

ErP labelling made easy:  
Viessmann makes you fit for the new energy efficiency labelling



Heating systems ◀  
Industrial systems  
Refrigeration systems

## The ErP Directive and the energy efficiency certificate for heating systems

Standardised energy efficiency labelling already exists for many energy and water-consuming household appliances. Now comes the energy efficiency label for heat generators, water heaters and DHW cylinders as well.

After the adoption of the new directive by the EU Commission, products from the field of heating technology also have to bear the energy efficiency label in accordance with the ErP Directive (Energy-related Products) from 26 September 2015 onwards. The label that consumers already recognise from refrigerators, televisions and washing machines, for example, also becomes obligatory for heat generators, water heaters, DHW cylinders and entire heating systems.

### **Standardised throughout Europe: energy efficiency labelling**

The legal basis for the labelling is various EU directives and regulations, in particular the Energy Labelling Directive 2010/30/EU, or the ErP Directive (Energy-related Products) for short. At first, the labelling requirements apply to oil and gas heating appliances, combined heat and power generation systems, heat pumps, water heaters and complete systems.

### **More transparency for building owners and renovators**

The standardised energy efficiency label throughout Europe is intended to provide building owners and renovators with a basis for comparison – and therefore an aid to decision making – when they want to buy a new heating system. A calculation process stipulated by the EU Commission provides the basis for determining the energy efficiency of a heat generator. The efficiency is shown on a scale from A<sup>++</sup> to G. In the case of water heaters, the scale ranges from A to G. Combi boilers that are used for both room heating and domestic hot water heating show the classification for the two applications separately. In addition to the breakdown into energy efficiency classes, details are also provided on the label of the output levels and noise emissions.

Assistance with decision making for the end consumer: The new Europe-wide standardised energy efficiency label.

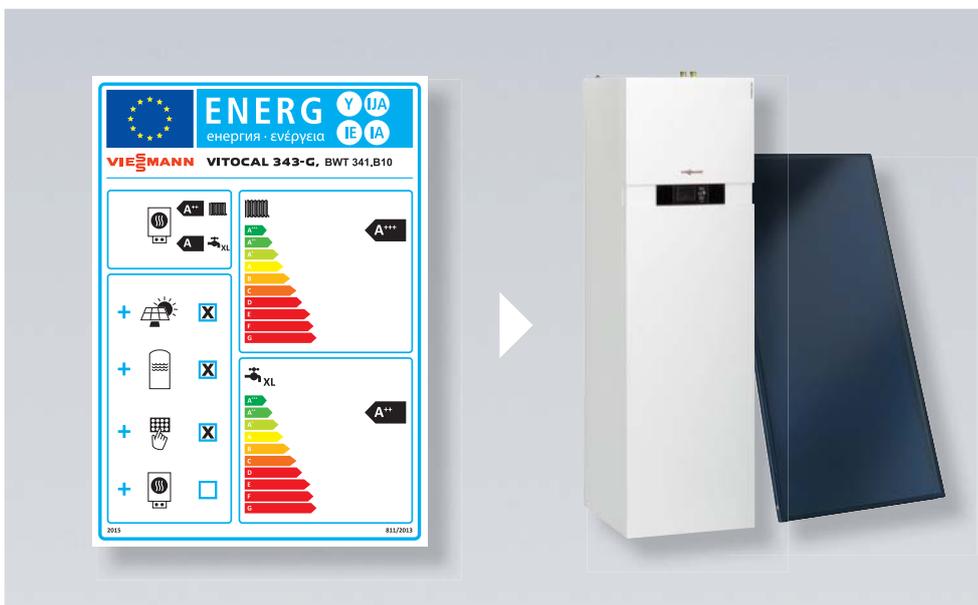


### The system is more than the sum total of its parts

Heating systems usually consist of several energy-related components. Therefore, once the entire system has been configured, the individual product labels are supplemented by a composite label. This then characterises the entire system. It may well be that the composite label shows a better energy efficiency classification than the individual components. It is possible, for example, that the addition of a solar thermal system to a gas or oil boiler will result in a higher efficiency class.

