



“All local space electric heaters manufactured for sale in the EU after 1st January 2018 which use electricity, or liquid fuels, must comply with a minimum efficiency standard. This includes electric radiators, electric under floor heating and electric and gas fires.”

What does this mean?

Very basically... From 1st January 2018 all electric space heaters sold in the UK must meet a set of minimum efficiency standards, this means that at the very least all heaters will have to incorporate intelligent room temperature controls to minimise wasted energy and comply with Energy Related Products Regulations (ERP)

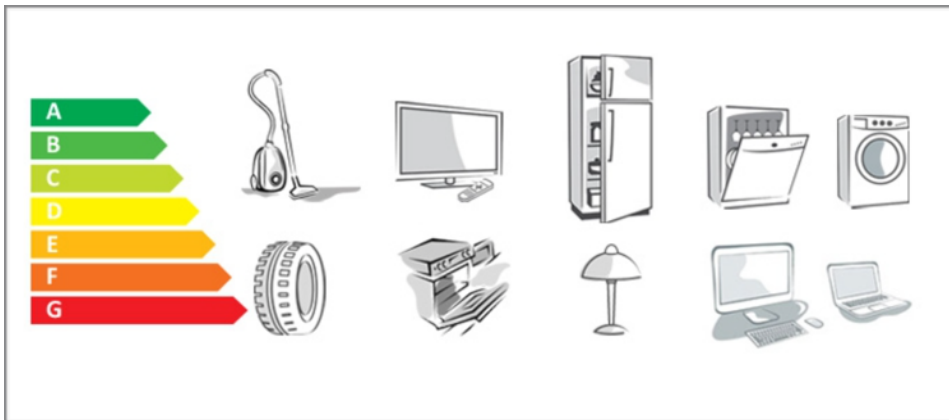
Intelli Heat Eco Design “Lot 20” Compliant

Including but not limited to:

- High accuracy temperature control $\pm 0,1^{\circ}$.
- Adaptive temperature control and Eco start functionality.
- 24/7 programming functions, and integrated real time energy consumption.
- Smart Open Window Technology.
- Presence detection.
- Smart Control V27 self-programming technology.
- Ergonomic digital thermostat.
- Built in Wifi with smartphone app.

Ecodesign is an approach to designing products with special consideration for the environmental impacts of the product during its whole lifecycle.

USE AND OBLIGATIONS REGARDING THE ENERGY LABEL



1. Is voluntary application of the label before the official introduction admitted? How to ensure uniform application in the EU?
Voluntary application of the label before the official implementation date is not allowed. Delegated acts specify the date from which a particular label shall be supplied. If it is supplied and subsequently displayed before that date the label is thus used in a manner not provided for in the delegated act.
2. Can the energy label be displayed before application at trade fairs, where products are not sold and end-users do not have access (the fairs are only for professional intermediates, such as installers)?
Regulation (EU) 2015/1186 specific for the energy labelling of local space heaters and the new energy labelling framework Regulation (EU) 2017/1369 establish that the dealer has to ensure that each local space heater bears the label at the point of sale. A trade fair, where products are not sold and end-users do not have access, is not a point of sale. Therefore, there is no obligation to display the label and at the same time information can be provided to professionals about the energy labelling class of the product. Even if no energy labelling legal requirements apply, common sense dictates that in order to provide accurate information, the labels displayed shall be in line with the relevant regulations.
3. Should the energy label be delivered together with the local space heater inside the box, or could it be provided for each local space heater by means of separate literature regarding the product, websites, brochures, evidence at sales point, etc.?
According to Article 3 of Regulation (EU) 2015/1186 and Article 3 of the new energy labelling framework regulation (EU) 2017/1369, the label shall be

printed; there is no specific indication on where to provide it, but websites cannot be used to provide an alternative to “printed” labels. It is to be understood that the dealer has to be provided with correct and clear information on the energy performance of heaters. The label may be delivered together with supplementary material as long as labels are provided with each individual local space heater.

