vedolux 30/37 are wood-fired boilers with suction fans. The combustion chambers are designed for reverse combustion with ceramic grates. Combustion chamber depth is 500mm and takes wood in 500 mm lengths. If used correctly the boilers give a high degree of efficiency and release only small amounts of substances hazardous to the environment. These boilers have been tested and environmentally approved.

### Easy to clean = saves time and wood

All flues are cleaned through the same door at the front of the boiler. Therefore, it is easy to clean regularly. As the flues are rounded you don't miss corners that are hard to get at. Otherwise, soot and deposits can cause heat to leak out of the chimney instead of staying where it comes to good use.



*The fan on the back of the boiler.*

## Double boiler

# Biomax



*The burner is not included.*

### **New Biomax uses tested double boiler technology but is also suited to modern biofuels and offers excellent comfort.**

Biomax gives you the freedom to choose fuel based on what you yourself find easiest and most economical. The boiler can be fired on either pellets or wood.

Separate boilers make it easy to choose the type of fuel.

### **Combination burning has its advantages**

For example, you can burn wood during the autumn and use pellets during the winter. In the summer you use pellets to heat your water. You choose what suits you best. When you don't want to burn wood, pellets are still an economical option.

### **Simple firewood burning**

The firewood combustion chamber is 40 cm deep and is designed for reverse combustion with ceramic grates and an afterburner. The

boiler is lit using the accompanying LPG lighter in around one minute. All cleaning is done through the same door on the front of the boiler. It could not be easier.

### **Convenient pellet burning**

The Viking Bio pellet burner can remain fitted to the boiler. The boiler door has a snap latch and can be opened so far that the burners hang by the side of the boiler. A pull out ash pan in the bottom of the combustion chamber eases removal of ash from the boiler.

### **Environmentally approved**

The boiler has been tested by the Swedish National Testing and Research Institute and offers excellent performance.

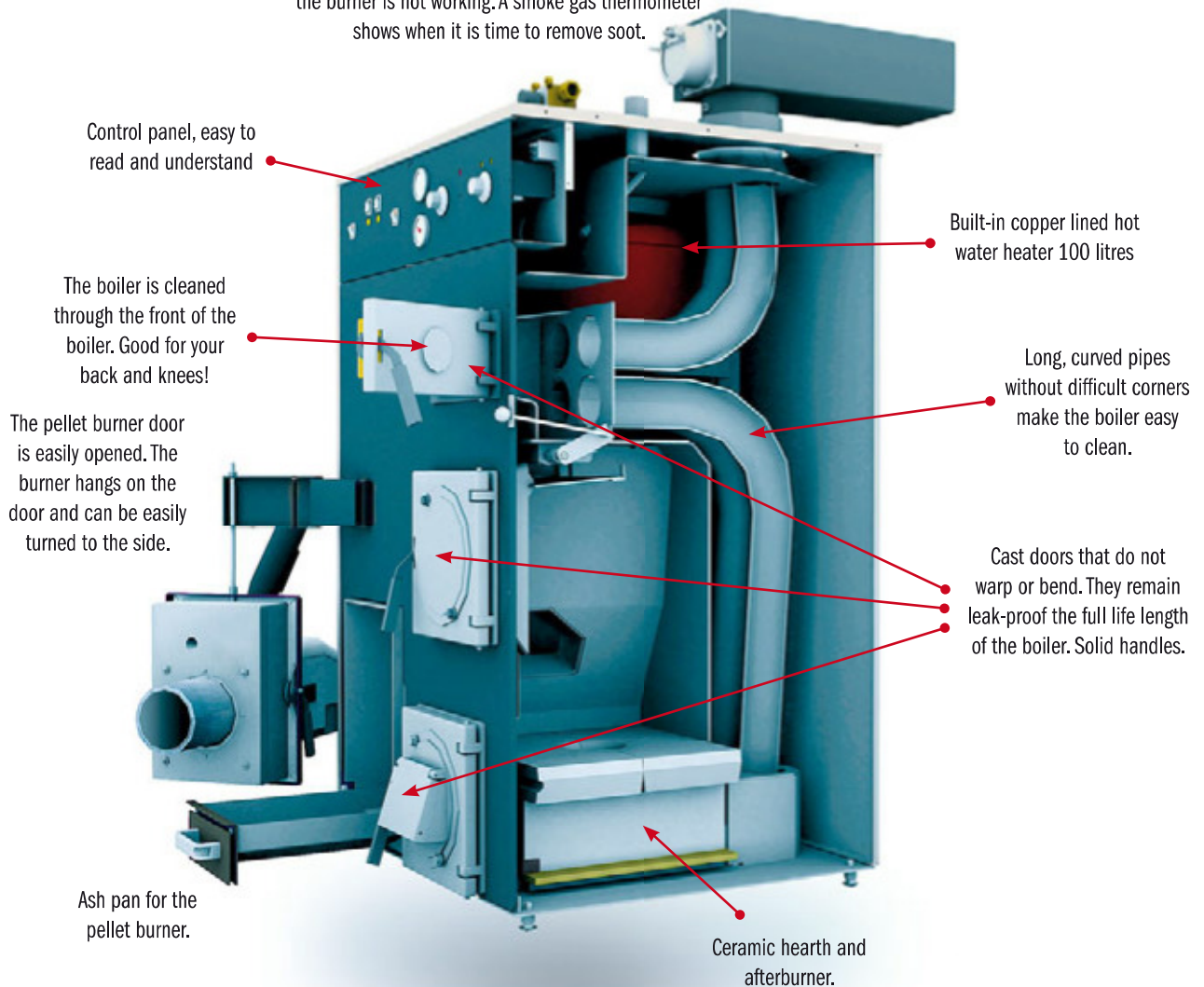
If you use firewood you need an accumulator tank, if you just burn pellets you can manage without one.