### Everything from a single source means: more efficiency

Complete Viessmann systems from a single source guarantee that all parts are perfectly matched. This means that in practice, the overall system achieves the highest efficiency levels. In the Viessmann comprehensive range, you will find all system components required to achieve system configurations with efficiency ratings up to A+++.



## The standardised energy efficiency label: a known quantity for the consumer

The Europe-wide standardised labelling of heat generators, water heaters and DHW cylinders using efficiency labels provides more transparency in terms of energy consumption.

The aim is to raise awareness of consumers in the EU in terms of the economical use of energy resources. A further step forward in this process is the labelling of heating components and systems with the efficiency label.

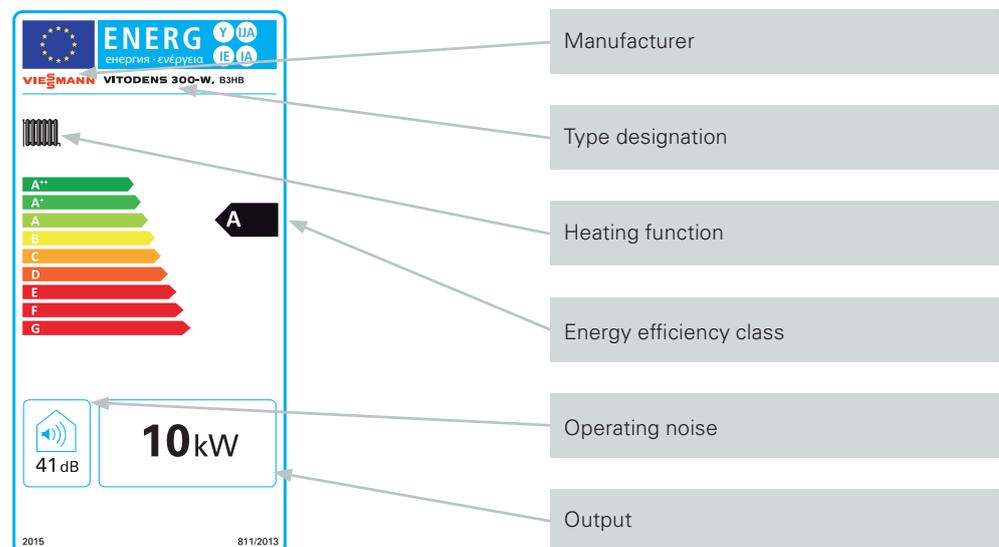
### Deadline: 26 September 2015

From 26 September 2015, as a specialist contractor you are required to state the efficiency classification according to the EU directives in your offers. All products which were delivered and invoiced before this deadline may continue to be sold, installed and put into operation without any efficiency label.

### Strengthen your consulting skills

The energy efficiency label is a guideline for consumers, although a decision in favour of the purchase of a particular heating system should never be taken solely on the basis of the label. The important aspect is the interaction of the building and plant technology. Only if systems are designed in accordance with the requirements of the building do they also reach maximum efficiency levels. Well informed, individual advice is becoming increasingly important – not only for the best system in each case, but also for satisfied customers.

The details about the appliances provided on the efficiency labels vary depending on the product family. The energy efficiency class is, of course, of primary interest to the consumer – indicated by a black arrow.



