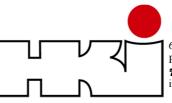
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> HKI-INFO 068EN Updated in September, 2017

# **HKI INFO**

# (EU) 2015/1186

# Energy label

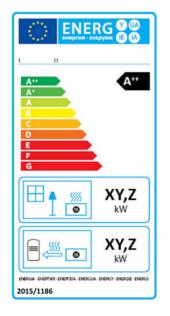
Local space heaters

# Content

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# 1. General information - energy label for local space heaters

The Commission Delegated Regulation (EU) 2015/1186 establishing requirements for the energy label for local space heaters, was published in the Official Journal of the European Union on July 21<sup>st</sup>, 2015. As of January 1<sup>st</sup> 2018 the label of this regulation shall apply to local space heaters that are not flueless heaters using solid fuels and as of January 1<sup>st</sup> 2022 for flueless heaters using solid fuels or open to chimney heaters using solid fuels. The energy label or rather the energy classifications will influence purchasing choices of customers and users.



# Scope

This regulation applies to local space heaters with a nominal heat output of 50 kW or less using solid fuels, gaseous fuels and liquid fuels. The regulation covers also appliances fitted with boilers, open fronted and flueless heaters.

Amongst others, this regulation shall not apply to electric local space heaters; solid fuel local space heaters that are specified for the combustion of non-woody biomass only; solid fuel local space heaters that are not factory assembled or are not provided as pre-fabricated components or parts by a single manufacturer which are to be assembled on site. Assembly kits are subject of the regulation.

Figure 1: Sample energy label

# Contents of the label

The label (as pictured in figure 1) shall contain a variety of information. The energy efficiency class graded with letters A++ - G and a gradient going from green to red are always included. To the right of the scale a black arrow containing the energy efficiency class is depicted with the head of the arrow pointing at the head of the relevant energy class. Below the classification are two data fields, the upper one stating the direct heat output into the installation room in kW (kilowatt) and, if applicable, the lower field stating the indirect heat output in kW (for local space heaters fitted with a boiler) into an existing heating system.

# Calculation of the energy efficiency class

The energy efficiency class of each appliance is calculated based on type testing methods. The energy efficiency class arises from the energy efficiency index (EEI) which is defined in figure 2:

 $EEI = (\eta_{S,on} * BLF) - 10\% + F(2) + F(3) - F(4) - F(5)$ 

# Figure 2: Energy efficiency index

The index consists of a variety of factors and has to be determined depending on appliance specifications. Calculation basis is the efficiency of the appliance which has been determined during type testing with a preferred fuel and at nominal heat output. The efficiency is multiplied with the biomass label factor (BLF), which is 1,45 for biomass and 1 for fossil fuel. This product is then reduced by 10. Further correction factors are analogue to the determination of the seasonal space heating EEI as specified in the ecodesign regulation (EU) 2015/1185. F(2) accounts for heaters with different temperature control devices. Factor F(3) accounts for presence detection and distance control option. F(4) is based on the calculation of the auxiliary electricity consumption and F(5) mirrors the energy consumption of a pilot flame.

<u>Respective correction factor F(2)</u>: The correction factor F(2) has a positive impact on the energy efficiency index. For all space heaters, the correction factor F(2) corresponds to the figures given in table 4 (see <u>EU 2015/1186</u> Annex VIII, page 40) which vary according to the control of indoor heating comfort characteristic.

As of January 1<sup>st</sup>, 2022 the correction factor F(2) shall be zero, for solid fuel space heaters with emissions higher than those set out in Annex II, number 2 of Commission Regulation (EU) 2015/1185 (limit values for PM, OCG and NOx).

If a nominal heat output as well as a partial load heat output (50 % max) is given for the appliances, the correction factor F(2) can be included with a minimum of 1,0 % into the EEI. In this case it would not be necessary to keep emission limit values until 2022.

As of 2022 the correction factor F(2) can only be included if the limit values from (EU) 2015/1185 are kept.

It is recommended to only take the correction factor F(2) into consideration if these conditions are met already in 2018.

| Energy efficiency class | Energy Efficiency Index |
|-------------------------|-------------------------|
| A++                     | EEI = 130               |
| A+                      | 107= EEI < 130          |
| А                       | 88= EEI < 107           |
| В                       | 82= EEI < 88            |
| С                       | 77= EEI < 82            |
| D                       | 72= EEI < 77            |
| E                       | 62= EEI < 72            |
| F                       | 62= EEI < 62            |
| G                       | EEI < 42                |

Once the energy efficiency index has been calculated, the energy efficiency class can be determined and indicated on the label with the help of the following table.

Figure 3: Energy efficiency classes

# Declaration of the preferred fuel

One of the principles for the calculation of the EEIs is the preferred fuel type which has to be indicated in the technical documentation. If the appliance can be operated both with fossil fuels as well as biomass, a preferred fuel must be specified. In case of fossil fuels a BLF of 1 may be assumed, for biomass as a preferred fuel a BLF of 1,45.

# **Responsibilities of manufacturers**

From January 1<sup>st</sup>, 2018 suppliers placing on the market or putting into service local space heaters that are not flueless heaters using solid fuels or open to chimney heaters using solid fuels shall ensure that:

- the heater is provided with a printed label as specified in point 1 of Annnex II and conforming to the energy efficiency classes set out in (EU) 2015/1186 Annex II;
- an electronic label in the format and containing the information set out in (EU) 2015/1186 point 1 of Annex III and conforming to the energy classes set out in Annex II is made available to dealers of such local space heater models;
- a product fiche in accordance with (EU) 2015/1186 Annex IV is provided for such local space heaters;
- an electronic product fiche, in accordance with (EU) 2015/1186 Annex IV, is made available to dealers for such local space heater model;
- the technical documentation as set out in (EU) 2015/1186 Annex V is provided on request to the authorities of the Member States and to the Commission.

Additionally as of April 1st, 2018, it will be mandatory to indicate the energy efficiency class of the appliance in advertisements referring to energy consumption and pricing as well as in technical promotional materials with information on appliance specifics.

From January 1st, 2022, suppliers placing on the market or putting into service flueless heaters using solid fuels or open to chimney heaters using solid fuels shall ensure all of the provisions stated above.

# Usage before January 1<sup>st</sup>, 2018

Usage of the label before January 1<sup>st</sup>, 2018 is officially prohibited by the European Commission. Exempted from this rule is the usage and application of the label during temporary trade shows and exhibitions, as long as the labelled appliances are not intended for placing on the market. Furthermore, to allow for the chain of supply and channels of distribution, the label may be included with the appliances or printed on the packaging within an appropriate time period before January 1<sup>st</sup>, 2018. A definite timeframe has not yet been determined. According to the commission, market surveillance throughout Europe will be notified of this specific period in due time and instructed to not pursue possible violations of the above stated ban on usage before January 1<sup>st</sup>, 2018 that occur within this specific time period.

# Verification procedure for market surveillance purposes

National authorities shall apply the following verification procedures which essentially consist of two basic control requirements as specified in the regulation. For one thing it has to be verified that the values and classes on the label and in the product fiche correspond to the values in the technical documentation and for another the correct declaration of the energy efficiency class and of the EEI has to be verified by testing the appliances.

