

ENERGY LABELLING AND MINIMUM EFFICIENCY AND NOISE REQUIREMENTS

AERMEC IS READY FOR THE 26 SEPTEMBER 2015 REVOLUTION



**APPLIES TO EUROPEAN DIRECTIVE
FOR ENERGY RELATED PRODUCTS**

WHAT'S CHANGING?

26 September 2015 is a milestone for the world of Heating and Sanitary Hot Water Production: equipment and systems for room heating and the production of sanitary hot water launched onto European markets will have to bear energy labels and comply with the new minimum seasonal energy performance requirements (energy environmental performance) and sound power (acoustic environmental performance).

WHAT ARE THE NEW GUIDELINES?

The following European Regulations will enter into force:

- 811/2013: energy labelling of heating and sanitary hot water production equipment;
- 812/2013: energy labelling of equipment for sanitary hot water production only;
- 813/2013: ecodesign requirements for heating and sanitary hot water production equipment;
- 814/2013: ecodesign regulation for equipment for sanitary hot water production only.

WHAT IS THE OBJECTIVE?

"Ecodesign" means: compliance with minimum energy efficiency requirements and with maximum noise emissions levels (sound power issued into the environment).

This will also ensure a clearer energy classification grading system, which will enable the end customer to easily see and understand the product's or system's actual performance.

WHICH ARE THE PRODUCTS INVOLVED?

The energy labelling requirement applies to room heating and sanitary hot water production equipment with rated power up to 70 kW and to boilers up to 500 litres, whilst the new minimum energy performance requirements apply to the same products with a rated power of up to 400 kW or a volume of up to 2000 litres.

The products included in the new regulations are by and large the following:

- Air-water heat pumps;
- Water-water and geothermal heat pumps;
- Hybrid systems;
- Traditional burner boilers.

WHAT ARE THE TIME SCALES?

The new regulations, with respect to both minimum thresholds to be achieved and labels to be applied, shall enter into force on 26 September 2015.

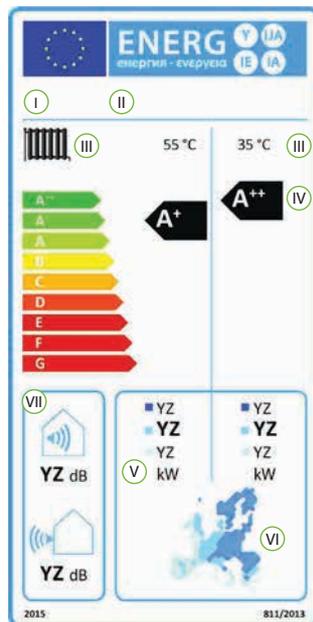
By this date, manufacturers may only be able to launch onto European markets products that comply with these regulations; the invoice date and not the date (of manufacture) on the product's ID plate will be the defining element. The same regulation also applies to products imported into European Community countries.

Products released to market before the 26th of September but still in the distribution chain (for instance in the warehouse of a reseller or wholesaler) are not subject to the directives and may be sold until stocks are exhausted.

WHAT DO THE NEW PRODUCT ENERGY LABELS LOOK LIKE?

The example below shows the look of the new label to be applied to each piece of equipment, in the case of a heat pump for heating and sanitary hot water production:

- I manufacturer's name or brand;
- II supplier model's ID code;
- III the room heating function is subdivided into average temperature applications (with hot water production 55°C) and low temperature applications (hot water production 35°C);
- IV the arrow symbol indicates the seasonal energy efficiency class of the device for the two reference applications;



- V the rated heat output (including that of any back-up heating devices) shown in kW, for three climate zones;
- VI the map shows the three climate zones;
- VII the sound power level LWA, inside (if applicable) and outside;

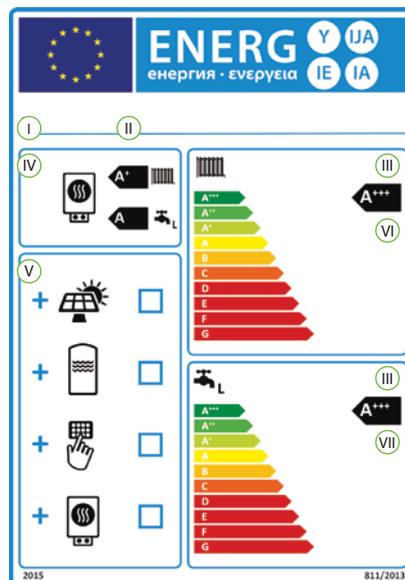
This label is supplied together with the technical documentation enclosed with the product. The distributor or importer is responsible for attaching the label to the product on display.