4. With regard to the obligation to communicate the efficiency class, the definitions of energy related information and technical parameters are unclear: for example, are dimensions technical parameters?

Dealers are obliged to provide information on the energy efficiency of the product together with any technical promotional material or together with information describing the technical parameters of the product. The technical parameters are laid down in Annex V of Regulation (EU) 2015/1186.

Dimensions (i.e. regarding the size of the product) are not considered as technical parameters.

5. For products in scope of Regulation (EU) 2015/1186 for the energy labelling of local space heaters, is a price list of the supplier, which is used for dealers only, defined as technical promotional material?

Any visual advertisement relating to a specific product and containing price information has to include a reference to the energy efficiency class of the product and the range of efficiency classes. As price lists obviously include information on prices, they are covered by this obligation.

For price lists used in digital format, e.g. for a retailers’ database, a reference to the seasonal space heating energy efficiency class under average climate conditions for that model should be included.

6. Are units delivered to dealers before 1 January 2018 subject to the energy labelling requirement?

No. Regulation (EU) 2015/1186 for the energy labelling of local space heaters is only applicable to products that are placed on the market or put into service from 1 January 2018 onwards.

7. What happens if a label has not the exact dimensions as indicated in Regulation (EU) 2015/1186?

The format and dimensions of the label as laid down in Regulation (EU) 2015/1186 have to be respected. The Member States are responsible for assessing compliance with the requirements of Regulation (EU) 2015/1186, including the label format.

8. On the energy label, the direct heat output needs to be displayed: should this be the gross calorific value or the net calorific value?

The heat output is independent of net or gross calorific value. The difference between net and gross calorific value affects the fuel input (for example energy efficiency or emission requirements).

9. How shall the Energy Efficiency Index (EEI) be rounded for determination of the energy efficiency class?

The EEI value for the determination of the energy efficiency class shall be to the nearest one decimal place.

ENTRY INTO FORCE AND IMPLEMENTATION OF THE REGULATIONS

10. Clarify if the following assumption is correct: The energy labelling requirements apply also to the appliances that have been produced/imported before the entry into force of the regulation (1/1/2018 or 1/1/2022 depending on the product), but were stored at the retailers' premises for the meantime.

Article 4

Responsibilities of the importer

Where the manufacturer is not established within the Community and in the absence of an authorised representative, the importer shall have the following obligations:

- (a) to ensure that the product placed on the market and/or put into service complies with this Directive and the applicable implementing measure; and
- (b) to keep and make available the EC declaration of conformity and the technical documentation.

Article 5

Marking and the EC declaration of conformity

1. Before a product covered by implementing measures is placed on the market and/or put into service, a CE marking shall be affixed and an EC declaration of conformity issued whereby the manufacturer or its authorised representative ensures and declares that the product complies with all relevant provisions of the applicable implementing measure.
2. The CE marking consists of the initials 'CE' as shown in Annex III.
3. The EC declaration of conformity shall contain the elements specified in Annex VI and shall refer to the appropriate implementing measure.
4. The affixing of markings on a product which are likely to mislead users as to the meaning or form of the CE marking shall be prohibited.

5. Member States may require the information to be supplied pursuant to Annex I, Part 2 to be in their official language(s) when the product reaches the end-user. Member States shall also authorise the provision of this information in one or more other official languages of the institutions of the European Union.

When applying the first subparagraph, Member States shall take into account in particular:

- (a) whether the information can be supplied by harmonised symbols or recognised codes or other measures; and
- (b) the type of user anticipated for the product and the nature of the information which is to be provided.

Ecodesign MEASUREMENT AND CALCULATION

30. Can correction factors for electric local space heaters be claimed if the control is not provided with the appliance?

As per the definitions, the product needs to be “equipped” with the controls when placed on the market or put into service. This means that the control can be external, but it needs to be placed on the market with the product in order to claim correction factor; the packaging does not need to be the same.

The control cannot be optional; it needs to be placed on the market or put into service together with the local space heater.