One single unit shall be tested with fuel characteristics in the same range as the fuel that was used by the manufacturer to perform measurements. For solid fuels, liquid fuels and gaseous fuels of local space heaters the EEI is not more than 8% lower than the declared value. If the requirement of a uniform documentation is not met, the model and all equivalent models shall be considered not to comply with this Regulation and the member state authorities shall proceed as specified in the Regulation. If the EEI is more than 8% lower than the declared value, three randomly selected units of the same model or three randomly selected units of an equivalent model shall be tested. If the EEI of these additionally tested units is more than 8% lower than the declared value, the member state authorities shall proceed as specified in the Regulation. If the EEI of these additionally tested units is more than 8% lower than the declared value, the member state authorities shall proceed as specified in X and X.

# 2. Notes for the creation of an energy label

The energy label can be created in different ways. Such are:

- independently by your company
- by an external graphic designer
- by using the online tools provided by the European Commission

In case you decide to create the label yourself or commission an external company, it is crucial to comply with the exact dimensions as described in Annex III of Regulation (EU) <u>2015/1186</u>. From experience, market surveillance acts strictly on infringements relating to label design and admonishes even slight deviations.

Thus, all labels shall be created with a uniform design that enables the consumer to unambiguously recognize the energy label. The design (size, colours, scale etc.) are described in detail in Regulation (EU) 2015/1186 Annex III.

Alternatively, the online tools of the European Commission, which have the correct measurements as the default setting, can be used to create the label. You can access the tools following this link:

# https://ec.europa.eu/energy/en/energy-labelling-tools

The following versions are available:

- Editable templates for InDesign (the relevant folder with information is the 9<sup>th</sup> folder from the top under *Local Space heaters*).
- <u>The Energy Label Generator</u> (an online tool to create and print high resolution energy labels).

Both tools can be used free of charge to create energy labels.

# References for the placement of information on the label:

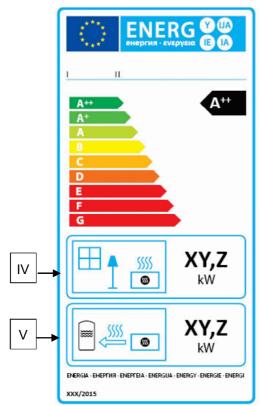


Figure 4: Example energy label

There are two areas on the label for the indication of the heat output in kW. The upper area (marked with IV) is for the indication of the direct heat output, the lower area (marked with V) for the indirect heat output.

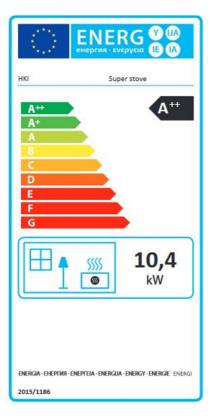
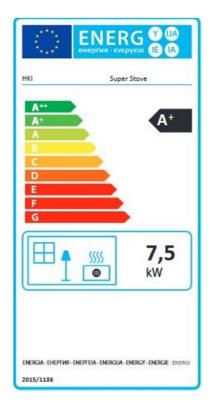


Figure 5: Sample label for appliances without heat transfer to a fluid (appliances which are not fitted with a boiler).

**Note:** Area V is for local space heaters with heat transfer to a fluid (it means appliances fitted with a boiler).

For local space heaters without heat transfer to a fluid area V is not included (see figure 5)



The heat output (direct as well as indirect) of the appliances is stated using layout XY, Z according to the regulation, the calculated value is rounded to the nearest one decimal place. Local space haters with a nominal heat output of <10 may be depicted in layout Y,Z. An appliance with a heat transfer of 7,5 kW is characterized as shown in figure 6. This also applies to area V (if applicable).

Figure 6: heat transfer layout

## COMMISSION DELEGATED REGULATION (EU) 2015/1186

### of 24 April 2015

supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of local space heaters

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2010/30/EU of the European Parliament and of the Council of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products (<sup>1</sup>), and in particular Article 10 thereof,

Whereas:

- (1) Directive 2010/30/EU requires the Commission to adopt delegated acts as regards the labelling of energy-related products that have a significant potential for energy savings and a wide disparity in the relevant performance levels with equivalent functionality.
- (2) Local space heaters with equivalent functionality exhibit a wide disparity in terms of energy efficiency and the energy they use accounts for a significant share of the total energy demand in the Union. The scope for reducing their energy consumption is significant.
- (3) Local space heaters using non-woody biomass have specific technical characteristics and should therefore be exempted from this Regulation.
- (4) Harmonised provisions on labelling and standard product information should be laid down in order to provide incentives for manufacturers to improve the energy efficiency of local space heaters, to encourage end-users to purchase energy-efficient products and to contribute to the functioning of the internal market.
- (5) As the typical use and therefore also energy consumption of local space heaters is different to that of other space heating products being regulated, this Regulation should introduce a labelling scale different to that of other space heating products.
- (6) As luminous and tube local space heaters are products directly purchased by professionals and not by final consumers no energy labelling requirements relating to them are set in this Regulation.
- (7) The minimum requirements applying to electric local space heaters under Commission Regulation (EU) 2015/1188 (<sup>2</sup>) provide the maximum technical improvement potential of these products. In consequence, no room for differentiation will be left among them. Electric local space heaters cannot be directly substituted by more efficient local space heaters using other fuels and in consequence, the label would not achieve the objective of providing information to consumers about the relative efficiency of different products.
- (8) Promoting the use of renewable energy in heating products is consistent with the objective of promoting renewable energy. It is therefore appropriate that this Regulation introduces a specific approach for local space heaters, a 'biomass label factor' set at such a level that class A++ can be reached by solid fuel local space heaters using pellets only.
- (9) The information provided on the label should be obtained through reliable, accurate and reproducible measurement and calculation procedures which take into account recognised state-of-the-art measurement and

<sup>(&</sup>lt;sup>1</sup>) OJ L 153, 18.6.2010, p. 1.

<sup>(2)</sup> Commission Regulation (EU) 2015/1188 of 28 April 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for local space heaters (see page 76 of this Official Journal).

calculation methods including, where available, harmonised standards adopted by the European standardisation organisations, in accordance with the procedures laid down in Regulation (EU) No 1025/2012 of the European Parliament and of the Council (<sup>1</sup>), for the purpose of establishing ecodesign requirements.

- (10) This Regulation should specify a uniform design and content for the product labels of local space heaters.
- (11) In addition, this Regulation should specify requirements for the product fiche and technical documentation for local space heaters.
- (12) Moreover, this Regulation should specify requirements in respect of the information to be provided in any case of any form of distance selling of local space heaters and in any advertisements and technical promotional material for such local space heaters.
- (13) It is appropriate to provide for a review of the provisions of this Regulation taking into account technological progress,

HAS ADOPTED THIS REGULATION:

### Article 1

#### Subject matter and scope

This Regulation establishes requirements for the energy labelling of, and the provision of supplementary product information on local space heaters with a nominal heat output of 50 kW or less.

