

5 Best Electric Boilers of 2023: A Practical Guide

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Best Electric Boilers of 2023 – Electric boilers are a type of electric boiler that uses electricity to heat hot water for your heating system. A gas boiler heats the water, but an electric boiler can be utilized in off-grid locations or when a gas supply is not desired or available.

Basics of Electric Boilers

How Does an Electric Boiler Work?

The boiler itself is quite straightforward. It can take many different shapes and forms, but the most common is a device that has water running through it and is heated by a heating element, much like a kettle. Long, slender units with a large surface area to heat the water are sometimes seen.

Different Types of Electric Boilers

Electric boilers are classified as classic, ionic, or induction based on their power output, energy consumption, energy performance, and energy efficiency, model type (combi or non-combi), and whether they are wall-mounted or floor-standing.

Most electric boilers are combi versions, which means they heat your home's hot water supply as well as channel hot water via your home's radiators or underfloor heating.

You may save money on your home heating expenses by installing a low-temperature electric boiler, but you must make sure your house radiators are suitable for this sort of installation.

Advantages of Electric Boilers

In some cases, electric boilers might be helpful. They are really basic pieces of technology that don't take up a lot of room and can be installed practically any place in a home because they don't require a flu or a gas line to operate. Electric boilers are almost 100 percent efficient because very little heat is wasted in the process of heating the water.

They're often easier to install, and they don't necessitate the services of a Gas Safe engineer. Because of the system's simplicity and ease of installation, the overall installation cost will be far lower than that of a gas boiler.

Disadvantages of Electric Boilers

Of course, if electric boilers were the greatest option, they would be ubiquitous, but they aren't. There are several drawbacks to electric boilers, and we will go through them now. At around 30% of the cost of electricity, gas is a far better option. Even if you own a very efficient system, this implies that the cost of heating water with electricity will be significantly greater.

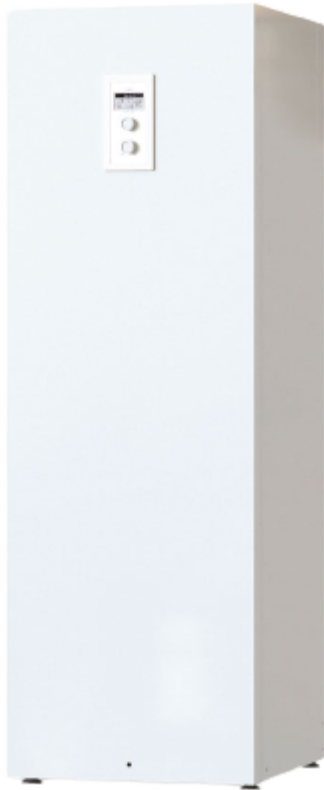
That much is self-evident, but even when comparing electric boilers to other types of electric heating, the electric boiler does not always win. An electric boiler will be more costly to operate compared to infrared.

Electric boilers are likely to find a role in certain homes. They are a basic, easy-to-install solution, but many individuals will find that there are better methods to heat their homes. Infrared, heat pumps, and even oil boilers are all likely to be less expensive to run than electric boilers if gas isn't an option.

If you're unsure about adding an electric boiler to your home, get guidance from an expert or a local shop. You are also encouraged to check out our [Boiler Providers](#) on Linquip for more information to fulfill all of your needs.

Best Electric Boilers of 2023 Reviews

1. Comet Combi Boiler by Electric Heating Company



Comet Combi Boiler by
Electric Heating Company
(Reference: **electric-
heatingcompany.co.uk**)

Pros & Cons

Pros

- Inbuilt Programmer with System Diagnostics
- Weather Compensation
- Full Power Modulation
- Energy Saving Smart Pump
- Stainless Steel Heat Exchanger

Cons

- Relatively high cost
- Limited warranty
- Is not compatible with LPG

Specifications

Efficiency Rating	100%
LPG Compatible	No
Standard Warranty	2 Years
Central Heating Max. Output	12kW
Mounting	Floor Standing

General Descriptions

The Comet Combi combi boiler heats water for a wet central heating system as well as for home consumption. It comes with a 140-liter Duplex stainless steel hot water cylinder to maximize hot water capacity while being compact, pre-plumbed, and pre-wired for simplicity of installation.