*The burner door and pull out ash pan make soot removal and cleaning easy.*



A damper in the flue pipe reduces heat loss when the burner is not working. A smoke gas thermometer shows when it is time to remove soot.



**BIOMAX is equipped with two hearths. One is intended for wood burning and in the other a pellet burner is fitted.**

BIOMAX is prepared for the Viking Bio pellet burner from Värmebaronen. There is plenty of room for ash in the hearth and cleaning away soot is simple. The burner can always remain on the boiler thanks to the hinged burner door. The boiler also has an ash pan which simplifies handling.

**An easily maintained boiler is economical**

Biomax is very easy to clean regularly. Therefore, the job is not avoided. You get good fuel economy, saving time and money. Remember that you are going to be friends with your boiler for a long time; what seems easy now can become an unpleasant task when you get older. Therefore, check carefully how maintenance is carried out before choosing a boiler.

**Firewood burning requires an accumulator tank**

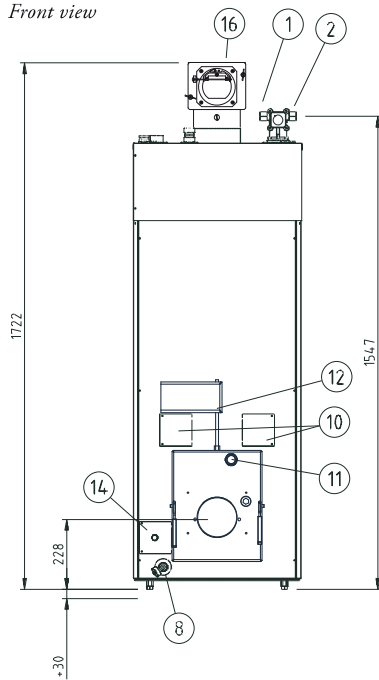
Biomax works with reverse combustion through natural ventilation when you burn firewood. Like all modern wood-fired boilers BIOMAX is equipped with ceramic grates. When burning firewood the boiler should be provided with one or more accumulator tanks supplemented with automatic filling (if you burn pellets no accumulators are needed).

Discharges from the chimney are almost negligible and consist mainly of water vapour and carbon dioxide. The boiler has been tested by the Swedish National Testing and Research Institute and has excellent efficiency.