This Regulation shall not apply to:

- (a) electric local space heaters;
- (b) local space heaters using a vapour compression cycle or sorption cycle for the generation of heat driven by electric compressors or fuel;
- (c) solid fuel local space heaters that are specified for the combustion of non-woody biomass only;
- (d) local space heaters specified for purposes other than indoor space heating to reach and maintain a certain thermal comfort of human beings by means of heat convection or heat radiation;
- (e) local space heaters that are specified for outdoor use only;
- (f) local space heaters of which the direct heat output is less than 6 % of the combined direct and indirect heat output at nominal heat output;
- (g) solid fuel local space heaters that are not factory assembled, or are not provided as prefabricated components or parts by a single manufacturer which are to be assembled on site;
- (h) luminous local space heaters and tube local space heaters;
- (i) air heating products;
- (j) sauna stoves.

#### Article 2

# Definitions

In addition to the definitions set out in Article 2 of Directive 2010/30/EU, the following definitions shall apply for the purposes of this Regulation:

(1) 'local space heater' means a space heating device that emits heat by direct heat transfer or by direct heat transfer in combination with heat transfer to a fluid, in order to reach and maintain a certain level of human thermal comfort

<sup>(&</sup>lt;sup>1</sup>) Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council (OJ L 316, 14.11.2012, p. 12).

within an enclosed space in which the product is situated, possibly combined with a heat output to other spaces and is equipped with one or more heat generators that convert electricity or gaseous, liquid or solid fuels directly into heat, through use of the Joule effect or combustion of fuels respectively;

- (2) 'solid fuel local space heater' means an open fronted local space heater, closed fronted local space heater or cooker using solid fuels;
- (3) 'gaseous fuel local space heater' means an open fronted local space heater or a closed fronted local space heater using gaseous fuel;
- (4) 'liquid fuel local space heater' means an open fronted local space heater or a closed fronted local space heater using liquid fuel;
- (5) 'electric local space heater' means a local space heater using the electric Joule effect to generate heat;
- (6) 'open fronted local space heater' means a local space heater, using gaseous, liquid or solid fuels, of which the fire bed and combustion gases are not sealed from the space in which the product is fitted and which is sealed to a chimney or fireplace opening or requires a flue duct for the evacuation of products of combustion;
- (7) 'closed fronted local space heater' means a local space heater, using gaseous, liquid or solid fuels, of which the fire bed and combustion gases can be sealed from the space in which the product is fitted and which is sealed to a chimney or fireplace opening or requires a flue duct for the evacuation of products of combustion;
- (8) 'cooker' means a local space heater, using solid fuels, that integrates in one enclosure the function of a local space heater, and a hob, an oven or both to be used for preparation of food and which is sealed to a chimney or fireplace opening or requires a flue duct for the evacuation of products of combustion;
- (9) 'fuel fired local space heater' means either an open fronted local space heater, closed fronted local space heater or cooker;
- (10) 'luminous local space heater' means a local space heater, using gaseous or liquid fuel which is equipped with a burner; which is to be installed above head level, directed towards the place of use so that the heat emission of the burner, being predominantly infrared radiation, directly warms the subjects to be heated and which emits the products of combustion in the space where it is situated;
- (11) 'tube local space heater' means a local space heater, using gaseous or liquid fuel, which is equipped with a burner; which is to be installed above head level, near the subjects to be heated, which heats the space primarily by infrared radiation from the tube or tubes heated by the internal passage of products of combustion and of which the products of combustion are to be evacuated through a flue duct;
- (12) 'flueless heater' means a local space heater, using gaseous, liquid or solid fuel, emitting the products of combustion into the space where the product is situated, other than a luminous local space heater;
- (13) 'open to chimney heater' means a local space heater, using gaseous, liquid or solid fuels intended to sit under a chimney or in a fireplace without sealing between the product and the chimney or fireplace opening, and allowing the products of combustion pass unrestricted from the fire bed to the chimney or flue;
- (14) 'air heating product' means a product providing heat to an air-based heating system only that can be ducted and is designed to be used while fastened or secured in a specific location or wall mounted which distributes the air by means of an air moving device in order to reach and maintain a certain level of human thermal comfort within an enclosed space in which the product is situated;
- (15) 'sauna stove' means a local space heater, incorporated in, or declared to be used in, dry or wet sauna's or similar environments;
- (16) 'solid fuel' means a fuel which is solid at normal indoor room temperatures, including solid biomass and solid fossil fuel;
- (17) 'biomass' means the biodegradable fraction of products, waste and residues from biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste;

- (18) 'woody biomass' means biomass originating from trees, bushes and shrubs, including log wood, chipped wood, compressed wood in the form of pellets, compressed wood in the form of briquettes, and sawdust;
- (19) 'non-woody biomass' means biomass other than woody biomass, including, inter alia, straw, miscanthus, reeds, kernels, grains, olive stones, olive cakes and nut shells;
- (20) 'preferred fuel' means the single fuel which is to be preferably used for the local space heater according to the supplier's instructions;
- (21) 'fossil solid fuel' means solid fuel other than biomass, including anthracite and dry steam coal, hard coke, low temperature coke, bituminous coal, lignite, a blend of fossil fuels or a blend of biomass and fossil fuel; for the purposes of this Regulation it also includes peat;
- (22) 'other suitable fuel' means a fuel, other than the preferred fuel, which can be used in the local space heater according to the supplier's instructions and includes any fuel that is mentioned in the instruction manual for installers and end-users, on free access websites of manufacturers and suppliers, in technical or promotional material and in advertisements;
- (23) 'direct heat output' means the heat output of the product by radiation and convection of heat, as emitted by or from the product itself to air, excluding the heat output of the product to a heat transfer fluid, expressed in kW;
- (24) 'indirect heat output' means the heat output of the product to a heat transfer fluid by the same heat generation process that provides the direct heat output of the product, expressed in kW;
- (25) 'indirect heating functionality' means the product is capable of transferring part of the total heat output to a heat transfer fluid, for use as space heating or domestic hot water generation.
- (26) 'nominal heat output' (*P<sub>nom</sub>*) means the heat output of a local space heater comprising both direct heat output and indirect heat output (where applicable), when operating at the setting for the maximum heat output that can be maintained over an extended period, as declared by the supplier, expressed in kW;
- (27) 'minimum heat output' ( $P_{min}$ ) means the heat output of a local space heater comprising both direct heat output and indirect heat output (where applicable), when operating at the setting for the lowest heat output, as declared by the supplier, expressed in kW;
- (28) 'intended for outdoor use' means the product is suitable for safe operation outside enclosed spaces, including possible use in outdoor conditions;
- (29) 'equivalent model' means a model placed on the market with the same technical parameters set out in Table 2 or Table 3 of Annex V as another model placed on the market by the same supplier.

For the purposes of Annexes II to IX, additional definitions are set out in Annex I.

#### Article 3

### Responsibilities of suppliers and timetable

1. From 1 January 2018 suppliers placing on the market or putting into service local space heaters that are not flueless heaters using solid fuels or open to chimney heaters using solid fuels shall ensure that:

- (a) such local space heater is provided with a printed label in the format and containing the information set out in point 1 of Annex III and conforming to the energy efficiency classes set out in Annex II;
- (b) an electronic label in the format and containing the information set out in point 1 of Annex III and conforming to the energy efficiency classes set out Annex II is made available to dealers for such local space heater model;
- (c) a product fiche in accordance with Annex IV, is provided for such local space heater;
- (d) an electronic product fiche, in accordance with Annex IV, is made available to dealers for such local space heater model;
- (e) the technical documentation, as set out in Annex V, is provided on request to the authorities of the Member States and to the Commission;

- (f) any advertisement related to a specific such local space heater model and containing energy-related or price information includes a reference to the energy efficiency class for that model;
- (g) any technical promotional material concerning a specific such local space heater model and describing its specific technical parameters includes a reference to the energy efficiency class for that model.

