

Draft Regulations laid before Parliament under regulation 24(1)(b) of the Ecodesign for Energy-Related Products Regulations 2010 (S.I. 2010/2617) and Article 11A(2)(b) of Regulation (EU) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling, for approval by resolution of each House of Parliament.

D R A F T S T A T U T O R Y I N S T R U M E N T S

No.

ENERGY CONSERVATION

**The Ecodesign for Energy-Related Products and Energy
Information (Space Heaters and Temperature Controls) Regulations
XXXX**

Made - - - - - *******

Coming into force in accordance with regulation 1(2) to (6)

The Secretary of State makes these Regulations in exercise of the powers conferred by regulations 22(1) and 24(2) of the Ecodesign for Energy-Related Products Regulations 2010(a) (“the Principal Ecodesign Regulations”) and Articles 11(3) and 11A(3) and (4) of Regulation (EU) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling(b) (“the Framework Regulation”).

For the purposes of paragraph (1) of regulation 22 of the Principal Ecodesign Regulations, the Secretary of State considers that the matters set out in paragraphs (2) and (6) of that regulation are satisfied.

The Secretary of State has complied with paragraph (4) of regulation 22 of the Principal Ecodesign Regulations.

For the purposes of paragraph 3(a) of Article 11 of the Framework Regulation, the Secretary of State considers that the conditions set out in subparagraphs (a) to (d) of paragraph 1 of that Article are satisfied.

In accordance with regulation 24(1)(b) of the Principal Ecodesign Regulations and Article 11A(2)(b) of the Framework Regulation, a draft of this instrument was laid before, and approved by a resolution of, each House of Parliament.

(a) S.I. 2010/2617.
(b) EUR 2017/1369.

PART 1

Introductory

Citation, commencement and extent

1.—(1) These Regulations may be cited as the Ecodesign for Energy-Related Products and Energy Information (Space Heaters and Temperature Controls) Regulations XXXX.

(2) The following provisions of these Regulations come into force on [date y]—

- (a) Part 2 (ecodesign requirements for temperature controls for space heaters);
- (b) regulation 11 (amendment of the Ecodesign Regulation (introductory));
- (c) regulation 12 (amendment of Article 2 of the Ecodesign Regulation (definitions));
- (d) regulation 13(1) (amendment of Article 3 of the Ecodesign Regulation: general (ecodesign requirements and timetable));
- (e) regulation 13(3), in so far as it inserts point (d) of Article 3 of the Ecodesign Regulation (ecodesign requirements for boilers);
- (f) regulation 14 (amendment of Article 4 of the Ecodesign Regulation (conformity assessment for boiler space heaters and boiler combination heaters);
- (g) regulation 15 (heaters: circumvention and software and firmware updates);
- (h) regulation 17 (amendment of Annex 1 to the Ecodesign Regulation (definitions applicable to Annexes 2 to 5));
- (i) regulation 18(1) (amendment of Annex 2 to the Ecodesign Regulation: introductory (ecodesign requirements));
- (j) regulation 18(2), in so far as it inserts point 1(c) of Annex 2 to the Ecodesign Regulation (ecodesign requirements for electric boiler space heaters and electric boiler combination heaters);
- (k) regulation 18(3), in so far as it inserts—
 - (i) point 4A of Annex 2 to the Ecodesign Regulation as it applies to FB combination heaters which are gas boiler combination heaters (ecodesign requirements for fossil fuel boiler combination heaters: qualifying communication protocols), and
 - (ii) point 4B of that Annex;
- (l) regulation 18(4)(a) (ecodesign requirements: general);
- (m) regulation 18(4)(b)(iii), in so far as it inserts the seventh and eighth indents of point 5(a) of Annex 2 to the Ecodesign Regulation (ecodesign requirements for fossil fuel boiler combination heaters: information);
- (n) regulation 18(5) (ecodesign requirements: heat pump space heaters and heat pump combination heaters);
- (o) regulation 18(6) (ecodesign requirements for hybrid heat pumps: parameters).
- (p) regulation 19 (amendment of Annex 3 to the Ecodesign Regulation (measurements and calculations));
- (q) regulation 20 (amendment of Annex 4 to the Ecodesign Regulation (verification tolerances));
- (r) regulation 21 (amendment of Annex 5 to the Ecodesign Regulation: benchmarks);
- (s) Part 4 (Amendment of the Labelling Regulation).

- (3) The following provisions of these Regulations come into force on [date y + 12 months]—
- (a) regulation 13(2) and regulation 14(3), in so far as it inserts point (e) of Article 3(2) of the Ecodesign Regulation (ecodesign requirements for heat pumps and hybrid heat pumps);
 - (b) regulation 18(2), in so far as it inserts points 1(d) and (e) of Annex 2 to the Ecodesign Regulation (ecodesign requirements for heat pump space heaters, heat pump combination heaters and hybrid heat pumps);
 - (c) regulation 18(4)(b)(i) and (ii);
 - (d) regulation 18(4)(b)(iii) in so far as it inserts the ninth indent of point 5(a) of Annex 2 to the Ecodesign Regulation (ecodesign requirements for hybrid heat pumps: information).
- (4) The following provisions of these Regulations come into force on [date y + 24 months]—
- (a) regulation 13(3), in so far as it inserts point (f) of Article 3(2) of the Ecodesign Regulation (ecodesign requirements for fossil fuel boilers);
 - (b) regulation 14(3), in so far as it relates to points 4B and 4C of Annex 2 to the Ecodesign Regulation;
 - (c) regulation 18(2), in so far as it inserts point 1(f) of Annex 2 to the Ecodesign Regulation (ecodesign: seasonal space heating energy efficiency of gas combination boilers);
 - (d) regulation 18(3) in so far as it inserts—
 - (i) point 4A of Annex 2 to the Ecodesign Regulation, as it applies to FB combination heaters which are oil boiler combination heaters (ecodesign requirements for fossil fuel boiler combination heaters: qualifying communication protocols), and
 - (ii) points 4C and 4D of Annex 2 to the Ecodesign Regulations (ecodesign requirements for fossil fuel boiler combination heaters: modulation).
- (5) The following provisions of these Regulations come into force on [date y + 36 months]—
- (a) regulation 13(3), in so far as it inserts point (g) of Article 3(2) of the Ecodesign Regulation (ecodesign requirements for heat pumps);
 - (b) regulation 18(2), in so far as it inserts point 1(g) of Annex 2 to the Ecodesign Regulation (ecodesign: seasonal space heating energy efficiency of heat pumps and hybrid heat pumps).
- (6) Otherwise these Regulations come into force on [date x].
- (7) These Regulations extend to England and Wales and Scotland.