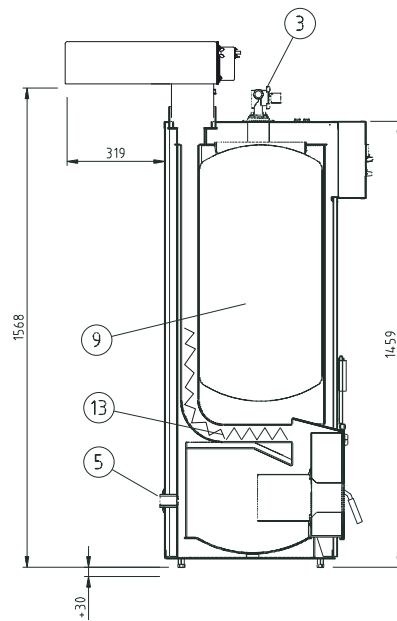
**Burner door**

The boiler is delivered with a burner door designed for Värmebaronen's Viking Bio pellet burner.

Front view



Side view (cross-section)



1. Flow pipe, compression ring coupling Ø22 mm
2. Return pipe, compression ring coupling Ø22 mm
3. Four-way shunt.
4. Expansion pipe R25 female
5. Hot water connection R25 female.
6. Domestic hot water Ø22 mm
7. Incoming cold water Ø22 mm
8. Drain valve R15 female
9. Hot water cylinder (copperlined)
10. Immersion heaters
11. Burner door for Viking Bio
12. Swing arm for burner door.
13. Turbulators
14. Trunking for burner cable.
15. Cable entries/exits.
16. Flue pipe with backdraught door\*

\* Please note that in Ireland a vertical flue pipe is used

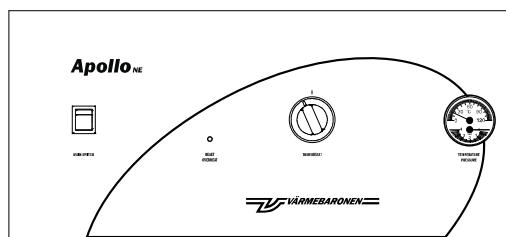
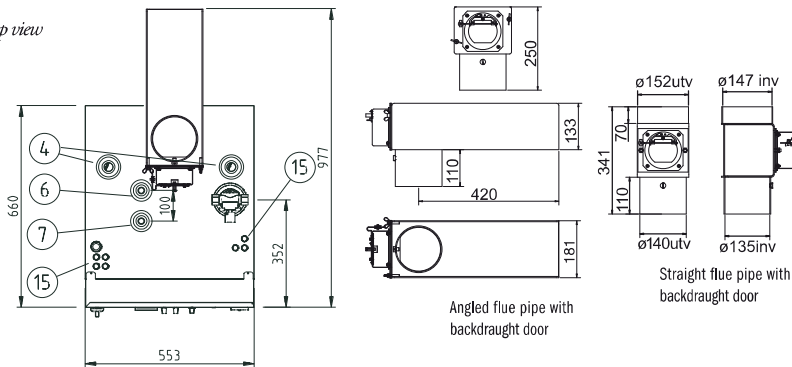
### SCOPE OF DELIVERY

- Installed shunt motor (Comet)
- Straight flue pipe with backdraught door
- Current transformers for load monitor (CU)
- Flue gas turbulators
- Drain valve
- Outside sensor (Comet)
- Flow pipe sensor (Comet)
- Automatic control for time tariff
- Soot brush
- Compression ring couplings HWC Ø22 mm.

### ACCESSORIES

- Room thermostat art. no.: 12 00 80

Top view



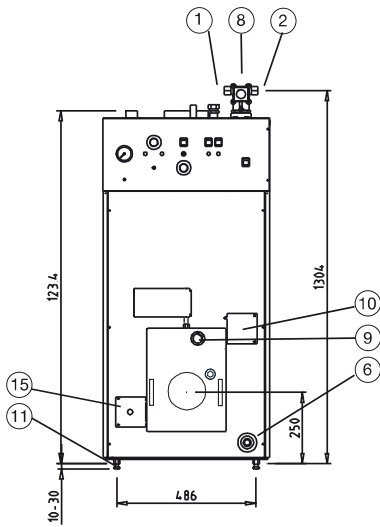
APOLLO front panel

Type / RSK-no.	Power (kW) Pellets	Capacity (litres)		Pressure (bar)		Main dimensions (mm)			Empty Weight (kg)	Draught demand	
		Boiler	HWC	Boiler	HWC	Height	Width	Depth		(pascal)	(mbar)
Apollo 621 05 51	20	90	100	3	10	1460 <sup>#</sup>	555	660	200	5	0.5