The Comet has a wireless thermostat and a built-in programmer that allows you to control the temperature and schedule of your heating. The Comet is offered in three different power outputs: 9kW, 12kW, and 14.4kW. You can also choose to utilize only heating, only hot water, or both at the same time. The boiler is covered by a two-year warranty, while the cylinder is covered by a ten-year warranty.

2. Electromax by Heatrae Sadia



Electromax by Heatrae Sadia (Reference: heatraesadia.com)

Pros & Cons

Pros

- Controllable, efficient wet central heating
- Uses standard radiators and thermostatic radiator valves
- Minimal service and maintenance costs
- Smooth start and zero volts switching to avoid power surges

Cons

- Low capacity
- Limited warranty
- Is not compatible with LPG

Specifications

Efficiency Rating	99.8%
LPG Compatible	No
Standard Warranty	2 Years

Central Heating Max. Output 6kW

Mounting

Floor Standing

General Descriptions

Because it combines an electric flow boiler with a hot water storage cylinder and circulating pump, the Electromax boiler can offer both heating and hot water for your house (at the same time).

All the Electromax requires is access to a power source and cold water. A 180-liter capacity duplex stainless steel unvented cylinder is housed within the boiler. This allows it to provide high-pressure showers, quick-filling tubs, and a steady supply of hot water to many tap outlets. The Electromax is designed for sealed systems and will fit into a regular household airing cabinet due to its small size. The Electromax comes in two residential kW capacities: 6 and 9 kW. The boiler is covered by a two-year warranty, while the cylinder is covered by a ten-year warranty.

3. THERMAflow



THERMAflow

(Reference:

thermaflowheating.co.uk)

Pros & Cons

Pros

- 100% Efficient
- Instant heating and hot water
- Very quiet in operation

- Internal Primary Expansion
- NSF Building Regulation Approved

Cons

- Limited warranty
- Is not compatible with LPG

Specifications

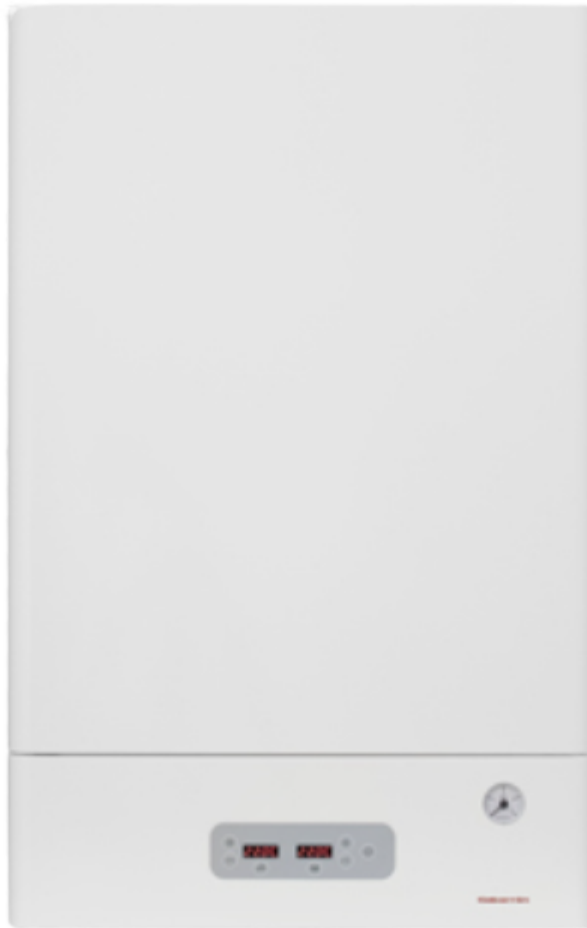
Efficiency Rating	100%
LPG Compatible	No
Standard Warranty	1 Year
Central Heating Max. Output	10kW
Mounting	Floor Standing

General Descriptions

The THERMAflow High-Efficiency Electric Combination Boiler is intended to run on lower electricity tariffs, allowing you to save money and energy while still fulfilling all of your heating and hot water needs. They believe this may save consumers up to 40% of their heating costs.