Interpretation

2. In these Regulations—

“the Ecodesign Regulation” means Commission Regulation (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters^(a);

“the Labelling Regulation” means Commission Delegated Regulation (EU) No 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device^(b);

(a) EUR 2013/813.

(b) EUR 2013/811.

“the Principal Ecodesign Regulations” means the Ecodesign for Energy-Related Products Regulations 2010(a), as they apply in England and Wales and Scotland.

Saving and transitional provisions

3.—(1) Article 4(3A) of the Ecodesign Regulation (as inserted by regulation 14) has effect until the end of the day before [date y + 12 months], as if the reference to points 4A, 4B and 4C of Annex 2 to that Regulation in that paragraph were a reference to point 4A of that Annex only.

(2) Table 8 of Annex 4 to the Ecodesign Regulation (as substituted by regulation 19) has effect until the end of the day before [date y + 12 months] as if the reference to hybrid heat pumps in that Table were omitted.

PART 2

Ecodesign requirements for temperature controls used with space heaters

Chapter 1

Introductory

Application of Part 2

4.—(1) This Part applies to temperature controls (including those in TC packages) which are—
(a) placed on the market(b) on or after [date y], or
(b) put into service on or after that date.

(2) But nothing in this Part applies to existing temperature controls which are put into service on or after [date y].

(3) In this regulation “existing temperature control” means a temperature control which is placed on the market before [date y] (whether in a TC package or not).

General interpretation of Part 2

5.—(1) In this Part—

“class” means one of the qualifying temperature control classes (see regulation 6);

“FB combination heater” has the meaning given for the purposes of the Ecodesign Regulation (see Article 2 of that Regulation);(c)

“FBCH temperature control” means a temperature control which can be used with an FB combination heater (whether or not it can be used with any other heater);

“heater” means a heater to which the Ecodesign Regulation applies;

“model identifier” means the code, usually alphanumeric, which distinguishes a specific product model from other models with the same trademark or same manufacturer or importer’s name(d);

(a) S.I. 2010/2617.

(b) See regulation 2(1) of the Ecodesign for Energy-Related Products Regulations 2010, as they apply in England and Wales and Scotland (“the Principal Ecodesign Regulations”) for the definitions of “place on the market” and “put into service”.

(c) The definition of “FB combination heater” is inserted into Article 2 of the Commission Regulation (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heater (“the Ecodesign Regulation”) by regulation 13(3) of these Regulations.

(d) See regulation 2(1) of the Principal Ecodesign Regulations for the definitions of “manufacturer” and “importer”.

“qualifying communication protocol” has the meaning given in paragraph (2);

“TC package” means a package which contains at least one heater and at least one temperature control (whether or not it includes any other device);

“temperature control” means the equipment which—

- (a) interfaces with an end-user regarding the values and timing of the desired indoor temperature, and
- (b) communicates relevant data to an interface of a heater, such as a central processing unit,

thus helping to regulate the indoor temperature.

(2) “Qualifying communication protocol” means an open communication protocol—

- (a) which allows a heater manufactured by one manufacturer and a temperature control manufactured by another to communicate with each other to help regulate the indoor temperature as required by the end-user, and
- (b) the use of which does not result in the heater or the temperature control (or both) losing any functionality which reduces the efficiency of the heater.

(3) For the purposes of paragraph (2), the use of an open communication protocol results in a temperature control losing functionality which reduces the efficiency of the heater if, in particular, the use of that protocol means the control can no longer maintain the set point temperature by adjusting the flow temperature or, as the case may be, modulating the output of the heater.

Qualifying temperature control classes

6.—(1) For the purposes of this Part, the qualifying temperature control classes are as follows—

<i>Temperature control class (control type)</i>	<i>Description</i>
<i>Class IV (TPI room thermostat for use with on/off heaters)</i>	An electronic room thermostat that uses a TPI control strategy. For this purpose, a “TPI control strategy” is one that controls both the thermostat cycle rate and the in-cycle on/off ratio of the heater proportional to room temperature, thus reducing mean water temperature, improving room temperature control accuracy and ensuring system efficiency.
<i>Class V (modulating room thermostat for use with modulating heaters)</i>	An electronic room thermostat that varies the flow temperature of the water leaving the heater dependant upon measured room temperature deviation from room thermostat set point. Control is achieved by modulating the output of the heater.
<i>Class VI (weather compensator and room sensor for use with modulating heaters)</i>	A heater flow temperature control that varies the flow temperature of water leaving the heater dependant upon prevailing outside temperature and selected weather compensation curve. A room temperature sensor monitors room temperature and adjusts the compensation curve parallel displacement to improve room comfort. Control is achieved by modulating the output of the heater.
<i>Class VII (weather compensator and room sensor for use with on/off heaters)</i>	A heater flow temperature control that varies the flow temperature of water leaving the heater dependant upon prevailing outside temperature and selected weather compensation curve. A room temperature sensor monitors room temperature and adjusts the compensation curve parallel displacement to improve room comfort.

<i>Temperature control class (control type)</i>	<i>Description</i>
Class VIII (<i>multi-sensor room temperature control, for use with modulating heaters</i>)	Heater flow temperature is varied by controlling the on/off operation of the heater. An electronic control equipped with three or more room sensors that varies the flow temperature of the water leaving the heater dependant upon the aggregated measured room temperature deviation from the room sensor set points. Control is achieved by modulating the output of the heater.

(2) In this regulation “modulating heater” means a heater with the capability to vary power output whilst maintaining continuous operation, and references to “modulating” are to be read accordingly.

Chapter 2

Ecodesign for temperature controls

Ecodesign requirements

7.—(1) A temperature control must conform with the ecodesign requirements specified in paragraph (2) when it is placed on the market and when it is put into service.

- (2) The requirements mentioned in paragraph (1) are that—
- (a) the temperature control is in a qualifying temperature control class,
 - (b) if the temperature control is an FBCH temperature control, it has one or more qualifying communication protocols enabled on it, and
 - (c) a manual is provided with the temperature control which contains instructions to installers and end-users on the proper installation of the temperature control.

Conformity assessment

8.—(1) For the purposes of the assessment procedure referred to in Schedule 1A to the Principal Ecodesign Regulations, a manufacturer assessing whether a product model conforms with this Part must use either—

- (a) the internal design control procedure set out in Part 1 of that Schedule, or
- (b) the management system procedure set out in Part 2 of that Schedule.