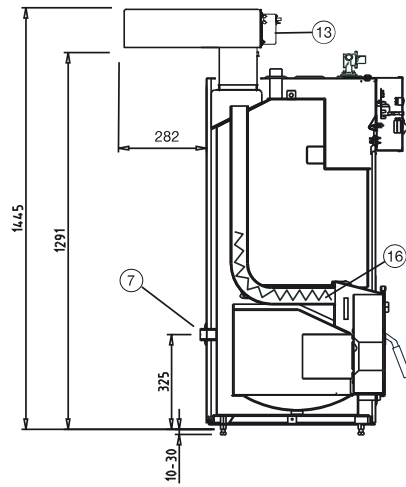
<sup>#</sup> Height without shunt

# Star

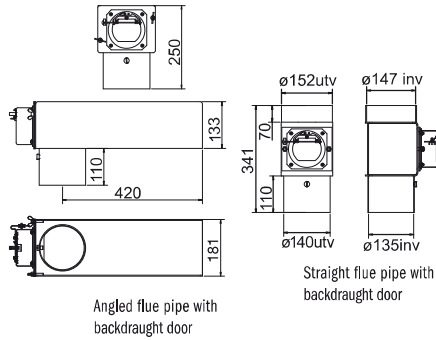
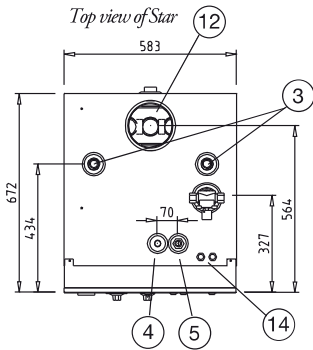
Front view of Star



Side view of Star (cross-section)



Top view of Star

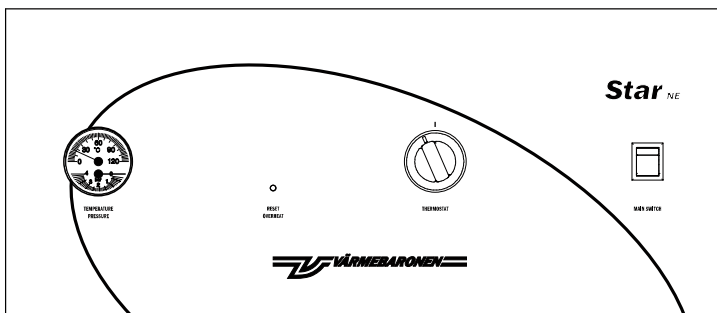


1. Flow pipe, compression ring coupling Ø 22 mm
2. Return pipe, compression ring coupling Ø 22 mm
3. Expansion pipe R25 female
4. Incoming cold water, copper, 22 mm
5. Domestic hot water, compression ring Ø 22 mm
6. Drain valve
7. Hot water connection R25 female
8. Four-way shunt
9. Burner door for Viking Bio
10. Immersion heater
11. Adjustable foot bolts
12. Flue connection\*
13. Angled flue pipe with access door for cleaning, damper and backdraught door
14. Cable outlets
15. Trunking for burner cable
16. Turbulators

\* Please note that in Ireland a vertical flue pipe is used

### SCOPE OF DELIVERY

- Straight flue pipe with backdraught door
- Soot brush
- Flue gas turbulators
- Current transformers for load monitor (CU)
- Dirt filter with compression ring coupling, copper Ø 22 mm



