

How to determine your boiler's ratings

Not all boilers are equally efficient. Aside from affecting performance, the energy efficiency of your boiler has a major impact on how much you're paying for your energy bills from month to month. An efficient boiler can save you around £100 to £300 every year. Conveniently, boilers in the UK are assigned an energy efficiency rating that you can check right away.

There are three rating systems for energy efficiency in the UK: SEDBUK 2005, SEDBUK 2009, and ErP.

ErP

The dominant one today is the ErP (Energy Related Products Directive), which has been the default rating system for models created since 2015. Boilers are assigned letter ratings by the ErP, ranging from G (the least efficient) to A+++ (the most efficient):

ErP Letter Rating	Efficiency Percentage	
A+++	> 150%	
A++	125% – 150%	
A+	98% -125%	
А	90% – 98%	
В	82% –90%	
С	75% –82%	
D	36% – 75%	
E	34% – 36%	
F	30% – 34%	
G	Below 30%	

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Boilers can have separate ErP ratings for hot water and heating. Nearly all modern boilers are A- or B-graded. Boilers installed on or after October 2010 are required to have a minimum efficiency rating of 88%, but this was raised even higher to 92% in April 2018 with the <u>Boiler Plus legislation</u>.

The ErP is actually the newest of the three rating systems. Released by the European Union in 2015, the ErP covers all heating products across the UK and Europe. Its main goal is to encourage the use of efficient boilers, in line with the EU's environmental advocacy of reducing greenhouse gas emissions and shifting consumer preference from fossil fuels like gas and oil to renewable energy.

The ErP Label

All modern boilers in the UK have energy efficiency rating labels. Here's what the ErP rating label looks like:

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	п
A** A*	A++
A C D	
E F G	
	YZ kW
-	6
2017	XYZ/2015

You can clearly see the different rating levels, with the boiler's rating specified on the right. The label indicates the supplier's name and model ID at the top as well, while the average heat output is shown below the rating scale. Depending on the label, you can also see other properties of the boiler, such as the sound power level or whether temperature control is included.

SEDBUK 2005 and 2009

Established in 1999, the SEDBUK is an older rating system than the ErP. While the ErP is the default boiler rating system today, many products still show their SEDBUK ratings because the SEDBUK is more detailed, specifying the exact efficiency percentage of the boiler.

This is the SEDBUK rating system:

SEDBUK Letter Rating (Phased Out)	Efficiency Percentage
A	90% and above
В	86% – 90%
С	82% - 86%
D	78% – 82%
E	74% – 78%
F	70% – 74%
G	Below 70%

The main difference between SEDBUK 2009 and 2005 is that SEDBUK 2005 used letter ratings (A to G) along with the efficiency percentages, while SEDBUK 2009 doesn't. For the SEDBUK 2009, letter ratings were phased out to avoid confusion with the ERP, leaving only the efficiency percentages.

You'll also notice that older boilers might show different ratings in SEDBUK 2009 and 2005. For example, an older boiler might be rated 85% in SEDBUK 2005, while its SEDBUK 2009 rating might be lower at 82%. This is mainly because of differences in the boiler's efficiency when it's operating in the winter compared to in the summer. In any case, look primarily at the SEDBUK 2009 rating because it's more updated.

Since 2010, all modern boilers are at the top tier of the SEDBUK system. The SEDBUK rating is usually found in your boiler's manual.

ErP vs. SEDBUK

SEDBUK ratings have been mostly replaced by ErP ratings, but sometimes you'll still see both ratings on one product. With the ErP, you can't compare the energy efficiency of two modern boilers because they'll be both A-rated. However, even if you know the exact efficiency percentages of the boilers from the SEDBUK system, the actual difference in performance might be negligible. Modern boilers might have only a 1% – 2% difference in their SEDBUK ratings. You'll find more striking differences between modern and older boilers, especially if the latter is over 15 years old.

Energy efficiency is also calculated differently in both systems. While the results are similar, a boiler would have a lower ErP rating compared to its SEDBUK rating, so the two are not interchangeable.

Checking Your Boiler's Energy Efficiency Rating

Checking your boiler's energy efficiency is usually as easy as looking at its energy efficiency label, which is either on the boiler itself or inside the accompanying pack. You can also look through the manual.

However, for older boilers, it could be trickier. What you can do is find out the boiler's model, model number, and manufacturer. You can then input these into the <u>PCDB</u> <u>database</u>, which has information about nearly every boiler in the UK. The model and model number are indicated on a small plate or sticker that's usually found under the boiler or near the dials.

On the other hand, if you can't find the model number, you'll have to estimate the efficiency based on the type of boiler you have. For example, if there's a condense pipe connected to a drain, then you have a condensing boiler, which is at least 85% efficient. When a Gas Safe engineer visits for <u>boiler servicing</u>, you can also ask them to check. With older boilers, just remember that they'll be performing below their original energy efficiency rating because of age.

Energy Efficiency for Sustainability and Cost-Effectiveness

The energy efficiency rating is one of the first things you should know about your boiler. While most modern boilers will be A-rated, you might be surprised to find that older boilers have much lower efficiency ratings. Because your boiler's energy efficiency influences how much you're paying for your heating, it's worthwhile to aim for a boiler with an ErP rating of B or higher, which is more cost-effective and environment-friendly over the long run.