(2) The technical documentation file required for the conformity assessment of a product model must contain the following information—

- (a) the name or trademark of the manufacturer;
- (b) a description of the product model allowing it to be unequivocally and easily identified, including the manufacturer’s model identifier;
- (c) where appropriate, any designated standard(a) used;
- (d) the class;
- (e) the seasonal space heating energy efficiency contribution, expressed as a percentage;
- (f) if it is an FBCH temperature control—

(a) See regulation 2A of the Principal Ecodesign Regulations for the meaning of “designated standard”.

- (i) a statement of which qualifying communication protocol or protocols are enabled on the product model, and
- (ii) instructions as to how to set up the temperature control so that it uses that protocol or one of those protocols.

(3) For the purposes of this regulation, the seasonal space heating energy efficiency contributions of temperature controls are as follows—

<i>Class of temperature control</i>	<i>Seasonal space heating energy efficiency contribution (%)</i>
Class IV	2
Class V	3
Class VI	4
Class VII	3.5
Class VIII	5

Verification procedure for market surveillance purposes

9.—(1) The market surveillance authority must use the following verification procedure when verifying the compliance of a product model with the requirements of this Part.

(2) The market surveillance authority must test one single unit of the product model to be verified.

(3) Subject to paragraph (5), the product model conforms to this Part if all the following conditions are satisfied in respect of the tested unit—

- (a) it is in the class stated by the manufacturer in the technical documentation file prepared for the purposes of regulation 8,
- (b) the manufacturer, importer or authorised representative^(a) has put in place a system that complies with the requirements of regulation 10(2) and (3), and
- (c) where it is an FBCH temperature control, it has at least one qualifying communication protocol enabled on it.

(4) If a unit fails the test in paragraph (3), the product model and all equivalent product models do not conform to this Part.

(5) Where a model has been designed to be able to detect it is being tested (for example by recognising test conditions or test cycles), and to react specifically by automatically altering its performance during a test with the objective of demonstrating that it complies with an ecodesign requirement that it would not otherwise comply with, the model and all equivalent models do not conform to this Part.

(6) For the purposes of this regulation, a product model is equivalent to another product model if—

- (a) they both have the same technical characteristics relevant to the ecodesign requirements, but
- (b) they are placed on the market or put into service by the manufacturer or importer as different product models with a different model identifiers.

(a) See regulation 2(1) of the Principal Ecodesign Regulations for the definition of “authorised representative”.

Circumvention and software updates

10.—(1) A relevant person must not place on the market, or put into service, a temperature control designed to be able to—

- (a) detect that it is being tested (for example by recognising test conditions or test cycles), or
- (b) react specifically by automatically altering its performance during a test with the aim of demonstrating that it complies with an ecodesign requirement that it would not otherwise comply with.

(2) A relevant person may not place on the market, or put into service, a temperature control which is designed to alter its behaviour or properties within a short period after being put into service in a way that reduces or degrades any of the declared values of the parameters set out in this Part.

(3) The performance of a temperature control must not change as a result of rejecting a software update.

(4) A software update must not have the effect of changing a temperature control’s performance in a way that makes it non compliant with the ecodesign requirements applicable for the declaration of conformity.

(5) In this regulation “relevant person”, in relation to a temperature control, means—

- (a) the manufacturer,
- (b) the authorised representative, or
- (c) the importer.

PART 3

Amendment of the Ecodesign Regulation

Introductory

11. The Ecodesign Regulation is amended in accordance with this Part.

Amendment of Article 2 (definitions)

12.—(1) Article 2 is amended as follows.

(2) In point (7) (definition of “rated heat output”) omit from “for heat pump space heater” to the end.

(3) After point (15) insert—

“(15A) “fuel boiler combination heater” means a boiler combination heater that generates heat by burning fossil fuels or biomass fuels (or both), and which may be equipped with one or more additional heat generators using the Joule effect in electric resistance heating elements;

(15B) “fuel boiler space heater” means a boiler space heater that generates heat by burning fossil fuels or biomass fuels (or both), and which may be equipped with one or more additional heat generators using the Joule effect in electric resistance heating elements;

- (15C) “gas boiler heater” means—
- (a) a fuel boiler space heater that—
 - (i) generates heat by burning gaseous fuels of fossil origin, and
 - (ii) has a rated heat output of $\leq 45\text{kW}$, or
 - (b) a gas boiler combination heater;
- (15D) “gas boiler combination heater” means a fuel boiler combination heater that—
- (a) generates heat by burning gaseous fuels of fossil origin, and
 - (b) has a rated heat output of $\leq 45\text{kW}$;
- (15E) “oil boiler combination heater” means a fuel boiler combination heater that—
- (a) generates heat by burning liquid fuels of fossil origin, and
 - (b) has a rated heat output of $\leq 45\text{kW}$;
- (15F) “FB combination heater” means—
- (a) a gas boiler combination heater other than a type B1 combination boiler, or
 - (b) an oil boiler combination heater other than a type B1 combination boiler;
- (15G) “type B1 combination boiler” means a fuel boiler combination heater—
- (a) incorporating a draught diverter, intended to be connected to a natural draught flue that evacuates residues of combustion to the outside of the room containing the heater, and drawing the combustion air directly from the room, and
 - (b) marketed only as such a heater;
- (15H) “type B1 boiler” means a fuel boiler space heater—
- (a) incorporating a draught diverter, intended to be connected to a natural draught flue that evacuates residues of combustion to the outside of the room containing the heater, and drawing the combustion air directly from the room, and
 - (b) marketed only as such a heater;
- (15I) “excepted boiler heater” means—
- (a) a type B1 boiler with a rated heat output of $\leq 10\text{kW}$, or
 - (b) a type B1 combination boiler with a rated heat output of $\leq 30\text{kW}$.”.

(4) In point (17) (definition of “heat pump space heater”) omit “or the combustion of” to the end.