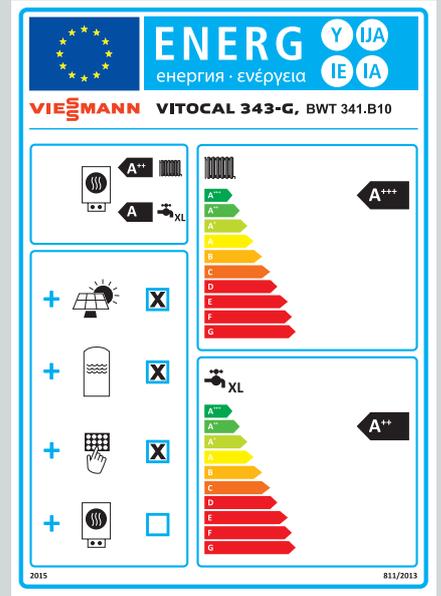
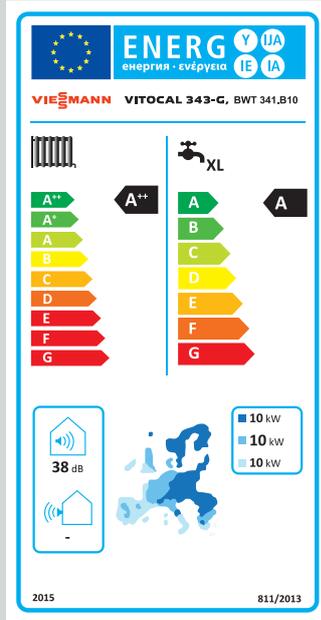
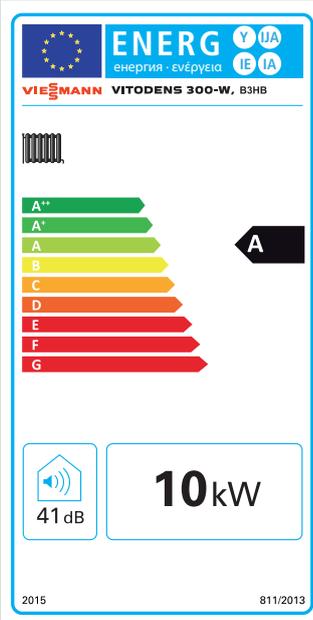
Label is specified by the manufacturer

Label is determined for every system

Space heaters

Combi boilers

Composite systems



Boiler



Combi boiler



Boiler with control unit



Wall mounted gas boiler



Storage combi boiler



Condensing solar compact appliance with collectors



Heat pump



Heat pump compact appliance



Heat pump compact appliance with solar thermal system



## Comprehensive product range, complete system technology, all-round service

Viessmann makes calculation of the efficiency class easy for you. You receive all of the products either complete with an efficiency label and datasheet or, for system combinations, use the Viessmann calculation tool to calculate the composite label.

For Viessmann, a comprehensive supplier means: the service is complete in every respect. For this reason we support our partners in the specialist trade with everything they need for the calculation of efficiency labels from the very beginning.

### **Mandatory: manufacturer's product label**

Product labels are attached to all oil/gas boilers, CHP units, heat pumps, water heaters and DHW cylinders. When the products are delivered, the corresponding product label and datasheet are also provided.

### **Fully prepared: composite label to be included in future offers**

For systems that consist of at least two components – for example a boiler and control unit – you must inform your customers of the efficiency class of the heating system in your offer. The easiest way to do this is to enclose the label provided by the Viessmann calculation program.

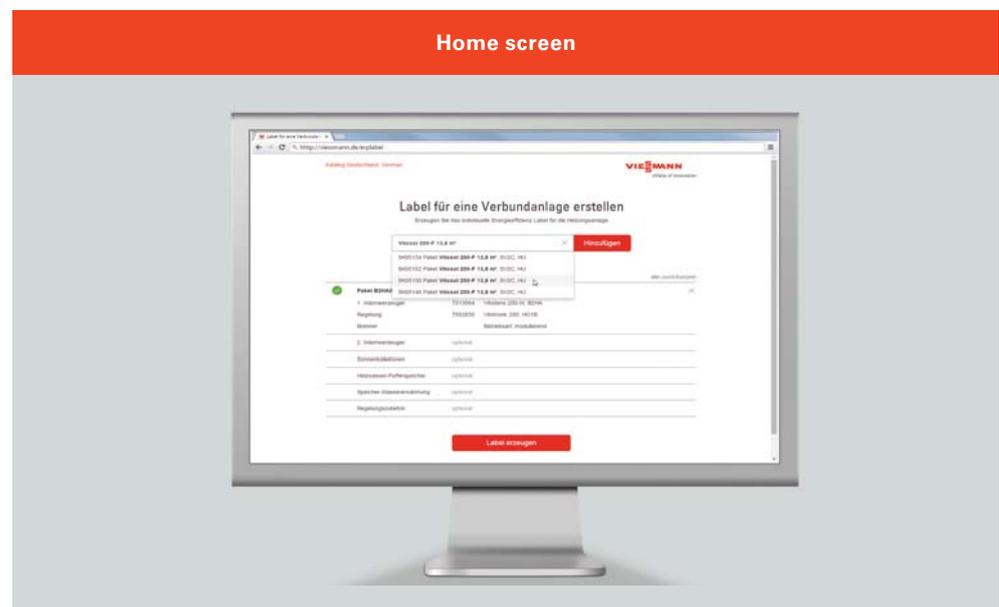
### **Labelled at the factory: Viessmann packages**