2. From 1 January 2022 suppliers placing on the market or putting into service flueless heaters using solid fuels or open to chimney heaters using solid fuels shall ensure that:

- (a) such local space heater is provided with a printed label in the format and containing the information set out in point 1 of Annex III and conforming to the energy efficiency classes set out in Annex II;
- (b) an electronic label in the format and containing the information set out in point 1 of Annex III and conforming to the energy efficiency classes set out Annex II is made available to dealers for such local space heater model;
- (c) a product fiche in accordance with Annex IV, is provided for such local space heater;
- (d) an electronic product fiche, in accordance with Annex IV, is made available to dealers for such local space heater model;
- (e) the technical documentation, as set out in Annex V, is provided on request to the authorities of the Member States and to the Commission;
- (f) any advertisement related to a specific such local space heater model and containing energy-related or price information includes a reference to the energy efficiency class for that model;
- (g) any technical promotional material concerning a specific such local space heater model and describing its specific technical parameters includes a reference to the energy efficiency class for that model.

#### Article 4

#### **Responsibilities of dealers**

Dealers of local space heaters shall ensure that:

- (a) each local space heater bears, at the point of sale, the label provided by suppliers in accordance with Article 3, on the outside of the front of the local space heater, in such a way as to be clearly visible;
- (b) local space heaters offered for sale, hire or hire-purchase, where the end-user cannot be expected to see the product displayed, are marketed with the information provided by the suppliers in accordance with Annex VI, except where the offer is made through the internet, in which case the provisions of Annex VII shall apply;
- (c) any advertisement for a specific local space heater model which contains energy-related or price information includes a reference to the energy efficiency class of that model;
- (d) any technical promotional material concerning a specific local space heater model which describes its specific technical parameters includes a reference to the energy efficiency class of that model.

#### Article 5

#### Measurement and calculation methods

The information to be provided pursuant to Articles 3 and 4 shall be obtained by reliable, accurate and reproducible measurement and calculation methods which take into account the recognised state-of-the-art measurement and calculation methods, set out in Annex VIII.

#### Article 6

## Verification procedure for market surveillance purposes

Member States shall apply the procedure laid down in Annex IX when assessing the conformity of the declared energy efficiency class of local space heaters.

### Article 7

### Review

The Commission shall review this Regulation in the light of technological progress no later than 1 January 2024. The review shall in particular assess whether the exemptions from application of the Regulation can be reduced.

#### Article 8

# Entry into force

1. This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

2. It shall apply from 1 January 2018 for local space heaters that are not flueless heaters using solid fuels or open to chimney heaters using solid fuels. However, Article 3(1)(f) and (g) and Article 4(b), (c) and (d) shall apply from 1 April 2018.

3. It shall apply from 1 January 2022 for flueless heaters using solid fuels and open to chimney heaters using solid fuels. However, Articles 3(2)(f) and (g) and Article 4(b), (c) and (d) shall apply from 1 April 2022.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 24 April 2015.

For the Commission The President Jean-Claude JUNCKER

#### ANNEX I

### Definitions applicable for Annexes II to IX

For the purposes of Annexes II to IX the following definitions shall apply:

- (1) 'conversion coefficient' (CC) means a coefficient reflecting the estimated 40 % average EU generation efficiency referred to in Directive 2012/27/EU of the European Parliament and of the Council (<sup>1</sup>); the value of the conversion coefficient is CC = 2,5
- (2) 'net calorific value' (NCV) means the total amount of heat released by a unit quantity of fuel containing the appropriate moisture of the fuel, when it is burned completely with oxygen, and when the products of combustion are not returned to ambient temperature;
- (3) 'useful efficiency, at either nominal or minimum heat output, ( $\eta_{th,min}$  or  $\eta_{th,min}$  respectively)' means the ratio of the useful heat output and the total energy input expressed in terms of NCV of a local space heater, expressed in %;
- (4) 'electric power requirement at nominal heat output' (el<sub>max</sub>) means the electric power consumption of the local space heater while providing the nominal heat output. The electric power consumption shall be established without consideration of the power consumption of a circulator in case the product offers indirect heating functionality and a circulator is incorporated, expressed in kW;
- (5) 'electric power requirement at minimum heat output' (el<sub>min</sub>) means the electric power consumption of the local space heater while providing the minimum heat output. The electric power consumption shall be established without consideration of the power consumption of a circulator in case the product offers indirect heating functionality and a circulator is incorporated, expressed in kW;
- (6) 'electric power requirement in standby mode' (el<sub>sb</sub>) means the electric power consumption of the product while in standby mode, expressed in kW;
- (7) 'permanent pilot flame power requirement' (P<sub>pilot</sub>) means the fuel consumption of gaseous, liquid or solid fuel of the product for the provision of a flame to serve as an ignition source for the more powerful combustion process needed for nominal or part load heat output, when lit for more than 5 minutes before the main burner is on, expressed in kW;
- (8) 'single stage heat output, no room temperature control' means the product is not capable of varying its heat output automatically and that no feedback of room temperature is present to adapt the heat output automatically;
- (9) 'two or more manual stages, no room temperature control' means the product is capable of varying its heat output manually by two or more levels of heat output and is not equipped with a device that automatically regulates the heat output in relation to a desired indoor temperature;
- (10) 'with mechanic thermostat room temperature control' means the product is equipped with a non-electronic device that allows the product to automatically vary its heat output over a certain time period, in relation to a certain required level of indoor heating comfort;
- (11) 'with electronic room temperature control' means the product is equipped with an electronic device, either integrated or external, that allows the product to automatically vary its heat output over a certain time period, in relation to a certain required level of indoor heating comfort;
- (12) 'with electronic room temperature control plus day timer' means the product is equipped with an electronic device, either integrated or external, that allows the product to automatically vary its heat output over a certain time period, in relation to a certain required level of indoor heating comfort, and allows the setting of timing and temperature level for a 24-hours timer interval;

<sup>(&</sup>lt;sup>1</sup>) Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1).

- (13) 'with electronic room temperature control plus week timer' means the product is equipped with an electronic device, either integrated or external, that allows the product to automatically vary its heat output over a certain time period, in relation to a certain required level of indoor heating comfort, and allows the setting of timing and temperature levels for a full week. During the 7-day period the settings must allow a variation on a day-to-day basis;
- (14) 'room temperature control, with presence detection' means the product is equipped with an electronic device, either integrated or external, that automatically reduces the set-point for the room temperature when no person is detected in the room;
- (15) 'room temperature control, with open window detection' means the product is equipped with an electronic device, either integrated or external, that reduces the heat output when a window or door has been opened. Whenever a sensor is used to detect the opening of a window or door, it can be installed with the product, externally to the product, built in the building structure or as a combination of those options;
- (16) 'with distance control option' means the function that allows remote interaction from outside the building in which the product is installed with the control of the product;
- (17) 'standby mode' means a condition where the product is connected to the mains power source, depends on energy input from the mains power source to work as intended and provides only the following functions, which may persist for an indefinite time: reactivation function, or reactivation function and only an indication of enabled reactivation function, and/or information or status display;
- (18) 'model identifier' means the code, usually alphanumeric, which distinguishes a specific local space heater model from other models with the same trade mark, supplier's name or dealer's name;
- (19) 'other fossil fuel' means fossil fuel other than anthracite and dry steam coal, hard coke, low temperature coke, bituminous coal, lignite, peat or blended fossil fuel briquettes;
- (20) 'other woody biomass' means woody biomass other than log wood with a moisture content of 25 % or less, briquetted fuel with a moisture content below 14 % or compressed wood with a moisture content below 12 %;
- (21) 'moisture content' means the mass of water in the fuel in relation to the total mass of the fuel as used in the local space heater.