(5) After point (18) insert—

“(18A) “low-temperature heat pump” means a heat pump space heater, or heat pump combination heater, that is declared capable of being used in a low-temperature application;

(18B) “low-temperature only heat pump” means a heat pump space heater, or heat pump combination heater, that is declared capable of being used only in a low-temperature application;

- (18C) “low-temperature application” (“LT”), in relation to a heat pump space heater, or heat pump combination heater, means an application where the heater delivers space heating—
- (a) at an indoor heat exchanger outlet temperature of 35°C at reference design temperature, and
 - (b) at the water outlet temperature specified for each set of part load conditions in the rows marked “LT” in Table 4B in Annex 3;
- (18D) “medium-temperature heat pump” means a heat pump space heater, or heat pump combination heater, that is declared capable of being used in a medium-temperature application;
- (18E) “medium-temperature application” (“MT”), in relation to a heat pump space heater or heat pump combination heater, means an application where the heater delivers space heating—
- (a) at an indoor heat exchanger outlet temperature of 55°C at reference design temperature, and
 - (b) at the water outlet temperature specified for each set of part load conditions in the rows marked “MT” in Table 4B in Annex 3;
- (18F) “high-temperature heat pump” means a heat pump space heater, or heat pump combination heater, that is declared capable of being used in a high-temperature application;
- (18G) “high-temperature application” (“HT”), in relation to a heat pump space heater or a heat pump combination heater, means an application where the heater delivers space heating—
- (a) at an indoor heat exchanger outlet temperature of 65°C at reference design temperature, and
 - (b) at the water outlet temperature specified for each set of part load conditions in the rows marked “HT” in Table 4B in Annex 3;
- (18H) “hybrid heat pump system” means a system of space heating, or space and water heating, that contains at least the following components (each a “necessary HHPS component”)—
- (a) a heat pump space heater, or heat pump combination heater, using electricity (an “electric heat pump”),
 - (b) a fuel boiler space heater or a fuel boiler combination heater, and
 - (c) a master controller which determines, based on operating conditions, the heat output of each of the heaters;
- (18I) “hybrid heat pump” means—
- (i) a package containing all the necessary HHPS components of a hybrid heat pump system, or
 - (ii) all of the necessary HHPS components of a hybrid heat pump system integrated in a unit,
- whether or not the package, or unit, contains any other device;
- (18J) “hybrid heat pump space heater” means a hybrid heat pump that is a space heater;

(18K) “hybrid heat pump combination heater” means a hybrid heat pump space heater that is a combination heater;”.

(6) In point (23) (definition of “conversion coefficient”) for “2.5” substitute “1.9”.

Amendment of Article 3 (ecodesign requirements and timetable)

13.—(1) Article 3 is amended as follows.

(2) After paragraph 1 insert—

“1A. Each individual heater that is contained, or integrated, in a hybrid heat pump must meet the ecodesign requirements that apply to that individual heater. So, for example, a boiler space heater contained in a hybrid heat pump must meet the ecodesign requirements for boiler space heaters.

1B. Paragraph 1A applies in addition to any ecodesign requirements that apply to the hybrid heat pump itself.

1C. In relation to heat pump space heaters and heat pump combination heaters—

- (a) the manufacturer must declare all of the temperature applications in which those heaters are capable of being used to deliver space heating;
- (b) where a heater is a medium-temperature heat pump, it must satisfy—
 - (i) the ecodesign requirements for low-temperature heat pumps, and
 - (ii) the ecodesign requirements for medium-temperature heat pumps;
- (c) where a heater is a high-temperature heat pump, it must satisfy—
 - (i) the ecodesign requirements for low-temperature heat pumps,
 - (ii) the ecodesign requirements for medium-temperature heat pumps, and
 - (iii) the ecodesign requirements for high-temperature heat pumps.”.

(3) In paragraph 2, after point (c) insert—

“(d) from [date y]:

- (i) gas boiler heaters which are FB combination heaters must meet the requirements set out in Annex 2, points 4A and 4B;
- (ii) FB combination heaters must meet the requirements set out in Annex 2, point 5(a), seventh indent;
- (iii) gas boiler heaters (other than excepted boiler heaters) must meet the requirements set out in Annex 2, point 5(a), eighth indent;
- (iv) electric boiler space heaters and electric boiler combination heaters must meet the requirements in Annex 2, point 1(c);

(e) from [date y + 12 months]:

- (i) heat pump space heaters and heat pump combination heaters must meet the requirements set out in Annex 2, point 1(d);
- (ii) hybrid heat pumps must meet the requirements in Annex 2, points 1(e) and point 5(a), final indent;

- (f) from [date y + 24 months]:
 - (i) oil boiler combination heaters which are FB combination heaters must meet the requirements in point 4A;
 - (ii) gas boiler combination heaters (other than type B1 combination boilers) must meet the requirements set out in Annex 2, points 1(e) and 4C;
 - (iii) oil boiler combination heaters (other than type B1 combination boilers) must meet the requirements set out in Annex 2, point 4D;
- (g) from [date y + 36 months] heat pump space heaters and heat pump combination heaters must meet the requirements set out in Annex 2, point 1(f)."

Amendment of Article 4 (conformity assessment)

14.—(1) Article 4 is amended as follows.

(2) In paragraph 3.1, in the words before subparagraph (a), after “boilers” insert “with the provisions of this implementing measure (other than the new efficiency provisions)”.

(3) After paragraph 3.1 insert—

“3.1A For the purposes of paragraph 3.1, “the new efficiency provisions” means points 4A, 4B, 4C and 4D of Annex 2.”.

New Article 5A

15. After Article 5 insert—

“Article 5A

Circumvention and software and firmware updates

1. A relevant person may not place on the market, or put into service, a heater which is designed to be able to—
 - (a) detect that it is being tested (for example, by recognising test conditions or test cycle), or
 - (b) react specifically by automatically altering its performance during a test with the aim of reaching a more favourable level for any of the parameters in the technical documentation or included in any documentation provided with the heater.
2. A relevant person must not prescribe test instructions, specifically for when a heater is being tested, that have the effect of altering the behaviour or properties of the heater in order to obtain a more favourable result for any declared values of the parameters set out in this Regulation.
3. A relevant person may not place on the market, or put into service, any heater which is designed to alter its behaviour or properties within a short period after being put into service in a way that reduces or degrades any of the declared values of the parameters set out in this Regulation.
4. The energy consumption of, and any of the other declared values of the parameters set out in this Regulation for, a heater must not reduce or degrade following a software or firmware update—
 - (a) except with the express consent of the end-user before the update takes place, and

- (b) provided that the update would not have the effect of changing the performance of the heater in such a way that it no longer complies with the ecodesign requirements that applied at the time the heater was placed on the market or put into service.
- 5. In addition, there must be no change in performance of a heater if an end-user chooses to reject a particular software or firmware update.
- 6. For the purposes of paragraph 4, the same designated standard used for the original declaration of conformity must be used to measure the relevant value after the software or firmware update.
- 7. A relevant person must not make a software or firmware update available for a heater.
- 8. In this Article “relevant person”, in relation to a heater, means—
 - (a) the manufacturer,
 - (b) an authorised representative of the manufacturer, or
 - (c) the importer.”.

Amendment of Article 6 (indicative benchmarks)

16. In Article 6 omit “at the time of entry into force of this Regulation”.

Amendment of Annex 1 (definitions applicable to Annexes 2 to 5)

17.—(1) Annex 1 is amended as follows.