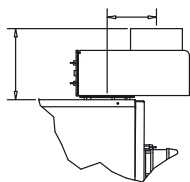
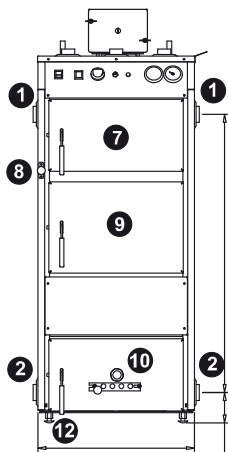
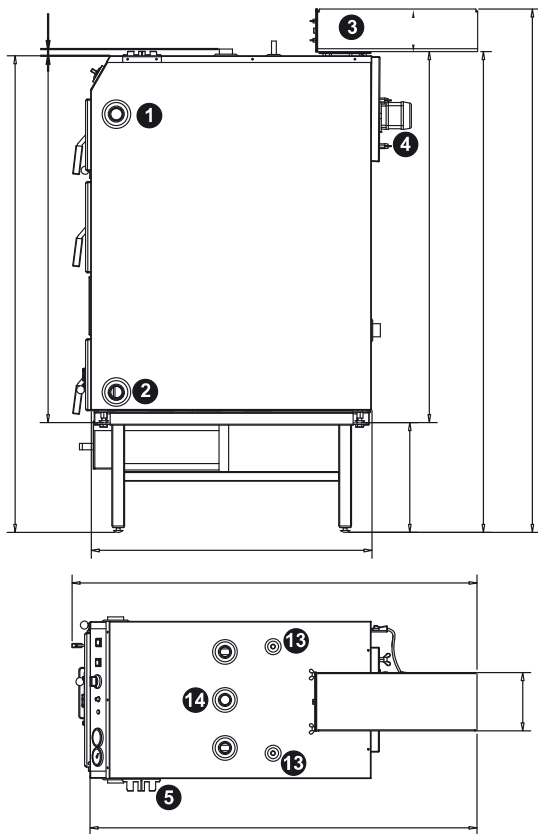
Front panel, Star

Boiler RSK-no.	Power (kW) Pellets	Capacity (liter)		Pressure (Bar)		Main dimensions (mm)			Empty Weight (kg)	Draught demand	
		Boiler	Exchanger	Boiler	Exchanger	Height	Width	Depth		(pascal)	(mbar)
Star 621 05 42	20	175	2	3	30	1234 #	583	670	150	5	0,5

# Height without shunt

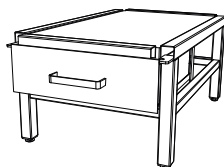
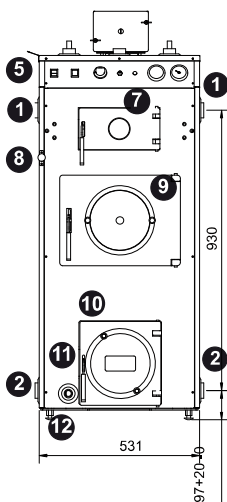


### Vedolux 30



**Flue pipe to rear/upwards**  
Art. no.: 2942 (accessory)

**MEETS ENVIRONMENTAL REQUIREMENTS**  
TESTED AND APPROVED BY SP TECHNICAL RESEARCH INSTITUTE OF SWEDEN

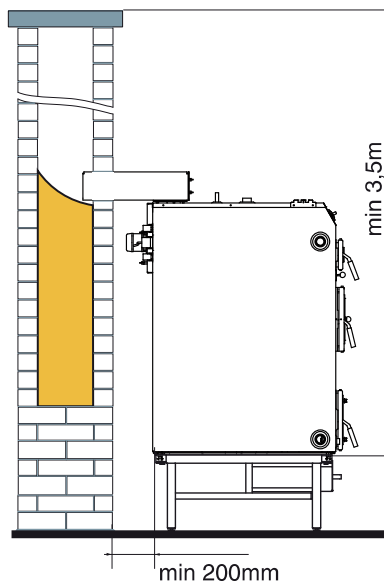
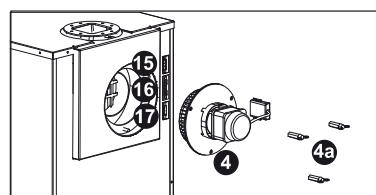


**Stand (accessory)**  
Height 343 mm +20 -0 mm

## Vedolux 30/37

1. Hot water connection, riser, R32
2. Hot water connection, return, R32
3. Flue pipe, standard.\*
4. Fan motor
  - a. long nuts (three)
5. Shelf for flue cleaning tools.
7. Access door for cleaning.
8. Bypass flap control.
9. Log door.
10. Ash door/draught door.
11. Drain valve (Vedolux 37)
12. Foot bolts, adjustable.
13. Connections for cooling coil, 15 mm copper.
14. Expansion connection, R25.
15. Electrical connection, supply, 230V~.
16. Electrical connection, fan.
17. Electrical connection, circulation pump, accumulator charging.