The floor-standing THERMAFlow may be linked to a wood-burning or solar thermal system to help you save money on energy, cut your heating expenses, and lower your carbon impact. The THERMAFlow is offered in six different outputs ranging from 10 to 18 kW. The THERMAFlow comes with a one-year boiler guarantee and a 25-year cylinder warranty.

4. Mattira MAC15 by Elnur



Mattira MAC15 by Elnur (Reference: elnur.co.uk)

Pros & Cons

Pros

- Each boiler can be used with single-phase or three-phase power.
- User-adjustable controls and a key lock facility are included in the digital display.
- Flow rate of up to 12 liters per minute
- The use of digital modulation results in less energy waste.

Cons

- Low efficiency
- Limited warranty
- Is not compatible with LPG

Specifications

Efficiency Rating	100%
LPG Compatible	No

Standard Warranty	2 Years
Central Heating Max. Output	15kW
Mounting	Wall Mounted

General Descriptions

The Mattira MAC15 is a wall-mounted electric boiler that produces both heating and hot water. It is a digital modulating electric combination boiler. The boiler may operate on single or three-phase power and uses less energy owing to digital modulation.

The Mattira also has a digital display, easy-to-use controls and can supply up to 12 liters per minute of hot water. The Mattira comes in twelve various power outputs ranging from 3 to 15 kW. The Mattira MAC15 comes with a two-year boiler guarantee and a two-year cylinder warranty.

5. Elektra EK.C by Electric Boilers Company



Elektra EK.C by Electric Boilers Company (Reference: electriccombiboilerscompany.com)

Pros & Cons

Pros

- Give instantaneous hot water
- Fully insulated
- Smaller residences and flats would benefit from this wall-mounted electric combi boiler
- Fully certified under IEC, IMQ, IECEE and Harmonics and Flicker

Cons

- Suitable for one bathroom
- Is not compatible with LPG
- Limited warranty

Specifications

Efficiency Rating	100%
LPG Compatible	No
Standard Warranty	2 Years
Central Heating Max. Output	12kW
Mounting	Wall Mounted

General Descriptions

Elektra EK.C is a wall-mounted electric combi boiler designed for smaller homes and apartments. It delivers rapid hot water (40-50°C) at an 8-liter-per-minute pace, however filling a bath can take up to 15 minutes because of the decreased flow rate. The Elektra is best suited to single-bathroom dwellings.

The Elektra comes solely in a 12 kW version, however, it can modulate between 2 and 12 kW as needed. As standard, the Elektra boiler comes with a two-year guarantee.

Considerations When Selecting an Electric Boiler

What Size Electric Boiler Do I Need?

Most electric boilers are smaller than oil or gas boilers, but it's crucial to note that in the boiler world, 'size' relates to how powerful the boiler is, which is measured in kilowatts (kW). The more kW it has, the more heat and hot water it can generate.

Electric boilers are less powerful than gas and oil boilers, which makes them ideal for smaller homes and apartments. An average gas boiler has a kW rating of 24-35 kW, whereas an electric boiler has a kW rating of 15 kW or less.

A general rule of thumb for electric boiler size is that 1.5 kW is required for each radiator in your home. The size of your spaces, the height of the roof, and how well insulated the space are all factors to consider, which is why a heating expert is an ideal person to size a boiler for your house. Learn more in the [What Size Electric Boiler Do I Need?](#) guide, which will assist you in installing an electric boiler with enough power.

Remember that you will run out of hot water if you install an electric boiler that is too small for your home. It's also crucial to avoid purchasing an electric boiler that is too large since you'll be consuming far more electricity than you want and will be surprised by your energy bills.

How Efficient are Electric Boilers?

An Energy Related Products (ErP) score is used to assess efficiency. This rating assigns a letter grade to each type of boiler, ranging from the most efficient (A+++) to the least efficient (G).