With Viessmann package solutions, for example from the package pricelist, you do not have to invest any time or effort whatsoever to create the composite label. All of the corresponding labels and datasheets are calculated at the press of a button. As a comprehensive supplier, all-round provider, Viessmann is able to offer this service because the entire system comes from a single source and can be calculated by Viessmann. For combinations of different products the calculation tool is available to you for calculating the label.

### **Everything made by Viessmann, everything with a label: scheme browser including composite label**

In the Viessmann scheme browser there are around 290 diagrams available for complete system packages. For orders from the scheme browser, Viessmann will also provide the efficiency labels in the future – quite simply using the shopping basket function.

The Viessmann calculation tool for efficiency labels offers a fast and easy way of testing various combinations of components in a composite system in order to be able to configure the system such that it achieves the best energy efficiency levels:  
[www.viessmann.de/erplabel](http://www.viessmann.de/erplabel)



# Everything Viessmann. Everything fine.

## Calculation tool for efficiency label

In addition to the ready-to-use labelling system for individual products and Viessmann complete packages, you also have a simple and intuitive software package at your disposal with which the energy efficiency of individually combined systems can be quickly and reliably calculated.

At Viessmann, labelling means as little time and expense as possible for the contractor. No matter how you order from Viessmann, all products are fully labelled. For heating packages from the package pricelist, Viessmann also provides you with composite labels and calculation certificates at the press of a button – without any input required on your part. You can simply retrieve both of the above as a PDF via the market partner portal. Viessmann provides an easy-to-use calculation tool for creating efficiency labels for individually configured systems.

### It could hardly be simpler: retrospective creation of efficiency labels

Offer, order, invoice or delivery note number: No matter what you currently have at hand, simply enter the corresponding number and you can calculate the composite labels without difficulty.

### Exceptions to the rule: products without an efficiency label

Mechanical ventilation systems and biomass boilers do not require a label for the time being. Energy efficiency labelling for these products is expected to be required from 2016 or 2017 at the earliest. Items which will not require product labels are solar components such as collectors or solar pump groups, as solar thermal is only used in a composite system. For this reason, product datasheets are sufficient for calculating composite labels.

### No worries: sale of stored products without a label

Products which you have ordered, purchased and stored on your premises before 26 September 2015 and which therefore do not have an efficiency label may also be resold, installed and put into operation after this date.

The image displays two parts of the Viessmann calculation tool. On the left is a composite energy label for a Viessmann VITODENS 200-W, B2HA boiler. The label features the EU Energy Label logo, the product name, and a scale from A+++ to G. The final composite label is A+. On the right is a detailed calculation sheet for the same system. It breaks down the energy efficiency into several components:
 

- Yearly average heating efficiency of the boiler: 92.0%
- Temperature range: 2.0%
- Additional boiler efficiency: 0.1%
- Solar contribution (collector area, temperature, collector efficiency): 10.45%
- Additional pump efficiency: 0.5%
- Final composite efficiency: 104%
- Final energy efficiency class: A+

 The calculation sheet also includes a legend for the energy efficiency classes (G to A+++) and a note at the bottom stating that the efficiency is based on the product's rated efficiency and the building's characteristics.