(2) Omit points (7) and (8) (definitions of “fuel boiler space heater” and “fuel boiler combination heater”).

(3) Omit points (9) and (10) (definitions of “type B1 boiler” and “type B1 combination boiler”).

(4) After point (10) insert—

“(10A) “qualifying communication protocol” means an open communication protocol—

- (a) which allows a heater manufactured by one manufacturer and a temperature control manufactured by another to communicate with each other to help regulate the indoor temperature as required by the end-user, and
- (b) the use of which does not result in the heater or the temperature control (or both) losing any functionality which reduces the efficiency of the heater.

For this purpose—

- (a) the use of an open communication protocol results in a temperature control losing functionality which reduces the efficiency of the heater if, in particular, the use of that protocol means the temperature control can no longer maintain the set point temperature by adjusting the flow temperature, or, as the case may be, modulating the output, of the heater;
- (b) a heater can modulate its output if it can vary its power output whilst maintaining continuous operation, and the reference to “modulating” is to be read accordingly.

- (10B) “FBCH temperature control” has the meaning given for the purposes of the Ecodesign for Energy-Related Products and Energy Information (Space Heaters and Temperature Controls) Regulations 20** (see regulation 5(1) of those Regulations);”.
- (5) After point (19) insert—
- “(19A)“ j ” is a reference to the number of a bin, as set out in the first column of Table 5 in Annex 3;”.
- (6) For point (22) substitute—
- “(22)“reference design temperature” ($T_{designh}$), in relation to space heating, means the outdoor temperature at which the part load ratio is equal to 1 (100%), expressed in degrees Celsius;”.
- (7) In point (25) omit “(bin_j)”.
- (8) For point (28) substitute—
- “(28)“seasonal coefficient of performance” ($SCOP$) means the annual average coefficient of performance of a heat pump space heater or a heat pump combination heater using electricity, in the designated heating season, calculated as the reference annual heating demand divided by the annual energy consumption;
- (28A) “seasonal primary energy ratio” ($SPER$) means the annual average primary energy ratio of a heat pump space heater or heat pump combination heater using fuels in the designated heating season, calculated from the active mode seasonal gas utilisation efficiency $SGUE$ and the seasonal auxiliary electricity factor $SAEF$, where $SAEF$ is calculated to primary energy using the conversion coefficient CC ;”.
- (9) In point (32) (meaning of “active mode coefficient of performance” and “active mode primary energy ratio”) for “average”, in both places it occurs, substitute “weighted average”.
- (10) In point (35) (definition of “declared capacity for heating”)—
- (a) after “($P_{dh}(T_j)$)” insert “in relation to a heat pump space heater or heat pump combination heater;”, and
- (b) for “a heat pump space heater or heat pump combination heater” substitute “the heater”.
- (11) After point (37) insert—
- “(37A)the “rated heat output” ($P_{rated, hp}$) of a heat pump space heater, or heat pump combination heater, is the useful heat output of the heater at the higher, in average climate conditions, of—
- (a) the operation limit temperature TOL , and
- (b) the reference design temperature $T_{designh}$,
expressed in kW;”.
- (12) Omit points (52) to (54).
- (13) After point (54) insert—
- “(54A)“part load conditions” means the conditions for testing at part loads A, B, C, D, E and F, as set out in Table 4B in Annex 3, and references to a set of part load conditions are to be read accordingly;

- (54B) “switch temperature heat pump on” ($T_{hp,on}$), in relation to a hybrid heat pump, means the outdoor temperature—
- (a) at which the heat pump space heater or heat pump combination heater (as the case may be) is switched on by the master controller and space heating is delivered by that heater, and
 - (b) below which space heating is delivered only by the fuel boiler space heater or fuel boiler combination heater,
- expressed in degrees Celsius;
- (54C) “switch temperature fuel boiler off” ($T_{fb,off}$), in relation to a hybrid heat pump, means the outdoor temperature—
- (a) at which the fuel boiler space heater or fuel boiler combination heater is switched off by the master controller, and
 - (b) above which the fuel boiler space heater or fuel boiler combination heater does not deliver any space heating,
- expressed in degrees Celsius;
- (54D) “electric resistance back-up heater capacity” ($elbu(T_j)$) is the heat output of a supplementary electric resistance heater supplementing the declared capacity for heating $Pdh(T_j)$ of a heat pump space heater, or heat pump combination heater, to reach the part load for heating $Ph(T_j)$ in the bin with the particular temperature (T_j), expressed in kW (see in particular point 4C of Annex 3);
- (54E) “cycling” is the condition where the capacity ratio CR is less than 0.9 and the unit cycles on/off to reach the required part load for heating $Ph(T_j)$;
- (54F) “control correction” $f(1)$ is a correction for a temperature control, made by subtracting 3 percentage points from the seasonal space heating energy efficiency η_s of a heater;
- (54G) “auxiliary electricity correction” $f(2)$ is a correction for the auxiliary electricity consumption as a fraction of the annual energy consumption of a heater, expressed in %;
- (54H) “auxiliary electricity consumption” means, for the purposes of the energy efficiency calculations in this Regulation, the annual electricity consumed by the system components, such as fans, valves, heating elements required for the operation of the heat generator but not including the circulation pump;
- (54I) “adjusted outlet temperature for cycling” $T_{cyc}(T_j)$ means the outlet temperature in active mode during on/off cycling of a heat pump space heater or heat pump combination heater;
- (54J) “temperature regime” means—
- (a) low-temperature application,
 - (b) medium-temperature application, or
 - (c) high-temperature application;
- (54K) “gas utilisation efficiency” ($GUE(T_j)$) is the ratio between the part load for heating $Ph(T_j)$ and the measured thermal output in GCV at a specific outdoor temperature T_j , expressed in kW/kW;

- (54L) “auxiliary electricity factor” ($AEF(T_j)$) is the ratio between the part load for heating $PH(T_j)$ and the electric power input at a specific outdoor temperature T_j , expressed in kW/kW;
- (54M) “active mode seasonal gas utilisation efficiency” ($SGUE$) means the seasonal GUE , calculated as the hour (H_j) weighted average of $GUE(T_j)$ over the designated heating season, expressed in kW/kW;
- (54N) “active mode seasonal auxiliary electricity factor” ($SAEF_{on}$) means the seasonal AEF in active mode, calculated as the hour (H_j) weighted average of $AEF(T_j)$ over the designated heating season, expressed in kW/kW;
- (54O) “seasonal auxiliary electricity factor” ($SAEF$) means the seasonal $SAEF$, including electricity use in non-active modes Q_{aux} , calculated as the reference annual heating demand divided by the annual energy consumption, expressed in kW/kW;
- (54P) “K” means degrees Kelvin;
- (54Q) “fuel supplementary heater capacity” ($fuelbu(T_j)$), in relation to a hybrid heat pump, means the heat output of the fuel boiler space heater, or fuel boiler combination heater, supplementing the declared hybrid heat pump capacity for heating, as appropriate, to reach the part load for heating $Ph(T_j)$ in the bin with temperature T_j , expressed in kW;”.