\* Please note that in Ireland a vertical flue pipe is used



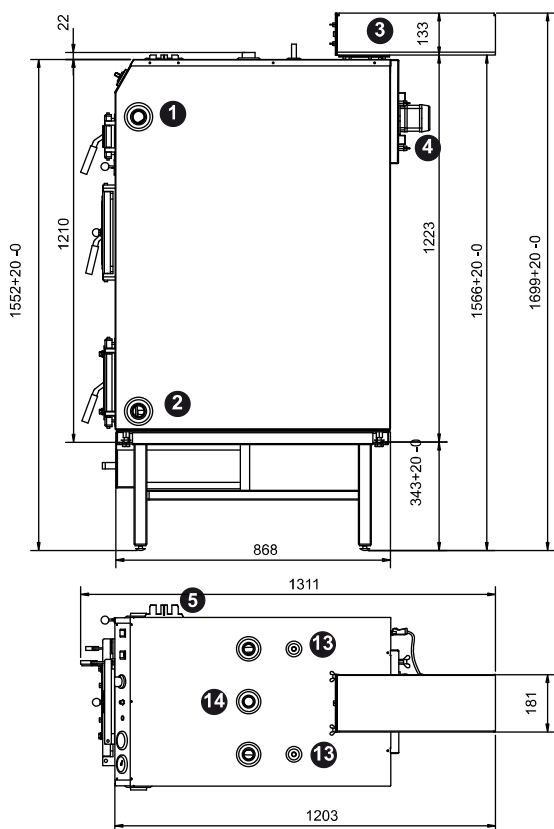
#### Accessories

- Flue pipe to rear/upwards (see drawing)
- Swing arm SA 50 RSK 622 19 53 (Vedolux 37)
- Stand RSK 622 19 56 (Vedolux 30)
- Stand RSK 622 19 55 (Vedolux 37)

#### Scope of delivery

- LPG lighter (not bottle)
- LPG lighter (not bottle)
- Angled flue pipe
- Flue cleaning tools with shelf

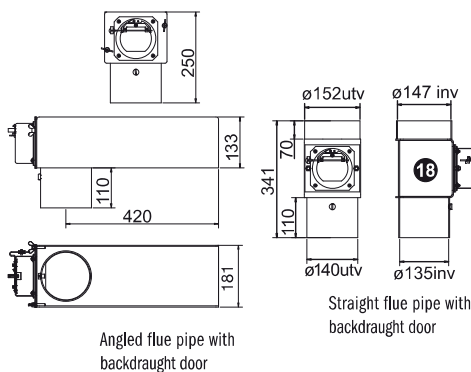
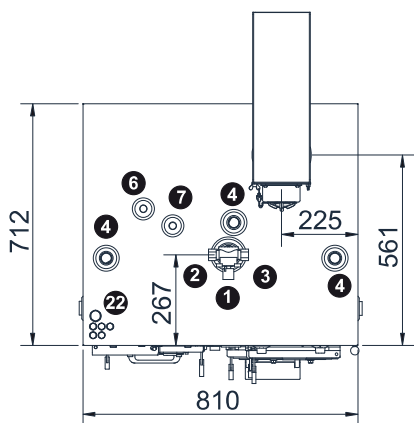
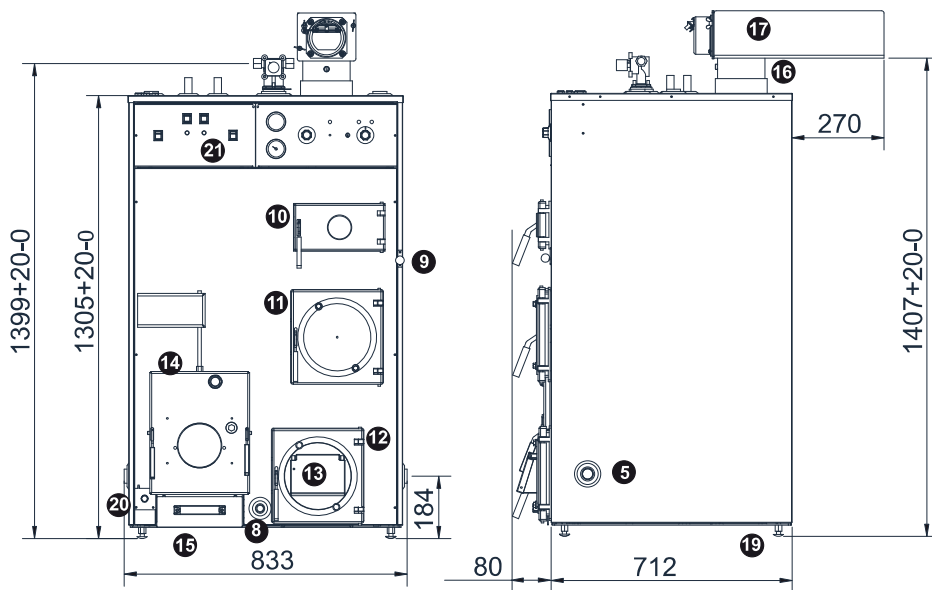
### Vedolux 37