- Can an appliance equipped with an electronic room temperature control integrated in the product and sold with a connection function to a programmable external user interface through a remote connection (wire or wireless) allowing each connected product to be operated on e.g. a weekly basis (week timer), be considered as complying with the definition for “with electronic room temperature control plus week timer”?

When the electronic room temperature control of the unit is integrated in the product and when the external part is merely a user interface (e.g. app on a phone), it can be considered that the product comes within the definition of 'equipped with electronic room temperature control'. At this point, the user interface can control several products, given that the control itself is integrated in each separate product.

In case the manufacturer claims a correction factor $F(2)$ or $F(3)$, but the control cannot be operated as per the claimed correction factors without the user interface, the instruction manuals for installers and end-users need to clearly mention that the unit is to be installed with the user interface and need to include a description of how to install it.

The product has to be equipped with all necessary components to be able to use these function(s). Offering these components only as options to be purchased separately and installed by the customer is not sufficient for claiming the correction factors.

- Does a product without display, but equipped with a daily programming function (e.g. heater programmed manually by choosing between settings on day one; heater automatically repeats these settings on the following days) comply with the definition 'with electronic room temperature control plus day timer'?

Yes. The definition of 'with electronic room temperature control plus day timer' in the two ecodesign regulations (Regulation (EU) 2015/1185 and Regulation (EU) 2015/1188) does not specify manually/automatic, or with/without display.

Please note that the unit should be programmable; a predefined fixed factory setting does not "allow the setting of timing and temperature" and therefore does not comply with the definition.

33. Does a product without display but equipped with two weekly "factory pre-set" programmes P1/P2 (user-selectable) comply with the definition "with electronic room temperature control plus week timer"?

34. If a product has no standby mode, does it mean that $F_4 = 0$, whatever is its power consumption?

For electric local space heaters:

$$F(4) = CC \cdot \frac{a \cdot el_{sb}}{P_{nom}} \cdot 100 \%$$

If there is no standby mode $el_{sb}=0$, and consequently $F(4)=0$.

For local space heaters using fuels:

$$F(4) = CC \cdot \frac{0,2 \cdot el_{max} + 0,8 \cdot el_{min} + 1,3 \cdot el_{sb}}{P_{nom}} \cdot 100 \%$$

35. Is network standby considered by Regulations (EU) 2015/1188, (EU) 2015/1185 and (EU) 2015/1186?

Yes. When the wireless port is deactivated, it falls under the definition of standby set out in Annex I of each of the three regulations.

36. In Annex III (f) of Regulation (EU) 2015/1188, α is by default 0 if the product complies with the limit values set in Regulation (EC) No 1275/2008. What are these limit values?

In the regulation there are limit values for standby and for off mode power consumption, see Annex II of Regulation (EU) 1275/2008:

	Description	Limit values
Off mode	Power consumption of equipment in any off-mode condition	0.5 W
Standby mode	Power consumption of equipment in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function	0.5 W
	Power consumption of equipment in any condition providing only information or status display, or providing only a combination of a reactivation function and information or status display	1 W

For α to be 0, the product has to comply with both the limit values for off mode and standby mode; this can be applied to all local space heaters, not only those listed in Annex I of Regulation (EU) 1275/2008.

37. A local space heater with an electronic room temperature control will run in transitional periods of thermostat on and thermostat off. During thermostat off the appliance is still operational (Thermostat off periods are those periods when the unit is operating, but where there is no load in the building and hence the thermostat switches off). Should these “off” periods be considered as “standby”?

No. The standby mode provides one of the following functions:

a reactivation function with or without an indicator showing that this function is enabled;

and/or information or status display .

Any mode that provides other functions is not considered as standby mode. The definition of standby mode is the same for the three Regulations (EU) 2015/1188, (EU) 2015/1185 and (EU) 2015/1186 and can be found in Annex I of each regulation.

38. Are the correction factors to be subtracted / summed as percentage points or percent of the son value?

As percentage points.