Amendment of Annex 2 (ecodesign requirements)

18.—(1) Annex 2 is amended as follows.

(2) In point 1, after point (b) insert—

- “(c) From [date y] the seasonal space heating energy efficiency of electric boiler space heaters and electric boiler combination heaters must not fall below 47%;
- (d) From [date y + 12 months] the seasonal space heating energy efficiency of heat pump space heaters and heat pump combination heaters must not fall below the following values:
- (i) in the case of low-temperature heat pumps, 170%;
 - (ii) in the case of medium-temperature heat pumps, 168%;
 - (iii) in the case of high-temperature heat pumps, 143%;
- (e) From [date y + 12 months] the seasonal space heating energy efficiency of hybrid heat pumps must not fall below 125%;
- (f) From [date y + 24 months] the seasonal space heating energy efficiency of gas boiler combination heaters (other than type B1 combination boilers) must not fall below 92%.
- (g) From [date y + 36 months] the seasonal space heating energy efficiency of heat pump space heaters and heat pump combination heaters must not fall below:
- (i) in the case of a low-temperature heat pumps, 175%;
 - (ii) in the case of a medium-temperature heat pumps, 175%;
 - (iii) in the case of a high-temperature heat pumps, 153%.”.

(3) After point 4 insert—

“4A. REQUIREMENTS FOR USE OF QUALIFYING COMMUNICATION PROTOCOL(S)
- FB COMBINATION HEATERS”

From [date y], gas boiler combination heaters which are FB combination heaters must have at least one qualifying communication protocol enabled.

From [date y + 24 months], oil boiler combination heaters which are FB combination heaters must have at least one qualifying communication protocol enabled.

4B REQUIREMENTS FOR DEFAULT FLOW TEMPERATURE - GAS BOILER COMBINATION HEATERS WHICH ARE FB COMBINATION HEATERS

From [date y], gas boiler combination heaters which are FB combination heaters must have a default flow temperature of 60°C for space heating.

4C REQUIREMENTS FOR ADDITIONAL ENERGY EFFICIENCY OF GAS BOILER HEATERS OTHER THAN TYPE B1 BOILERS

From [date y + 24 months] gas boiler combination heaters (other than type B1 combination boilers) must be able to modulate their useful heat output down to 15% of their maximum output and at the same useful efficiency as at 30% of the rated heat output.

4D REQUIREMENTS FOR ADDITIONAL ENERGY OF OIL BOILER COMBINATION HEATERS OTHER THAN TYPE B1 BOILERS

From [date y + 24 months] oil boiler combination heaters (other than type B1 combination boilers) must be able to modulate their useful heat output down to 33% of the rated heat output and at the same useful efficiency as at 30% of the rated heat output.”.

(4) In point 5—

(a) in the words before point (a), omit “From 26 September 2015”;

(b) in point (a)—

(i) in the indent beginning “for boiler space heaters”, after “cogeneration space heaters” insert “(other than those comprised in hybrid heat pumps)”;

(ii) in the indent beginning “for heat pump space heaters”, after “combination heaters” insert “(other than those comprised in hybrid heat pumps)”;

(iii) after the final indent, insert—

“— from [date y], for FB combination heaters, the open communication protocol(s) enabled on the heater and how to set up the heater so that it can use the protocol(s);

— from [date y], for gas boiler heaters (other than excepted boiler heaters), their maximum heat output and their minimum heat output;

— from [date y + 12 months], for hybrid heat pumps, the technical parameters set out in Table 2A, calculated in accordance with Annex 3.”;

(5) In Table 2, for the row beginning “Parameters shall be declared” substitute—

“Parameters are to be declared for medium-temperature application, except for low-temperature only heat pumps. For low-temperature only heat pumps, parameters are to be declared for low-temperature application.”.
--

(6) After Table 2 insert—

“Table 2A

Information requirements for hybrid heat pumps

Model(s): [information identifying the model(s) to which the information relates]							
Primary heat source: [heat pump/boiler]							
Testing standard used:							
Air-to-water heat pump: [yes/no]							
Brine-to-water heat pump: [yes/no]							
Low-temperature only heat pump: [yes/no]							
Heat pump combination heater: [yes/no]							
B1 boiler: [yes/no]							
Boiler combination heater: [yes/no]							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output of heat pump at temperature $T_{hp,on}$	P_{hp}	x	kW	Seasonal space heating energy efficiency	η_s	x	%
Rated heat output of boiler at temperature $T_{fb,off}$	P_{fb}	x	kW				
Declared capacity for heating of the hybrid heat pump at indoor temperature of 20°C and outdoor temperature T_j				Declared coefficient of performance or primary energy ratio of the hybrid heat pump at indoor temperature of 20°C and outdoor temperature T_j			
$T_j = -7^\circ\text{C}$	P_{dh}	x.x	kW	$T_j = -7^\circ\text{C}$	COP_d or PER_d	x.xx or x.x	— or %
$T_j = +2^\circ\text{C}$	P_{dh}	x.x	kW	$T_j = +2^\circ\text{C}$	COP_d or PER_d	x.xx or x.x	— or %
$T_j = +7^\circ\text{C}$	P_{dh}	x.x	kW	$T_j = +7^\circ\text{C}$	COP_d or PER_d	x.xx or x.x	— or %
$T_j = +12^\circ\text{C}$	P_{dh}	x.x	kW	$T_j = +12^\circ\text{C}$	COP_d or PER_d	x.xx or x.x	— or %

Switch temperature boiler off	$T_{fb,off}$	x	°C		Cycling interval efficiency	COP_{cyc} or PER_{cyc}	x.xxx or x.x	— or %
Switch temperature heat pump on	$T_{hp,on}$	x	°C		Heating water operation limit temperature	$WTOL$	x	°C
Cycling interval capacity for heating	P_{cyc}	x.x	kW					
Degradation coefficient ^a	C_{dh}	x.x	—					
Power consumption of the heat pump space heater or heat pump combination heater in modes other than active mode								
Off mode	P_{OFF}	x.xxx	kW					
Thermostat-off mode	P_{TO}	x.xxx	kW					
Standby mode	P_{SB}	x.xxx	kW					
Crankcase heater mode	P_{CK}	x.xxx	kW					
Other items								
Capacity control	[fixed/variable]							
Sound power level, indoors	L_{WA}	x	dB					
Sounds power level, outdoors	L_{WA}	x	dB		For water-/brine-to water heat pumps, flow rate, outdoor heat exchanger	—	x	m ³ /h
Emissions of nitrogen oxides	NOx	x	mg/kWh					
For a boiler combination heater (if applicable)								
Declared load profile	x			Water heating energy efficiency	η_{wh}	x	%	
Daily electricity consumption	Q_{elec}	xxxx	kWh		Daily fuel consumption	Q_{fuel}	x.xxx	kWh
Contact details	Name and address of the manufacturer(s) or their authorised representative							

note (a) — If Cdh is not determined by measurement, then the default degradation coefficient = 0.9”.

