



ECODESIGN AND LABELLING REQUIREMENTS FOR ROOM AIR CONDITIONING APPLIANCES

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Summary

- Following the Ecodesign Consultation Forum meetings of June 2009 and April 2010, ANEC and BEUC provide additional comments in this position paper with regard to ecodesign and Energy Label requirements of room air conditioning appliances.
- We ask including all types of room air conditioning appliances in one Ecodesign Regulation, i.e. appliances with a cooling function, with a cooling and heating function and with a heating function only.
- We call on the Commission to introduce the Ecodesign requirements as soon as possible.
- Moreover, we call for mandatory requirements on noise as noise from room air conditioning appliances may lead to discomfort for consumers.
- We call for introducing a technology independent Energy Label with seven classes from A – G.
- Finally, we see a need to better inform consumers about inefficient technologies such as single duct air coolers which require windows to stay open. Such information should be given on the front of pack. We also ask to inform consumers better in the booklet of instructions on how to manage heat loads in summer without using room air conditioning appliances, e.g. by closing shutters and ventilating rooms at times of the day when outside temperatures are lower.

Introduction

The European Commission consulted stakeholders on possible ecodesign and energy labelling requirements for room air conditioning appliances in June 2009. ANEC and BEUC contributed with the consumer view to the Consultation Forum on 22 June 2009¹. In this position paper, we make additional comments related to the updated Commission working documents.

Scope of the Ecodesign measure

At the Consultation Forum of 23 April 2010 it has been explained that a new product group will soon be available to consumers: room air conditioning appliances that provide for a heating function only.

As these appliances use the same technology as air conditioning for cooling by applying a reversed cycle, we propose treating all different kinds of air conditioning appliances in one Ecodesign Regulation.

We are however not convinced that it will be beneficial to include these heating appliances into the labelling scheme. Labelling these local appliances with good ratings such as class "A" or better may give an incentive to consumers to buy these appliances for heating purposes. However, other types of products that do not have a label may be more suitable. Thus, the label could give the wrong incentive to consumers.

We recommend using such heating appliances only in existing buildings and not in new buildings as new constructions should be conceptualised without the need to install additional local heating sources.

Moreover, we recommend keeping this product group in mind when progressing with other preparatory studies such as on local room heating products using hot air in order to ensure consistency with regard to the ecodesign and labelling requirements.

Ecodesign requirements should apply from 2012 onwards

ANEC and BEUC call on the Commission to make the first tier of ecodesign requirements binding from the beginning of 2012 instead of 2013. Should it not be possible to keep the originally envisaged timescale proposed in the year 2009, we suggest raising the ambition level of the energy efficiency requirements (e.g. by 10%).

We also ask to introduce the second tier of ecodesign requirements from the beginning of 2014 instead of 2015. Considering the high energy consumption and the considerable improvement potential of room air conditioning appliances, the requirements on energy efficiency should be introduced as soon as possible.

¹ <http://www.anec.eu/attachments/ANEC-PT-2009-EuP-031final.pdf>

This demand seems to be justified as consumer testing² shows a considerable trend towards more energy efficient split appliances in recent years. It is expected that this trend will continue.

Mandatory requirements on noise levels needed

We see an urgent need to protect consumers from disturbing noise from room air conditioning. We therefore reiterate our demand made at the Consultation Forum in 2009:

- o The maximum noise levels for all RACs and LACs should be fixed to a maximum value of 60 dB-A for all indoor units.
- o To reduce the acoustic pollution, the requirements for outdoor units should be lowered by 5 dB-A. We recommend applying the following values:

Sound power level	RAC < 6 kW		RAC 6-12 kW		LAC	
	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor
dB-A	55	60	60	65	55	55

Energy Label should show seven classes from A-G

We are in favour of introducing a technology independent Energy Label for room air conditioning appliances. However, we strongly reject the proposal to introduce a ten class label from A+++ to G from the beginning.

Related to the new Energy Efficiency of Buildings Directive (EPBD), a growing demand for heat pumps can be expected. Because of the increasing energy efficiency of buildings *and* the installed appliances, it is quite crucial that the scale for the Energy Labelling scheme leaves sufficient headroom for future technological innovations. Existing technologies should therefore not be classified in classes of A+, A++ and A+++ as this would make the label meaningless for consumers in the near future.

We therefore propose introducing a seven class label from A-G as follows:

² Such as carried out by DECO PROTESTE from Portugal.

Energy Efficiency Class	SEER/EER	SCOP/COP
A	>6	>5
B	>5,4	>4,4
C	>4,8	>3,8
D	>4,2	>3,2
E	>3,6	>2,6
F	>3	>2
G	<=3	<=2

Consumer information needs to be improved

The ecodesign and labelling requirements will be based on a changed calculation method for RACs. Thus, the future SEER values will have no correlation with the EER values that are used for the current labelling classes. As there is not a simple transition from one method to the other, it is not predictable in which labelling class the appliances will be grouped. In case the SEER will be much higher than the current EER values, this could lead to the misconception for consumers that a considerable improvement in the quality of the products has taken place. Therefore it will be crucial to inform consumers about the new label in shops.

In 2009, ANEC and BEUC called for improving consumer information related to the installation and use of room air conditioning appliances. As our demands are not reflected in the latest working documents, we reiterate the following points:

- As professional installation and maintenance is required for all split devices, consumers need to be informed
- about this need before taking a purchase decision. The relevant information should be given on the packaging of room air conditioning appliances.
- Consumers need to be better informed about the features of local air coolers. Although local air coolers perform badly, it is difficult for consumers to find useful information at the point of sale that allows for a quick and easy comparison of local air coolers and room air conditioning appliances. We ask to show on all local air coolers with images and written text that windows or doors must stay open for using single duct local air coolers. The picture should keep the proportions of the real appliance as showing the duct e.g. in smaller size would be misleading for consumers.
- We ask to include the following information into the booklet of instructions:
 - General advice to consumers how to reduce heat loads without the use of room air conditioning appliances (e.g. advice to open windows early in the morning and to close shutters)
 - Information that RACs and LACs contain a refrigerant which is either a greenhouse gas, toxic or combustible. It should be informed that therefore a damaging of the refrigerant cycle must be avoided and that the product

needs to be uninstalled by qualified personnel and needs to be disposed of properly.

Energy consumption in “off” mode should be mentioned on the label

According to recent consumer testing³ the energy consumption in “off” mode can be up to 10W. This consumption cannot be easily controlled by the consumer as usually there is no plug available to disconnect the appliance from the grid. As this consumption in “off” mode can have a considerable impact on the total yearly consumption, the label should mention this information to allow consumers informed choices.

Value for energy consumption should be mentioned on the label

At the Consultation Forum it had been discussed whether the annual power consumption should be mentioned on the label. As the time in “on” mode depends considerably on varying whether conditions it has been argued that mentioning the average annual power consumption could be misleading to consumers. However, we see a need for an absolute reference value on the label. In case an annual average consumption cannot be reliably calculated, another more suitable unit should be chosen.

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³ E.g. from DECO PROTESTE, Portugal.