# ANNEX II

# **Energy efficiency classes**

The energy efficiency class of a local space heater shall be determined on the basis of its energy efficiency index as set out in Table 1.

# Table 1

# Energy efficiency classes of local space heaters

| Energy efficiency class | Energy efficiency index (EEI) |
|-------------------------|-------------------------------|
| A++                     | $EEI \ge 130$                 |
| A+                      | $107 \le EEI < 130$           |
| A                       | 88 ≤ EEI < 107                |
| В                       | 82 ≤ EEI < 88                 |
| С                       | 77 ≤ EEI < 82                 |
| D                       | 72 ≤ EEI < 77                 |
| Е                       | 62 ≤ EEI < 72                 |
| F                       | 42 ≤ EEI < 62                 |
| G                       | EEI < 42                      |

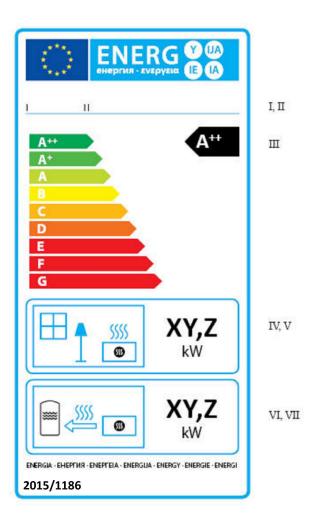
The energy efficiency index of a local space heater shall be calculated in accordance with Annex VIII.

### ANNEX III

# The label

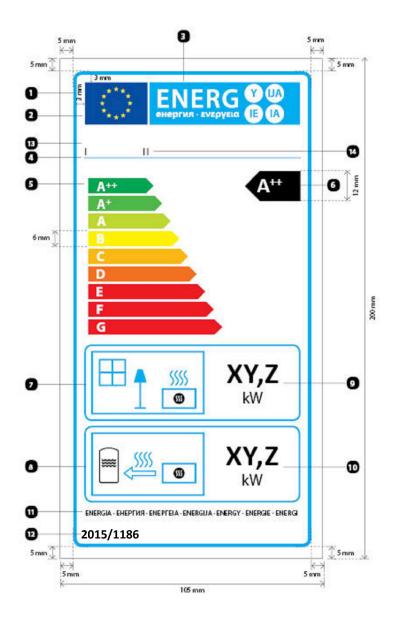
1. Local space heaters

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- (a) The following information shall be included in the label:
  - I. supplier's name or trade mark;
  - II. supplier's model identifier;
  - III. the energy efficiency class, determined in accordance with point 1 of Annex II; the head of the arrow containing the energy efficiency class of the local space heater shall be placed at the same height as the head of the relevant energy efficiency class;
  - IV. the symbol for direct heat output;
  - V. the direct heat output in kW, rounded to the nearest one decimal place;
  - VI. for local space heaters with heat transfer to a fluid, the symbol for indirect heat output;
  - VII. for local space heaters with heat transfer to a fluid, the indirect heat output in kW, rounded to the nearest one decimal place.
- (b) The design aspects of the label for local space heaters shall be in accordance with point 2 of this Annex.

2. The design of the label for local space heaters shall be the following:



Whereby:

- (a) The label shall be at least 105 mm wide and 200 mm high. Where the label is printed in a larger format, its content shall nevertheless remain proportionate to the specifications above.
- (b) The background shall be white.
- (c) Colours are coded as CMYK cyan, magenta, yellow and black, following this example: 00-70-X-00: 0 % cyan, 70 % magenta, 100 % yellow, 0 % black.
- (d) The label shall fulfil all of the following requirements (numbers refer to the figure above):

0

EU label border stroke: 4 pt, colour: cyan 100 %, round corners: 3,5 mm.



- EU logo: Colours: X-80-00-00 and 00-00-X-00.
- 3
- **Energy label:** Colour: X-00-00-00. Pictogram as depicted: EU logo + energy label: width: 86 mm, height: 17 mm.

**Sub-logos border:** 1 pt, colour: cyan 100 %, length: 86 mm.

# **5** Scale of energy classes

- Arrow: height: 6 mm, gap: 1,3 mm, colours:
  - Highest class: X-00-X-00,
  - Second class: 70-00-X-00,
  - Third class: 30-00-X-00,
  - Fourth class: 00-00-X-00,
  - Fifth class: 00-30-X-00,
  - Sixth class: 00-70-X-00,
  - Seventh class: 00-X-X-00,
  - Eighth class: 00-X-X-00,
  - Last class: 00-X-X-00,
- Text: Calibri bold 14 pt, capitals, white, '+' symbols: superscript, aligned on a single row;



# Energy efficiency class:

- Arrow: width: 22 mm, height: 12 mm, 100 % black,
- Text: Calibri bold 24 pt, capitals, white, '+' symbols: superscript, aligned on a single row.

# **7** Direct heating functionality:

- Pictogram as depicted,
- Border: 2 pt, colour: cyan 100 %, round corners: 3,5 mm.

# **8** If applicable, indirect heating functionality:

- Pictogram as depicted,
- Border: 2 pt, colour: cyan 100 %, round corners: 3,5 mm.

# **9** Nominal direct heat output:

- Border: 2 pt, colour: cyan 100 %, round corners: 3,5 mm,
- Value 'XY,Z': Calibri bold 34 pt, 100 % black,
- Text 'kW': Calibri regular 18 pt, 100 % black.

# **(D)** If applicable, nominal indirect heat output:

- Border: 2 pt, colour: cyan 100 %, round corners: 3,5 mm,
- Value 'XY,Z': Calibri bold 34 pt, 100 % black,
- Text 'kW': Calibri regular 18 pt, 100 % black.

# **1** Energy:

- Text: Calibri regular 8 pt, 100 % black.

# **(2)** Year of label introduction and number of Regulation:

— **Text:** Calibri bold 10 pt.

# **1**3 Supplier's name or trademark.

## **1** Supplier's model identifier:

- The supplier's name or trade mark and model identifier shall fit in a space of 86 × 12 mm.