39. Should portable appliances sold with features which can be used to fix it on a wall have to comply with ecodesign requirements applicable to fixed room heaters? Should a fixed appliance sold with a kit of castors be considered as a portable? The classification of the local space heater is dependent on its intended use and how it is marketed (in the catalogues, leaflets, etc.).

If the product is marketed as a local space heater that can be used either as a portable or as a fixed local space heater, then it has to comply with both requirements. In practice, this means that the product has to comply with the most stringent requirements, i.e. those of the fixed local space heaters.

40. Does an electric fixed radiant local space heater have to comply with the requirements of an electric radiant local space heater or an electric fixed local space heater? If an electric radiant heater is fixed, can the factors F(3) for radiant and fixed be accumulated?

The requirements for electric radiant space heaters are applicable to all types of electric radiant space heaters independent of whether they are fixed or portable. Cumulating F(3) factors in Annex III, Table 8 of Regulation 2015/1188 for different types of heaters is not allowed; cumulating the different control options in Table 8 is allowed. If the radiant heater has e.g. a distance control option and a room temperature control with open window detection, then the F(3) would be 1% + 1%.

41. How should the nominal heat output to the room of a slow heat release appliance be determined?

nominal heat output [kW] = thermal output t_{25}

with thermal output as determined according to the EN 15250 and t_{25} as the time when 25% of the peak temperature is reached and as determined during type testing of the appliance.

INFORMATION REQUIREMENTS

42. How to manage the technical documentation and information for local space heaters that can be operated with different types and combinations of fuels (e.g. pellets + wood logs or wood logs + coal)?

Regulation (EU) 2015/1185 (in Article 2(14)) defines the concept of 'preferred fuel'. In Table 1 of Regulation (EU) 2015/1185 several types of fuels are identified, including some blended fuels. In the second column of Table 1, the manufacturer needs to select only one of the specified fuels as preferred fuel. If the local space heater can be operated with other fuels too, the manufacturer needs to select them in the third column of Table 1. Table 1 is part of the information that shall be provided according to Annex II.3.a(i) and (ii).

In Table 1, the parameters η_s , PM, OGC, CO and NO_x need to be given for all fuels the unit is marketed to be operated with; the parameters for the heat output, useful efficiency, auxiliary electricity consumption, permanent pilot flame power requirement need to be given for the preferred fuel only.

The same applies to Table 2 of Regulation (EU) 2015/1186. Regulation (EU) 2015/1186 has in Article 2(20) the same definition of 'preferred fuel' as Regulation (EU) 2015/1185.

43. Which heat output is to be indicated on the label? nominal, minimum or maximum heat output?

The heat output to be included in the energy label following the requirement in Annex III point (a)V. of Regulation (EU) 2015/1186, is the nominal heat output.

No. LOT 20

Annex I(20) of Regulation (EU) 2015/1188 and Annex I(18) of Regulation (EU) 2015/1185 define a product “with electronic room temperature control plus week timer” as a product which 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".

A predefined fixed factory setting would not “allow the setting of timing and temperature levels”. It would also not fulfil the requirement of “the settings must allow a variation on a day-to-day basis”.

- If a product has no standby mode, does it mean that $F_4 = 0$, whatever is its power consumption?

The classification of the local space heater is dependent on its intended use and how it is marketed (in the catalogues, leaflets, etc.).

If the product is marketed as a local space heater that can be used either as a portable or as a fixed local space heater, then it has to comply with both requirements. In practice, this means that the product has to comply with the most stringent requirements, i.e. those of the fixed local space heaters.

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The requirements for electric radiant space heaters are applicable to all types of electric radiant space heaters independent of whether they are fixed or portable. Cumulating $F(3)$ factors in Annex III, Table 8 of Regulation 2015/1188 for different types of heaters is not allowed; cumulating the different control options in Table 8 is allowed. If the radiant heater has e.g. a distance control option and a room temperature control with open window detection, then the $F(3)$ would be $1\% + 1\%$

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