Boiler RSK-no.	Power (kW) Wood	Capacity (litres)		Main dimensions (mm)			Empty Weight (kg)	Hearth		Min. flue requirements			Pressure (bar) Boiler
		Boiler	HWC	Height	Width	Depth		Volume	Depth	Height	Area	Draught	
Vedolux 30 622 19 57	33	100		1145*	489	876**	290	90	550	3,5 m	Ø150mm	10 Pa	1,5
Vedolux 37 622 19 54	37	120		1231*	531	870**	320	105	550	3,5 m	Ø150mm	10 Pa	1,5

\*+20-0, \*\* + 200 mm fan. NOTE: This measure is a essential for fan cleaning access

# Biomax



**MEETS ENVIRONMENTAL REQUIREMENTS**  
TESTED AND APPROVED BY SP TECHNICAL RESEARCH INSTITUTE OF SWEDEN

1. Shunt valve, four-way.
2. Flow pipe, compression ring 22 mm.
3. Return pipe, compression ring 22 mm.
4. Expansion/hot water connection R25 female.
5. Hot water return R25 female.
6. Domestic hot water, compression ring 22 mm.
7. Cold water, compression ring coupling Ø 22 mm.
8. Drain valve.
9. Bypass damper control.
10. Access panel for sweeping.
11. Log door.
12. Ash door.
13. Draught door.
14. Pellet burner door for Viking Bio.
15. Ashbox.
16. Flue connection.\*
17. Angled flue pipe with backdraught door.
18. Straight flue pipe with backdraught door, accessory.
19. Adjustable foot bolts.
20. Trunking for burner cable.
21. Control panel, hinged doors.
22. Cable glands.

\* Please note that in Ireland a vertical flue pipe is used

### Scope of delivery

- Angled flue pipe with lockable backdraught door
- Flue sweeping tools with hanging console
- Flue gas thermometer
- LPG lighter (not bottle)
- Drain valve
- Current transformer

### Accessories

- Straight flue pipe RSK 621 05 49

Boiler RSK-no.	Capacity (litres)		Main dimensions (mm)			Empty Weight (kg)	Hearth, wood		Min flue requirements			Pressure (Bar)			
	Pellets	Wood	Boiler	HWC	Height		Width	Depth	Volume	Depth	Height	Area	Draught	Boiler	HWC
Biomax 611 62 59	20	20	190	100	1305#	810	715	350	55	400	7m	180cm <sup>2</sup> Tube Ø 150 mm	Min 20 Pa	1,5	9

# Height without shunt











# Värmebaronen means quality

Swedish insurer Folksam's reports on heating boilers and heat pumps which break down often and far too soon are presented at regular intervals.

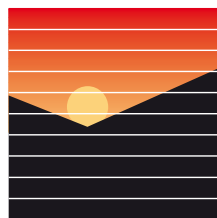
Happily, there is no cause for concern if you are the owner of a boiler from Värmebaronen. Our wood-burning boilers don't even figure in the statistics. Other boilers have also performed very well.

Obviously nothing lasts for ever. But – if you choose a heat source from Värmebaronen you get quality product which lives up to its promises!



*Värmebaronen head office and modern production facility are located in Österslöv just outside Kristianstad in north-eastern Skåne.*

RETAILER



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