



Review of ENER Lot 10

EHPA comments on the Ecodesign and Energy Labelling proposals for air-to-air conditioners and heat pumps

EHPA would like to thank the European Commission and the study team for the work already carried out and welcome the opportunity given to comment on the options proposed in the review of the Ecodesign Regulation 206/2012 and energy labelling Regulation 626/2011 for air conditioners and comfort fans. The first part of this paper presents our comments on several options and recommendations in the addendum report on alternative testing methods for air-to-air air conditioners and air-to-air heat pumps. The second part of this paper provides EHPA position on the merging of local space heaters and air conditioners labelling scales to prepare the upcoming stakeholders' meetings on the topic.

Chapter 1: EHPA Comments on the addendum report on alternative testing methods

Thermal comfort: heating & cooling mode

EHPA appreciates that thermal comfort of occupants has been taken into account. Fixing a maximum air flow rate during testing is a good way forward. We support the European Commission approach of limiting the airflow. It should be considered that regardless the maximum airflow rate value chosen the airflow limit should remain stable and not change at each review, in order to assure stability on the AC market.

- **Air flow measurement**

To assure that measurements done by different labs and declared by manufacturers are accurate, reliable and reproducible, we believe that measured airflow tolerances should be included and defined in the regulation.

As recommended in the report, the standards will need to be adapted as well, to ensure for accuracy, repeatability, reproducibility, and easy checks, to secure a level playing field on the market. It will be important as flagged in the report to standardize the airflow measurement procedure and to prepare amendments to the relevant EN standards.

Both methods to measure airflow in calorimeter and air enthalpy room should be made possible and yield comparable results.

Taking the above points into account, it shall be noted that sufficient time is needed to standardize and proof the airflow measurement methods, especially indirect measurement in calorimeter room.

- **Bivalent point**

EHPA supports the proposal to fix the bivalent point at -7 °C or lower for the average climate.

- **Multi-split**

EHPA appreciates the proposal of the Commission on multi-split systems. We believe that multi-split systems shall be considered carefully.



For units placed on the market with a capacity ratio lower than 1, the current proposal may be too restrictive as it imposes unnecessary limitations on the airflow of such systems, and therefore, we propose to carefully assess the equation for combinations with capacity ratios lower than 1.

Introducing a CR without proper capacity ratio confirmation procedure could generate ambiguities in the regulation: to assess properly whether the AFR-related capacity ratio formula is applied correctly, methods have to be set in place that can check and validate the capacity of the outdoor unit and the indoor units.

- **Process application/close control units**

EHPA would like to point out that air conditioner not intended for human comfort application i.e. close control units should be exempted from the requirements of comfort testing. We understand the concern of the European Commission on the need to avoid extra loopholes, however these proposals should not create irrelevant requirements neither on units not intended to provide thermal comfort. Close control units are designed to provide large amounts of cold air under low supply temperatures to remove excess heat generated by room installed equipment in non-occupied spaces.

Furthermore, close control units are out of the scope of the Standard EN 14825: the scope applies to factory made units as defined in EN 14511-1, except single duct, double duct, control cabinet and close control units.

- **Final proposal and implementation**

Foreseeing one year between publication and implementation of Tier 1 is too short and ambitious period. More time is needed to:

- Retest the units that exceed the proposed airflow limitations;
- Redesign of impacted units that fail the MEPS under airflow limitation requirements;
- Amend the relevant CEN standards and harmonize them with the revised regulation.
- For the calorimeter test room method, additional consideration is needed for dealing with the fan speed variation when measuring and setting the test airflow rate;

Therefore, we believe that there should be a period of at least two years between the publication and the implementation of the Tier 1. Keeping in mind that an implementation either in the beginning or in the end of the year is more appropriate due to AC market seasonality.

Compensation method and alternative solutions

EHPA supports the conclusion of the Commission that the compensation method is not yet fit for regulatory application and should be postponed to later on. More time is needed for additional round robin tests, investigations, standardization activities etc. Considering that a revision clause is an acceptable approach, we wonder based on the results currently available if the timing proposed in the new reports is not too optimistic taking into account the challenges, lack of information and limited results as available today.