WHAT DO THE NEW SYSTEM ENERGY LABELS LOOK LIKE?

European Regulations prescribe system labelling for systems consisting of the combination of several appliances. A system is a group of various individual products, in each combination that then acts as a system. This could be, by way of example, a system consisting of a heat pump, a boiler, a solar thermal system and an electronic system control, all working as a single unit and, therefore, with an energy performance that can be calculated as the combination of its individual components.

An example of the new label to be applied to the system is shown below:

- I manufacturer's name or brand;
- II supplier model's ID code;
- III the room heating function and the water heating function, including the load profile expressed by the relevant letter pursuant to Table 15 of Annex VII;
- IV seasonal energy efficiency classes for room heating and water heating for the mixed heating equipment determined in accordance with Annex II, points 1 and 2;
- V the indication whether a solar collector, a hot water tank, a temperature control device and/or an auxiliary heating device can be included into the system that consists of the mixed heating equipment, the temperature control device and the solar device;



- VI the seasonal energy efficiency class for room heating of the system of mixed heating devices, temperature control devices and solar devices determined in line with Annex IV, point 6; the arrowhead that shows the seasonal energy efficiency class for room heating for the system consisting of mixed heating equipment, temperature control devices and solar devices is at the height of the arrowhead that indicates the relevant energy efficiency class;
- VII the seasonal energy efficiency class for water heating of the system consisting of mixed heating equipment, temperature control devices and solar devices determined in line with Annex IV, point 6; the arrowhead that shows the seasonal energy efficiency class for water heating for the system consisting of mixed heating equipment, temperature control devices and solar devices is at the height of the arrowhead that indicates the relevant energy efficiency class.

Contrary to product labels, system labels are not produced by the manufacturers of individual products (system components), but rather by whoever defines the system of products that are then installed in situ. This may be the wholesaler or the installer, for instance.

There are support tools for those who need to create the system label, to help them draft and create such labels.

WHAT ARE THE OBLIGATIONS FOR THE VARIOUS PARTIES INVOLVED?

Starting from 26 September 2015:

The Manufacturer:

- Supplies products that comply with all requirements;
- Applies product energy labels on all products to which regulations applies;
- Provides support tools (documentation and information) to customers.

The importer (who imports goods from non-EU countries):

- Must comply with the same requirements as those applicable to the manufacturer.

The Reseller, Wholesaler or installer:

- Must apply any system energy label.

The End User:

- The end user has no obligations or duties as a result of the new legislation.

AND WHAT ABOUT AERMEC'S PRODUCTS?

These new regulations are yet another opportunity for AERMEC to highlight once again the excellence of its heat pump in terms of energy efficiency, sustainability and cost savings for the end user.

Aermec can offer a vast range of heat pumps (air-water and water-water) with efficiencies ranging from Class A+ to Class A++.

With respect to acoustic compatibility, Aermec can reap the results of years of design efforts aimed at achieving very quiet operation for its appliances.

AERMEC, therefore, passes the very strict exam to which heating equipment manufacturer shall be subject from 26 September onwards with flying colours.

WHAT ARE THE SUPPORT TOOLS PROVIDED BY AERMEC?

We have also worked very hard to harmonise our technical documentation - both online and offline - as well as the selection software that we offer to sector operators with the new guidelines. Both on-board machine manuals and Aermec's technical documentation provide clear information about the new energy classes. Moreover, detailed information about each model in all its configurations is also available on Aermec's website.

DO YOU HAVE ANY OTHER QUESTIONS?

For further details about regulatory issues, click on this link:

<http://eur-lex.europa.eu/legal-content/IT/TXT/?uri=CELEX:32013R0811>

ADDITIONALLY...

Aermec can provide designers, installers and end users with any clarifications that they may require about the environmentally- friendly features (efficiency and noiseless operation) of its equipment, as well as with any other tools about the new guidelines and their implementation.

