

Review study of ecodesign and energy labelling for air conditioners October 2018

In addition to the position paper submitted in August 2018 on the final reports of the preparatory study on the review of the Ecodesign and Energy labelling requirements for air conditioners, EPEE recommends that the European Commission improves the existing test methods to better reflect the real use of products.

The study team makes a number of suggestions on how to enhance the real-life product usage to better reflect real life performance. However, we consider that the study missed the opportunity to better compare the existing testing methods with the real life use of the products and to suggest improvements of the testing methods that will trigger real life energy savings.

The proposed solution to achieve the BAT and BNAT is to have bigger heat exchangers with a high air flow rate (i.e. Task 6). This type of unit can definitely be built. It will also be able to reach the minimum requirements and meet high energy class, but only in a laboratory. The reason is that these improvements will have a severe impact on the comfort level. Indeed, the unit will not be able to dehumidify a room at a normal set point temperature in cooling mode and a cold draft effect can be sensed in heating mode. The customer will therefore modify the set point temperature to avoid this discomfort. No energy savings will be made with this type of unit in real situations, only in a laboratory.

Currently, designers are considering these points while designing the unit. During testing however, the comfort is not taken into account while in reality it is the main concern for the users. With the current direction of having high targets for energy label, designers would therefore have to design a product without considering these fundamental points. This will lead to a situation where there will be energy savings in theory, as tested in the laboratory, but not in reality.

EPEE therefore calls on the Commission to further investigate this topic and assess the potential impact of the recommendations made in the final report, in particular:

- Minimum blowing air temperature in heating mode;
- Blowing air temperature and minimum dehumidification in cooling mode;
- Change of air flow and possible temperature settings during part load testing; and
- Potentially other aspects.

We believe that this will have an impact on the efficiency, sound power level and the relevant requirements for the Energy label.

In the final tasks, the study team is suggesting to provide in the technical documentation the temperature of the blown air temperature in heating and cooling mode and dehumidification in cooling mode. Based on these values, it is planned for the next revision to evaluate the possible impacts on SEER and SCOP values and ensure that these remain representative of real

life. The phenomena are well known and there is no need to delay this to the next revision. We believe that it will be too late to analyse them for the next revision.

We are at your disposal should you have any questions and would like to request a meeting at your convenience to further discuss this important topic.

ABOUT EPEE:

The European Partnership for Energy and the Environment (EPEE) represents the refrigeration, air-conditioning and heat pump industry in Europe. Founded in the year 2000, EPEE's membership is composed of 40 member companies, national and international associations.

EPEE member companies realize a turnover of over 30 billion Euros, employ more than 200,000 people in Europe and also create indirect employment through a vast network of small and medium-sized enterprises such as contractors who install, service and maintain equipment.

EPEE member companies have manufacturing sites and research and development facilities across the EU, which innovate for the global market.

As an expert association, EPEE is supporting safe, environmentally and economically viable technologies with the objective of promoting a better understanding of the sector in the EU and contributing to the development of effective European policies. Please see our website (www.epeeglobal.org) for further information.

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