Despite their high efficiency (about 99%), electric boilers often get an ErP grade of D. This is because electricity is generated by burning fossil fuels, which produces twice as much carbon as using natural gas in a gas boiler. Electricity is also considerably more expensive than gas, costing roughly 14 cents per kilowatt-hour vs. three pence for gas. Electric boilers have a lower ErP score as a result of these factors, but they waste nearly little energy during operation.

Solar panels would be even more effective for powering an electric boiler. You will most likely see a reduction in your power costs if you generate electricity this way.

It's also crucial to look at your hot water tank's efficiency rating. It's pointless to have a high-efficiency boiler if the majority of that energy is wasted due to an inefficient water tank. The hot water generated by the boiler is stored in the cylinder for subsequent use. To keep the heat from escaping too rapidly, the tank should be built of high-quality materials and well-insulated.

If you're concerned about how quickly your tank loses heat, you may buy an extra insulating jacket for it or cover the tank and any hot water pipes that run into it with a blanket. The water should be able to stay warm for at least 24 hours in a well-insulated tank.

Electric Boiler Efficiency and Running Costs

Electric boilers have a high operating cost because most countries generate the great bulk of their power from fossil fuels. This also leads to electric boilers obtaining a D-rating for ErP efficiency, which might be confusing given that they are also classified as 99-100 percent efficient.

Electric Boiler Efficiency

Electricity is a carbon heavy fuel since it is produced mostly from fossil fuels, which emit a lot of carbon into the atmosphere. So, even if you own an energy provider that uses renewable technology to create power, the electricity is still deemed carbon heavy. However, as more providers adopt renewable generating, the high 'fuel factor' imposed on electricity is likely to decrease.

Running Costs of Electric Boilers

While the operating expenses of electricity are greater than those of gas, as previously said, you will save money in other areas, including installation, not having to schedule an annual service and overall maintenance expenditures.

Factors Should be Considered When Selecting The Best Electric Boilers

Like a standard gas combi boiler, you want your electric boiler to provide consistent hot water and heat, have a long lifespan, and, ideally, help you save energy and money on your heating expenses.

You also want the electric boiler manufacturer to provide a long warranty period so that you won't have to worry about excessive repair costs if your boiler breaks down.

With these considerations in mind, the following elements should be considered while compiling a list of the finest electric boilers:

- The boiler maker provides a warranty period.
- Based on consumer feedback, the boiler brand's overall reputation.
- Boiler installers' reputation
- Reviews on Trustpilot
- Awards and honors, such as the Which? Best Buy Awards
- The quality of customer service
- The price range of their boilers
- Ratings of efficiency

FAQs about Electric Boilers

Is Electric or Gas Best for Your Home?

For residences off the grid, electric boilers are an excellent alternative to oil or LPG, and if you want to lessen your carbon impact, an electric boiler is definitely worth considering. If you're linked to the grid and worried about rising energy costs, you might choose to continue with your gas boiler.

Why Choose a Gas Boiler?

- Operating expenses will be much greater because electricity is 3-4 times more expensive per kilowatt-hour (kWh) than gas.
- While an electric boiler does not utilize a fossil fuel like gas to create heat and does not emit carbon dioxide while it operates, the power it requires is normally generated using fossil fuels when an electric boiler works on fossil fuel electricity.
- Electric boilers are often only suited for small dwellings since they cannot simultaneously serve several outlets.

Why Choose an Electric Boiler?

- An electric boiler is an excellent alternative if you have solar PV panels installed in your home. You may utilize the electricity you create, lowering your energy costs.
- Electric boilers have a much better efficiency. An electric boiler will provide you with 99-100 percent efficiency, whilst a gas boiler will provide you with 92-93 percent efficiency. An electric boiler might be the answer if you don't want to waste electricity.
- An electric boiler, unlike a gas, oil, or LPG boiler, does not emit carbon dioxide when it is in use.

Should I Replace My Gas Boiler with an Electric Boiler?

Replacing your old gas boiler with an electric boiler is not complicated. Heating and hot water pipes are the same and may be adapted/fitted to the new electric boiler. An electric boiler does not require a gas pipe, saving you money on annual gas safety certification.

Buy Equipment or Ask for a Service

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