Very easy to operate: with the Viessmann calculation tool you can quickly and easily create the corresponding composite labels, including calculation datasheets, for individually combined heating systems.

[www.viessmann.de/eplabel](http://www.viessmann.de/eplabel)

## ErP Directive: regulations, use and classification

### Legal aspects

#### **What is the timeline for the introduction of the new efficiency label?**

The directive was published on 6 September 2013 in the Official Journal of the EU and came into force on 26 September 2013. Two years later, from 26 September 2015 onwards, an efficiency label must be enclosed with the appliances and the energy efficiency class stated. Up to the deadline, the publication of information on the efficiency of the appliances is still voluntary, but thereafter compulsory.

#### **What must specialist contractors now bear in mind?**

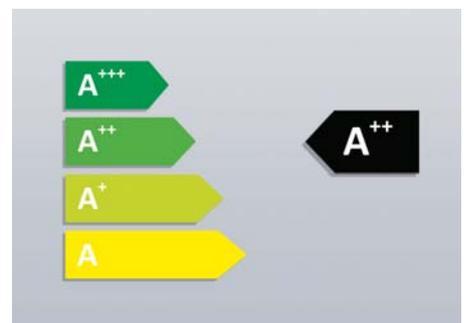
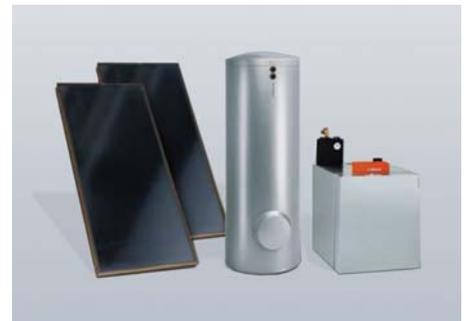
The specialist trade must ensure that as of 26 September 2015, all devices on display in the salesroom have a visible efficiency label. The information on energy efficiency also has to be included in advertising, offers and technical documents. It goes without saying that Viessmann will help you with this.

#### **Which product groups does the new efficiency label apply to?**

The efficiency label applies to heat generators, water heaters, DHW cylinders and complete systems, irrespective of the type of energy used (with the exception of biomass). This affects gas and oil heating appliances up to 70 kW, heat pumps, CHP systems and DHW cylinders with a capacity of up to 500 litres.

#### **Into which efficiency classes are the products divided up?**

The appliances are divided up into nine efficiency classes. Here A<sup>+++</sup> is the best energy efficiency class. G in turn is used to indicate appliances with significantly worse values. From 2019, the scale from A<sup>+++</sup> to D will apply. In the case of water heaters, the scale ranges from A to G and as of 2017 from A<sup>+</sup> to F. Combi boilers which are used for both room heating and DHW heating will display both applications separately.



### Where does the label have to be displayed?

The energy efficiency must be visible to the consumer in all forms of advertising for a product or system. This also applies of course to specific offers submitted by building owners or renovators.

### What is a composite system?

According to the EU regulation, even a boiler with a control unit is a composite system. For the specialist heating firm there is therefore an obligation to provide a composite label for the end customer for the entire system.

### What are the differences between a product label and composite label?

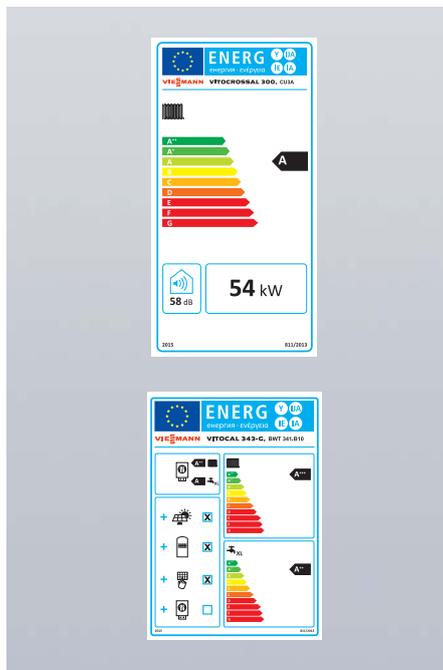
#### Product label

The manufacturer must produce a product label with the corresponding datasheet for every relevant system component. Viessmann sends the product label and datasheet together with the delivery.