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# ANNEX IV

#### Product fiche

- 1. The information in the product fiche of the local space heater shall be provided in the following order and shall be included in the product brochure or other literature provided with the product:
  - (a) supplier's name or trademark;
  - (b) supplier's model identifier;
  - (c) the energy efficiency class of the model, determined in accordance with point 1 of Annex II;
  - (d) the direct heat output in kW, rounded to the nearest one decimal place;
  - (e) the indirect heat output in kW, rounded to the nearest one decimal place;
  - (f) the energy efficiency index, rounded to the nearest integer and calculated in accordance with Annex VIII;
  - (g) the useful energy efficiency at nominal heat output, and at minimum load if applicable, rounded to the nearest one decimal place and calculated in accordance with Annex VIII;
  - (h) any specific precautions that shall be taken when the local space heater is assembled, installed or maintained.
- 2. One fiche may cover a number of local space heater models supplied by the same supplier.
- 3. The information contained in the fiche may be given in the form of a copy of the label, either in colour or in black and white. Where this is the case, the information listed in point 1 not already displayed on the label shall also be provided.

## ANNEX V

#### **Technical documentation**

For local space heaters, the technical documentation referred to in Article 3(1)(e) and Article 3(2)(e) shall include:

- (a) the name and address of the supplier;
- (b) the model identifier;
- (c) where appropriate, the references of the harmonised standards applied;
- (d) where the preferred fuel is other woody biomass, non-woody biomass, other fossil fuel or other blend of biomass and fossil fuel as referred to in Table 2, a description of the fuel sufficient for its unambiguous identification and the technical standard or specification of the fuel, including the measured moisture content and the measured ash content, and for other fossil fuel also the measured volatile content of the fuel;
- (e) where appropriate, the other technical standards and specifications used;
- (f) the identification and signature of the person empowered to bind the supplier;
- (g) the information included in Table 2 (for solid fuel local space heaters) and Table 3 (for gaseous/liquid fuel local space heaters), measured and calculated in accordance with Annex VIII;
- (h) reports of tests undertaken by suppliers or on their behalf, including the name and address of the body that conducted the tests;
- (i) any specific precautions that shall be taken when the local space heater is assembled, installed or maintained;
- (j) a list of equivalent models, if applicable.

This information may be merged with the technical documentation provided in accordance with measures under Directive 2009/125/EC of the European Parliament and of the Council (<sup>1</sup>).

# Table 2

# Technical parameters for solid fuel local space heaters

| Model identifier(s):                                    |                            |                         |  |  |  |  |  |
|---|----------------------------|-------------------------|--|--|--|--|--|
| Indirect heating functionality:[yes/no]                 |                            |                         |  |  |  |  |  |
| Direct heat output:(kW)                                 |                            |                         |  |  |  |  |  |
| Indirect heat output:(kW)                               |                            |                         |  |  |  |  |  |
| Fuel  | Preferred fuel (only one): | Other suitable fuel(s): |  |  |  |  |  |
| Wood logs with moisture content $\leq 25 \%$            | [yes/no]                   | [yes/no]                |  |  |  |  |  |
| Compressed wood with moisture content [yes/no] [yes/no] |                            |                         |  |  |  |  |  |
| Other woody biomass [yes/no] [yes/no]                   |                            |                         |  |  |  |  |  |
| Non-woody biomass                                       | [yes/no]                   | [yes/no]                |  |  |  |  |  |

<sup>(1)</sup> Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (OJ L 285, 31.10.2009, p. 10).

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| Anthracite and dry steam coal              | [yes/no] | [yes/no] |
|--|----------|----------|
| Hard coke                                  | [yes/no] | [yes/no] |
| Low temperature coke                       | [yes/no] | [yes/no] |
| Bituminous coal                            | [yes/no] | [yes/no] |
| Lignite briquettes                         | [yes/no] | [yes/no] |
| Peat briquettes                            | [yes/no] | [yes/no] |
| Blended fossil fuel briquettes             | [yes/no] | [yes/no] |
| Other fossil fuel                          | [yes/no] | [yes/no] |
| Blended biomass and fossil fuel briquettes | [yes/no] | [yes/no] |
| Other blend of biomass and solid fuel      | [yes/no] | [yes/no] |

# Characteristics when operating with the preferred fuel

Seasonal space heating energy efficiency  $\eta_s$  [%]:

Energy Efficiency Index (EEI):

| Item                                  | Symbol            | Value      | Unit | Item   | Symbol                             | Value       | Unit |  |
|---------------------------------------|-------------------|------------|------|--|------------------------------------|-------------|------|--|
| Heat output                           |                   |            |      | Useful efficiency (NCV as received)                                |                                    |             |      |  |
| Nominal heat out-<br>put              | P <sub>nom</sub>  | X,X        | kW   | Useful efficiency at<br>nominal heat output                        | $\eta_{\scriptscriptstyle th,nom}$ | X,X         | %    |  |
| Minimum heat out-<br>put (indicative) | P <sub>min</sub>  | [x,x/N.A.] | kW   | Useful efficiency at<br>minimum heat out-<br>put (indicative)      | $\eta_{{}_{th,min}}$               | [x,x/N.A.]  | %    |  |
|                                       |                   |            |      |  |                                    |             |      |  |
| Auxiliary electricity consumption     |                   |            |      | Type of heat output/<br>(select one)                               | room temp                          | erature con | trol |  |
| At nominal heat<br>output             | el <sub>max</sub> | X,XXX      | kW   | single stage heat output, no [yes/r                                |                                    | [yes/no]    |      |  |
| At minimum heat<br>output             | el <sub>min</sub> | X,XXX      | kW   | two or more manual stages, no<br>room temperature control [yes/no] |                                    | [yes/no]    |      |  |
| In standby mode                       | el <sub>sb</sub>  | X,XXX      | kW   | with mechanic thermostat room [yes/no]                             |                                    | [yes/no]    |      |  |

|   |             |                |          | with electronic room tempera-<br>ture control                 | [yes/no]     |          |
|---|-------------|----------------|----------|---|--------------|----------|
|   |             |                |          | with electronic room tempera-<br>ture control plus day timer  | [yes/no]     |          |
|   |             |                |          | with electronic room tempera-<br>ture control plus week timer | [yes/no]     |          |
|   |             |                |          | Other control options (multiple                               | e selections | possible |
|   |             |                |          | room temperature control, with presence detection             | [yes/no]     |          |
|   |             |                |          | room temperature control, with open window detection          | [yes/no]     |          |
|   |             |                |          | with distance control option                                  | [yes/no]     |          |
| Permanent pilot flan                                | ne power 1  | requirement    |          |   |              |          |
| Pilot flame power<br>requirement (if<br>applicable) | $P_{pilot}$ | [x,xxx/N.A.]   | kW       |   |              |          |
| Contact details                                     | Name and    | address of the | supplier |   |              |          |