Amendment of Annex 3 (measurements and calculations)

19.—(1) Annex 3 is amended as follows.

(2) In point 2 for “2,5” substitute “1.9”.

(3) After point 2 insert—

“2A. Conditions for measurements and calculations in relation to hybrid heat pumps

2A.1. For establishing the seasonal space heating energy efficiency η_s of hybrid heat pumps—

- (a) testing must be carried out at medium-temperature application;
- (b) either of the following testing methods may be used—
 - (i) a separated testing method: this method determines the heating capacity delivered by the electric heat pump and the heating capacity delivered by the fuel boiler space heater, or fuel boiler combination heater, separately;
 - (ii) a combined testing method: this method treats the hybrid heat pump as a single unit, and measures the electricity and fuel use at each set of part load test conditions using the master controller;
- (c) the electric heat pump and the fuel boiler space heater, or fuel boiler combination heater, must be hydraulically connected when testing is carried out;
- (d) testing must be carried out at each set of part load conditions, except that—
 - (i) set E of those conditions has effect as if for TOL there were substituted $T_{hp,on}$, and
 - (ii) set F of those conditions has effect as if for T_{biv} there were substituted $T_{fb,off}$.”.

(4) In point 3, for “2,5” substitute “1.9”.

(5) For point 4 substitute—

“4. SEASONAL SPACE HEATING ENERGY EFFICIENCY η_s OF HEAT PUMP SPACE HEATERS USING ELECTRICITY AND HEAT PUMP COMBINATION HEATERS USING ELECTRICITY

4.1. The seasonal space heating energy efficiency η_s of a heat pump space heater, or heat pump combination heater, using electricity is the seasonal coefficient of performance adjusted to make corrections for controls and auxiliary energy and for the conversion coefficient, calculated as follows—

$$\eta_s = (1/CC) \times SCOP - \sum F(i)$$

where—

- (a) CC is the conversion coefficient,
- (b) $SCOP$ is the seasonal coefficient of performance,

- (c) $\Sigma F(i)$ is the sum of the correction for controls ($f(1)$) and auxiliary energy consumption ($f(2)$).

4.2. The seasonal coefficient of performance $SCOP$ is to be calculated as follows—

$$SCOP = Q_H / Q_{HE}$$

where—

- (a) Q_H is the reference annual heating demand, expressed in kWh per annum, and
 (b) Q_{HE} is the annual energy consumption, expressed in kWh per annum.

4.3. The reference annual heating demand Q_H is to be calculated as follows—

$$Q_H = P_{designh} \times H_{HE}$$

where—

- (a) $P_{designh}$ is the design load for heating at the reference design conditions in Table 4, expressed in kW, and
 (b) H_{HE} is the reference annual hours for active mode (see Table 4A).

4.4. The annual energy consumption Q_{HE} is to be calculated as follows—

$$Q_{HE} = Q_H / SCOP_{on} + Q_{aux}$$

where—

- (a) Q_H is the reference annual heating demand, expressed in kWh per annum,
 (b) $SCOP_{on}$ is the active mode coefficient of performance, and
 (c) Q_{aux} is the additional auxiliary electricity consumption, expressed in kWh per annum.

4.5. The addition auxiliary electricity consumption Q_{aux} is to be calculated as follows—

$$Q_{aux} = H_{TO} \times P_{TO} + H_{CK} \times P_{CK} + H_{OFF} \times P_{OFF}$$

where—

- (a) H_{TO} is the reference annual hours for thermostat-off mode (see Table 4A),
 (b) P_{TO} is the measured thermostat-off mode power consumption,
 (c) H_{CK} is the reference annual hours for crankcase heater mode (see Table 4A),
 (d) P_{CK} is the measured power consumption in crankcase heater mode,
 (e) H_{OFF} is the reference annual hours for off mode (if any) (see Table 4A), and
 (f) P_{OFF} is the measured power consumption in off mode.

4A. SEASONAL SPACE HEATING ENERGY EFFICIENCY η_s OF HEAT PUMP SPACE HEATERS USING FUELS AND HEAT PUMP COMBINATION HEATERS USING FUELS

4A.1. The seasonal space heating energy efficiency η_s of a heat pump space heater, or a heat pump combination heater, using fuels is the seasonal primary energy ratio adjusted for the conversion coefficient and for corrections for controls calculated as follows—

$$\eta_s = SPER - \sum F(i)$$

where—

- (a) *SPER* is the seasonal primary energy ratio, and
- (b) $\sum F(i)$ is the sum of the correction for controls (*f(1)*) and auxiliary energy consumption (*f(2)*).

4A.2. The seasonal primary energy ratio *SPER* is to be calculated as follows—

$$SPER = 1 / \left\{ 1 / SGUE + CC / SAEF \right\}$$

where—

- (a) *SGUE* is the seasonal gas utilisation efficiency,
- (b) *SAEF* is the seasonal auxiliary electricity factor, and
- (c) *CC* is the conversion coefficient.

4A.3. The seasonal auxiliary electricity factor *SAEF* is to be calculated as follows—

$$SAEF = Q_H / Q_{HE}$$

where—

- (a) Q_H is the reference annual heating demand, expressed in kWh per annum, and
- (b) Q_{HE} is the annual energy consumption, expressed in kWh per annum.

4A.4. The reference annual heating demand Q_H is to be calculated as set out in point 4.3.

4A.5. The annual energy consumption Q_{HE} is to be calculated as follows—

$$Q_{HE} = \left(Q_H / SAEF_{on} \right) + Q_{aux}$$

where—

- (a) Q_H is the reference annual heating demand,
- (b) $SAEF_{on}$ is the active mode seasonal auxiliary electricity factor, and
- (c) Q_{aux} is the additional auxiliary electricity consumption, expressed in kWh per annum.