- **Request of technical information allowing independent testing**

EHPA welcomes the European Commission proposal to share test settings allowing for independent testing. However, we would prefer not having the information on a public platform (e.g., compliance part of EPREL can be a suitable location that is not publicly accessible) to ensure confidentiality and avoid unnecessary leak of IP sensitive information and misuse of such data. In case the EPREL



compliance part is not considered, any other option considered should clearly contain boundary conditions such as:

- **No public share:** It should be on a secured platform of the manufacturer and handled as confidential data by the recipient.
 - **The type of labs eligible to request such information:**
 - Labs considered eligible to request such information shall ensure high technical competences and knowledge of lab technicians and engineers to reduce errors and pertain high test data reliability. In addition, access to such labs shall avoid creating any competitive advantage. Indeed, it is of the utmost importance that the testing data and reports are only used for the goal set in the regulation, because their misuse could result in non-competitive practices on the market.
 - **Acceptance and refusal criteria to obtain the data information:**
 - There should be no immediate access to the information. A clear set of rules and procedures need to be established between the manufacturer and the lab registering to get the information for test settings: i.e., eligibility status, creating user accounts, verification procedure, acceptance, and refusal criteria (manufacturers should have the possibility to grant deny request based on fulfillment of defined criteria), handling of the information after finishing the test etc.
 - Manufacturers should have the possibility if certain criteria are not met to deny the request.
 - **Possibility for NDAs upon granting the data to avoid leak to third parties:**
 - That information cannot be passed down among stakeholders once they are granted access to the information. We wonder how to engage stakeholders to respect privacy and confidentiality and avoid misuse once the information have been provided.
 - Upon granting access, it shall be possible to consider adding an NDA or any other legal means that shall prevent having test setting information being freely distributed to third parties by the labs that have access to that information. This can jeopardise IP of manufacturers based on “know-hows”, patents, or other legal obligations.
 - **Type of shared information: Define the type of shared information** to avoid access to intellectual property information
 - **Form of sharing the information:**
 - **The manufacturer providing the data should also get some feedback on the testing performed and the use of the data:** avoid misuse of the info and the units, and receive notification, even possibly results and test report, once the tests are finished about shared data destruction.
- **Controls verification procedure**

EHPA supports the introduction of the controls verification procedure (CVP), specifically the Japanese JIS methodology as in the standard JIS B 8616: 2015.

However, the suggested Japanese procedure needs to be specifically adapted for smaller capacity units under both enthalpy and calorimeter test conditions and included in the relevant standards. Therefore, more time will be needed as mentioned already above.



Chapter 2: EHPA position on the merging of local space heaters and air conditioners labelling scales

EHPA welcomes the merging of the local space heating products labelling scales and air conditioners labelling scales. The conclusion of the study shows that the consumer can benefit more from a combined label. Indeed, granularity can be an issue, but further investigation and study can be conducted as suggested by the consumer study.

We believe that the display information should be easily understood by the consumers. We suggest the use of efficiency as a possible solution instead of the consumption as it may help improve granularity. Furthermore, if the heating capacity is shown, it should be clearly indicated that it is the heating capacity to avoid misunderstandings.

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ABOUT EHPA

The European Heat Pump Association (EHPA) is a Brussels based industry association which aims at promoting awareness and proper deployment of heat pump technology in the European marketplace for residential, commercial and industrial applications.

EHPA provides technical and economic input to European, national and local authorities in legislative, regulatory and energy efficiency matters. All activities are aimed at overcoming market barriers and dissemination of information in order to speed up market development of heat pumps for heating, cooling and hot water production.

EHPA coordinates quality initiatives: including the HP KEYMARK, a Quality label for heat pumps and Certification standards for heat pump installers. The association compiles the annual heat pump statistics and organizes a number of events, among them an annual heat pump conference.