#### Composite label

These labels are created specifically for a particular system. As Viessmann products are usually a heat generator including a control unit or a heat generator with control unit and integrated cylinder, the appropriate efficiency label will be part of our offers in the future.

For systems assembled individually from Viessmann components there is an easy-to-operate calculation tool available. On the basis of product names or order numbers, the program calculates the energy efficiency and provides the composite label together with the calculation datasheet as a PDF.



Legal aspects

## The efficiency label and its importance: for the overall market, for your customers and for you

### Legal aspects

#### **Does a label have to be created for spare parts?**

No. Spare parts do not have to be labelled.

#### **Do existing systems require a label?**

No. Existing installations or systems are exempt. If the system is subsequently extended, e.g. a heating appliance is supplemented by a solar thermal system or a DHW cylinder, a composite label does not have to be issued.

#### **What happens to appliances which are already held in stock before the deadline?**

All appliances and systems which you have in stock before 26 September 2015 or which are held by wholesalers are considered to have already been "placed on the market". This means that they are not affected by the ErP Directive and may be sold, installed and operated.

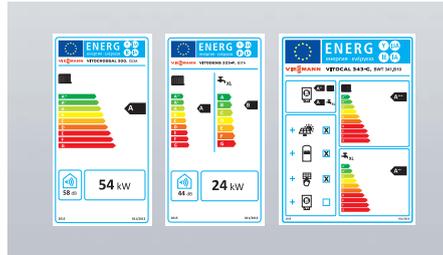
#### **What effects does the new Ecodesign Directive have on Viessmann products?**

Appliances whose energy efficiency levels are below 86 percent may no longer be placed on the market after 26 September 2015. This relates above all to floorstanding conventional boilers such as Vitola, Vitorond, Vitogas and Vitoplex, as well as wall mounted conventional boilers such as Vitopend. Open flue, conventional, wall mounted gas boilers (Vitopend) may still be sold after 26 September 2015, provided that they are connected in multi storey buildings to a shared low pressure chimney.



### Do the labels differ from manufacturer to manufacturer?

No. The graphic and the contents of the labels are officially defined. There are no differences in the design because they are specified by law. The difference only results from the respective parameters and classifications.



Technology and market

### Why have biomass boilers not been included?

For these systems there is still no basis for calculating their efficiency. It is likely that there will not be a mandatory energy efficiency label for biomass boilers until 2017.



### Does controlled mechanical ventilation have an effect on the label?

No. The effects of controlled mechanical ventilation are not currently included in the calculation. Mechanical ventilation systems are subject to the calculation regulations of the EU Commission from 1 January 2016.



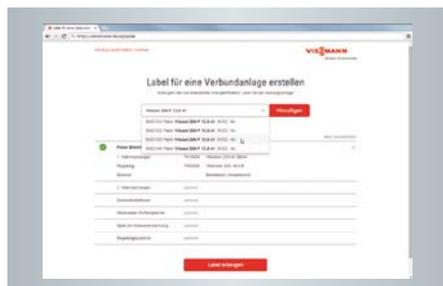
### How can the efficiency class of a composite system be improved?

Both the individual product labels and the number of additional components have an effect on the energy efficiency of a composite system. Certain system components improve the ranking of a system through efficiency points. These include, for example, a control unit, a solar thermal system or a smart home system.



### How can the most favourable rating for a composite system be determined?

The Viessmann calculation tool for efficiency labels offers a fast and easy way of testing various combinations of components in a composite system in order to be able to configure the system such that it achieves the best energy efficiency levels:  
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