# Table 3

# Technical parameters for gaseous/liquid fuel local space heaters

| Model identifier(s):                  |                  |            |         |  |  |                                    |                      |       |      |
|---------------------------------------|------------------|------------|---------|--|--|------------------------------------|----------------------|-------|------|
| Indirect heating funct                | ionality:[yes    | /no]       |         |  |  |                                    |                      |       |      |
| Direct heat output:                   | .(kW)            |            |         |  |  |                                    |                      |       |      |
| Indirect heat output: .               | (kW)             |            |         |  |  |                                    |                      |       |      |
| Fuel                                  |                  |            |         |  |  |                                    |                      |       |      |
| Select fuel type                      |                  |            | [gaseou | aseous/liquid] [specify]                                 |  |                                    |                      |       |      |
|                                       |                  |            |         |  |  |                                    |                      |       |      |
| Item                                  | Symbol           | Value      | Unit    |  | Item                                     |                                    | Symbol               | Value | Unit |
| Heat output                           |                  |            |         | Us   | sefu                                     | l efficiency (NCV)                 |                      |       |      |
| Nominal heat out-<br>put              | P <sub>nom</sub> | X,X        | kW      |  | Useful efficiency at nominal heat output |                                    | $\eta_{{}^{th,nom}}$ | X,X   | %    |
| Minimum heat out-<br>put (indicative) | P <sub>min</sub> | [x,x/N.A.] | kW      | Useful efficiency at minimum heat<br>output (indicative) |  | $\eta_{\scriptscriptstyle th,min}$ | [x,x/N.A.]           | %     |      |
|                                       | 1                | 1          |         |  |  |                                    |                      |       |      |

| Auxiliary electricity                               | consumpt          | ion            |   | Type of heat output/room temperature cont<br>(select one)   | rol      |  |
|---|-------------------|----------------|---|---|----------|--|
| At nominal heat<br>output                           | el <sub>max</sub> | x,xxx          | kW  | single stage heat output, no room temperature control       | [yes/no] |  |
| At minimum heat<br>output                           | el <sub>min</sub> | x,xxx          | kW  | two or more manual stages, no room tem-<br>perature control | [yes/no] |  |
| In standby mode                                     | el <sub>sB</sub>  | x,xxx          | kW  | with mechanic thermostat room temperature control           | [yes/no] |  |
|   |                   |                |   | with electronic room temperature control                    | [yes/no] |  |
|   |                   |                | with electronic room temperature control plus day timer | [yes/no]  |          |  |
|   |                   |                |   | with electronic room temperature control plus week timer    | [yes/no] |  |
|   |                   |                |   | Other control options (multiple selections possible)        |          |  |
|   |                   |                |   | room temperature control, with presence de-<br>tection      | [yes/no] |  |
|   |                   |                |   | room temperature control, with open window detection        | [yes/no] |  |
| Permanent pilot flar                                | ne power i        | requirement    |   | with distance control option                                | [yes/no] |  |
| Pilot flame power<br>requirement (if<br>applicable) | $P_{pilot}$       | [x,xxx/N.A.]   | kW  |   |          |  |
| Contact details                                     | Name and          | address of the | supplier  |   |          |  |

## ANNEX VI

# Information to be provided in cases where end-users cannot be expected to see the product displayed, except on the internet

- 1. The information referred to in Article 4(1)(b) shall be provided in the following order:
  - (a) the energy efficiency class of the model, determined in accordance with point 1 of Annex II;
  - (b) the direct heat output in kW, rounded to the nearest one decimal place;
  - (c) the indirect heat output in kW, rounded to the nearest one decimal place.
- 2. The size and font in which the information referred in point 1 is printed or shown shall be legible.

### ANNEX VII

### Information to be provided in the case of sale, hire or hire-purchase through the internet

- 1. For the purpose of points 2 to 5 of this Annex, the following definitions shall apply:
  - (a) 'display mechanism' means any screen, including tactile screen, or other visual technology used for displaying internet content to users;
  - (b) 'nested display' means visual interface where an image or data set is accessed by a mouse click, mouse roll-over or tactile screen expansion of another image or data set;
  - (c) 'tactile screen' means a screen responding to touch, such as that of a tablet computer, slate computer or a smartphone;
  - (d) 'alternative text' means text provided as an alternative to a graphic allowing information to be presented in nongraphical form where display devices cannot render the graphic or as an aid to accessibility such as input to voice synthesis applications.
- 2. The appropriate label made available by suppliers in accordance with Article 3(1)(b) or Article 3(2)(b) shall be shown on the display mechanism in proximity to the price of the product. The size shall be such that the label is clearly visible and legible and shall be proportionate to the size specified in point 2 of Annex III. The label may be displayed using a nested display, in which case the image used for accessing the label shall comply with the specifications laid down in point 3 of this Annex. If nested display is applied, the label shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the image.
- 3. The image used for accessing the label in the case of nested display shall:
  - (a) be an arrow in the colour corresponding to the energy efficiency class of the product on the label;
  - (b) indicate on the arrow the energy efficiency class of the product in white in a font size equivalent to that of the price; and
  - (c) have one of the following two formats:



- 4. In the case of nested display, the sequence of display of the label shall be as follows:
  - (a) the image referred to in point 3 of this Annex shall be shown on the display mechanism in proximity to the price of the product;
  - (b) the image shall link to the label;
  - (c) the label shall be displayed after a mouse click, mouse roll-over or tactile screen expansion on the image;
  - (d) the label shall be displayed by pop up, new tab, new page or inset screen display;
  - (e) for magnification of the label on tactile screens, the device conventions for tactile magnification shall apply;
  - (f) the label shall cease to be displayed by means of a close option or other standard closing mechanism;
  - (g) the alternative text for the graphic, to be displayed on failure to display the label, shall be the energy efficiency class of the product in a font size equivalent to that of the price.
- 5. The appropriate product fiche made available by suppliers in accordance with Article 3(1)(d) or Article 3(2)(d) shall be shown on the display mechanism in proximity to the price of the product. The size shall be such that the product fiche is clearly visible and legible. The product fiche may be displayed using a nested display, in which case the link used for accessing the fiche shall clearly and legibly indicate 'Product fiche'. If nested display is used, the product fiche shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the link.

#### ANNEX VIII

#### Measurements and calculations

- 1. For the purposes of compliance and verification of compliance with the requirements of this Regulation, measurements and calculations shall be made using harmonised standards the reference numbers of which have been published for this purpose in the *Official Journal of the European Union*, or using other reliable, accurate and reproducible methods that take into account the generally recognised state-of-the-art methods. They shall meet the conditions set out in points 2 to 4.
- 2. General conditions for measurements and calculations
  - (a) Local space heaters shall be tested for the preferred fuel in order to determine the energy efficiency index, direct and indirect heat output.
  - (b) Declared values for direct and indirect heat output, and energy efficiency index, shall be rounded to the nearest one decimal place.
- 3. General conditions for energy efficiency index and consumption of local space heaters:
  - (a) The useful efficiency values  $\eta_{th,nom}$ ,  $\eta_{th,min}$  and the direct and indirect heat output values for  $P_{nom}$ ,  $P_{min}$  are measured, where applicable.
  - (b) The energy efficiency index (*EEI*) shall be calculated as the seasonal space heating energy efficiency in active mode  $(\eta_{s,on})$  corrected for local space heaters using biomass as preferred fuel by a factor taking into account the renewable character of the preferred fuel, and corrected by contributions accounting for temperature controls, auxiliary electricity consumption and permanent pilot flame energy consumption. The energy efficiency index (EEI) is expressed as a figure equivalent to its figure expressed in percentage.
- 4. Specific conditions for seasonal space heating energy efficiency
  - (a) The energy efficiency index (EEI) of all local space heaters is defined as:

 $EEI = (\eta_{S.on} \cdot BLF) - 10\% + F(2) + F(3) - F(4) - F(5)$ 

Where

- $\eta_{s,on}$  is the seasonal space heating energy efficiency in active mode, expressed in %, calculated as set out in point 4(b),
- BLF is the biomass label factor, which is 1,45 for biomass local space heaters and 1 for fossil fuel local space heaters,
- F(2) is a correction factor accounting for a positive contribution to the energy efficiency index due to adjusted contributions of controls of indoor heating comfort, the values of which are mutually exclusive, cannot be added on top of each other, expressed in %,
- F(3) is a correction factor accounting for a positive contribution to the energy efficiency index due to adjusted contributions of controls for indoor heating comfort the values of which can be added on top of each other, expressed in %;
- F(4) is a correction factor accounting for a negative contribution to the energy efficiency index by auxiliary electricity consumption, expressed in %;
- F(5) is a correction factor accounting for a negative contribution to the energy efficiency index by energy consumption of a permanent pilot flame, expressed in %.
- (b) The seasonal space heating energy efficiency in active mode is calculated as:

#### Where

- $-\eta_{th,nom}$  is the useful efficiency at nominal heat output, based on NCV.
- (c) The correction factor F(2) accounting for a positive contribution to the energy efficiency index due to adjusted contributions of controls for indoor heating comfort, the values of which are mutually exclusive or cannot be added to each other, is calculated as follows:

For all local space heaters the correction factor F(2) is equal to one of the factors according to Table 4, depending on which control characteristic applies. Only one value can be selected.

# Table 4

#### Correction factor F(2)

| If the module is actioned with (only one option more early)  | F(2)                           |
|--|--------------------------------|
| If the product is equipped with (only one option may apply): | Fuel fired local space heaters |
| single stage heat output, no room temperature control        | 0,0 %                          |
| two or more manual stages, no temperature control            | 1,0 %                          |
| with mechanic thermostat room temperature control            | 2,0 %                          |
| with electronic room temperature control                     | 4,0 %                          |
| with electronic room temperature control plus day timer      | 6,0 %                          |
| with electronic room temperature control plus week timer     | 7,0 %                          |

From 1 January 2022, F(2) shall be zero for solid fuel local space heaters with emissions, where the temperature control is set at the minimum heat output, higher than those set out in Annex II, point 2 of Commission Regulation (EU) 2015/1185 (<sup>1</sup>). The heat output in this setting must not be higher than 50 % of the nominal heat output. From 1 January 2022, if F(2) is not zero the technical documentation shall include the relevant information on emissions at minimum heat output.

(d) The correction factor F(3) accounting for a positive contribution to the energy efficiency index due to adjusted contributions of controls for indoor heating comfort, the values of which can be added to each other, is calculated as follows:

For all local space heaters the correction factor F(3) is the summation of the values according to Table 5, depending on which control characteristic(s) applies.

#### Table 5

# Correction factor F(3)

| If the module is equipped with (multiple options mere early)  | F(3)                           |
|---|--------------------------------|
| If the product is equipped with (multiple options may apply): | Fuel fired local space heaters |
| room temperature control with presence detection              | 1,0 %                          |
| room temperature control with open window detection           | 1,0 %                          |
| with distance control option                                  | 1,0 %                          |

<sup>(&</sup>lt;sup>1</sup>) Commission Regulation (EU) 2015/1185 of 24 April 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for solid fuel local space heaters (see page 1 of this Official Journal).

From 1 January 2022, F(3) shall be zero for solid fuel local space heaters with emissions, where the temperature control is set at the minimum heat output, higher than those set out in Annex II, point 2 of Regulation (EU) 2015/1185. The heat output in this setting must not be higher than 50 % of the nominal heat output. From 1 January 2022, if F(3) is not zero the technical documentation shall include the relevant information on emissions at minimum heat output.

(e) The auxiliary electricity use correction factor F(4) is calculated as:

This correction factor takes into account the auxiliary electricity consumption during on-mode and standby-mode operation.

For all local space heaters the auxiliary electricity consumption correction is calculated as follows:

$$F(4) = CC \cdot \frac{0.2 \cdot el_{max} + 0.8 \cdot el_{min} + 1.3 \cdot el_{sb}}{P_{nom}} \cdot 100[\%]$$

Where

- el<sub>max</sub> is the electric power consumption at nominal heat output, expressed in kW;
- $el_{min}$  is the electric power consumption at minimum heat output, expressed in kW. In case the product does not offer a minimum heat output the value for the electric power consumption at nominal heat output shall be used;
- $el_{sb}$  is the electric power consumption of the product while in standby mode, expressed in kW,
- $P_{nom}$  is the nominal heat output of the product, expressed in kW.
- (f) The correction factor F(5) related to the energy consumption of a permanent pilot flame is calculated as follows:

This correction factor takes into account the permanent pilot flame power requirement.

For all local space heaters the correction factor is calculated as:

$$F(5) = 0.5 \cdot \frac{P_{pilot}}{P_{nom}} \cdot 100[\%]$$

Where

- P<sub>vilot</sub> is the pilot flame consumption, expressed in kW,

 $- P_{nom}$  is the nominal heat output of the product, expressed in kW.

### ANNEX IX

#### Verification procedure for market surveillance purposes

For the purposes of assessing the conformity with the requirements laid down in Articles 3 and 4, the authorities of the Member States shall apply the following verification procedure:

1. The Member State authorities shall test one single unit per model. The unit shall be tested with a fuel with characteristics in the same range as the fuel that was used by the manufacturer to perform measurements according to Annex VIII.

The model shall be considered to comply with the applicable requirements if:

- (a) the values and classes on the label and in the product fiche correspond to the values in the technical documentation; and
- (b) for solid fuel local space heaters, the energy efficiency index (EEI) is not more than 8 % lower than the declared value;
- (c) for liquid fuel local space heaters, the EEI is not more than 8 % lower than the declared value;
- (d) for gaseous fuel local space heaters, the EEI is not more than 8 % lower than the declared value.
- 2. If the result referred to in point 2(a) is not achieved, the model and all equivalent models shall be considered not to comply with this Regulation. If any of the results referred to in points from 2(b) to 2(d) is not achieved, the Member State authorities shall randomly select three additional units of the same model for testing. As alternative, the three additional units selected may be of one or more equivalent models which have been listed as equivalent products in the supplier's technical documentation.

The model shall be considered to comply with the applicable requirements if:

- (a) the declared values and classes on the label and in the product fiche for the three additional units correspond to the values in the technical documentation;
- (b) for solid fuel local space heaters, the average EEI of the three additional units is not more than 8 % lower than the declared value;
- (c) for liquid fuel local space heaters, the average EEI of the three additional units is not more than 8 % lower than the declared value;
- (d) for gaseous fuel local space heaters, the average EEI of the three additional units is not more than 8 % lower than the declared value.

If the results referred to in point 2 are not achieved, the model and all equivalent models shall be considered not to comply with this Regulation.

The Member State authorities shall provide the test results and other relevant information to the authorities of the other Member States and to the Commission within one month of taking the decision on non-compliance of the model.

Member State authorities shall use the measurement and calculation methods set out in Annex VIII.

The verification tolerances defined in this Annex relate only to the verification of the measured parameters by Member State authorities and shall not be used by the supplier as an allowed tolerance to establish the values in the technical documentation. The values and classes on the label or in the product fiche shall not be more favourable for the supplier than the values reported in the technical documentation.