4A.6. The additional auxiliary electricity consumption Q_{aux} is to be calculated as set out in point 4.5.

4B. SEASONAL SPACE HEATING ENERGY EFFICIENCY OF HYBRID HEAT PUMP SPACE HEATERS AND HYBRID PUMP COMBINATION HEATERS

4B.1. The method for establishing the seasonal space heating energy efficiency η_s of hybrid heat pumps—

- (a) consists of determining the heating capacity delivered by—
 - (i) the heat pump space heater or the heat pump combination heater, and

- (ii) the fuel boiler space heater or the fuel boiler combination heater, separately, and
 - (b) is similar to the bin method of calculating the seasonal space heating energy efficiency of a heat pump space heater, or heat pump combination heater, with a supplementary electric resistance heater that supplies the required electric resistance back-up heater capacity ($elbu(T_j)$), expressed in kW, on the basis of part loads per bin following the declared design load for heating $P_{designh}$.
- 4B.2. In the case of a hybrid heat pump, the supplementary heater is a fuel boiler space heater, or fuel boiler combination heater, with seasonal space heating energy efficiency in active mode η_{son} supplying the required capacity $fuelbu(T_j)$ converted to final energy equivalent to the conversion coefficient CC , and corrected for the control correction $f(1)$ where applicable, the auxiliary electricity use $f(2)$ and the standby heat loss of the boiler $f(3)$.
- 4B.3. The [useful heat output] P of an HP boiler per bin bin_j follows from the [heating] capacity of the heat pump space heater, or heat pump combination heater, for that bin at the relevant set of part load conditions, which in turn depends on $P_{designh}$, $T_{hp,off}$ and $T_{fb,on}$.
- 4B.4. $T_{hp,off}$ and $T_{fb,on}$ are declared values and settings of the [master control] and are not subject to design conditions.
- 4B.5. The tests for the heat pump space heater, or heat pump combination heater, in a hybrid heat pump are to be conducted with only the heat pump space heater or heat pump combination in operation and the fuel boiler space heater, or fuel boiler combination heater, hydraulically connected, for each set of part load conditions in which the outdoor temperature $T_{(j)}$ is greater than or equal to $T_{fb,off}$.
- 4B.6. For the separated testing method, the calculation of the seasonal space heating energy efficiency of the hybrid heat pump uses the [seasonal space heating] energy efficiency η_s of the fuel boiler space heater, or fuel boiler combination heater, at each the outdoor temperature $T_{(j)}$ in each bin temperature where the heating capacity is provided by the boiler.
- 4B.7. For the combined testing method, the calculation of the seasonal space heating energy efficiency of the hybrid heat pump is based on the interpolation at each bin temperature T_j of the heating capacity and energy input of the hybrid heat pump between values at the tested part load conditions.
- 4C. HEAT PUMP SPACE HEATERS, AND HEAT PUMP COMBINATION HEATERS, USING ELECTRICITY: SEASONAL SPACE HEATING ENERGY EFFICIENCY IN ACTIVE MODE (η_{son})
- 4C.1. Seasonal space heating energy efficiency in active mode (η_{son}) of a heat pump space heater, or heat pump combination heater, using electricity is the same as the seasonal coefficient of performance in active mode $SCOP_{on}$.
- 4C.2. $SCOP_{on}$ is derived from the bin specific coefficient of performance $COP_{bin}(T_j)$ and the declared capacity for heating $Pdh(T_j)$ at the temperature T_j for each set of part load conditions and at the design load for heating $P_{designh}$, as set out in Table 4B.
- 4C.3. The part load ratio for a particular outdoor temperature must be calculated as follows—

$$Pl(T_j) = (T_j - 16) / (T_{designh} - 16)$$

where—

- (a) $Pl(T_j)$ is the part load ratio,
- (b) T_j is the outdoor temperature, and
- (c) $T_{designh}$ is the reference design temperature.

4C.4. The declared coefficient of performance $COP_d(T_j)$ must be the measured value of the bin specific coefficient of performance $COP_{bin}(T_j)$ for—

- (a) each of the outdoor temperatures specified in each set of part load conditions, and
- (b) the reference design temperature $T_{designh}$.

4C.5. The declared capacity for heating $Pdh(T_j)$ must be the measured value of the part load for heating $Ph(T_j)$ for—

- (a) each of the outdoor temperatures specified in each set of part load conditions, and
- (b) the reference design temperature $T_{designh}$.

4C.6. The declared coefficient of performance $COP_d(T_j)$, and the declared capacity for heating $Pdh(T_j)$, for bins other than those mentioned in points 4B.5 and 4B.6 must be determined by interpolation or extrapolation from known values.

4C.7. If the heating capacity of a heat pump space heater, or a heat pump combination heater, using electricity in a particular bin is too low for the demand for heating in that bin, then a supplementary electric back-up resistance heater with required heating capacity $elbu(T_j)$, in kW, fills in the lacking heating capacity.

4C.8. If the heating capacity of a heat pump space heater, or heat pump combination heater, using electricity, exceeds the demand for heating in a particular bin, the heat pump will cycle on/off.

In such cases, the bin specific coefficient of performance $COP_{bin}(T_j)$ must be calculated as follows—

$$COP_{bin}(T_j) = COP_d(T_j) \times CR / (Cdh \times CR + (1 - Cdh))$$

where—

- (a) $COP_d(T_j)$ is the declared coefficient of performance,
- (b) CR is the capacity ratio, and
- (c) Cdh is the degradation coefficient

4C.9 For the purposes of the calculation in the second paragraph of point 4C.8—

- (a) if the degradation coefficient Cdh is not determined by measurement, then the default degradation coefficient of 0.9 must be used, and
- (b) the capacity ratio CR is to be calculated as follows—

$$CR = Pl(T_j) - P_{designh}/P_{dh}(T_j)$$

where—

- (i) $Pl(T_j)$ is the part load for heating,
- (ii) $P_{designh}$ is the design load for heating, and
- (iii) $P_{dh}(T_j)$ is the declared capacity for heating.

4C.10. Once the bin specific coefficient of performance and the electric resistance back-up heater capacity has been determined for each bin, the seasonal coefficient of performance in active mode $SCOP_{on}$ can be calculated, using the number of hours and heat demand P , expressed in kW, per bin over the heating season as follows—

$$SCOP_{on} = \frac{\sum_{j=1}^n H_j \times P_{dh}(T_j)}{\sum_{j=1}^n H_j \left[\frac{P_{dh}(T_j) - elbu(T_j)}{COP_{bin}(T_j)} \right] + elbu(T_j)}$$

where—

- (a) H_j is bin hours,
- (b) $P_{dh}(T_j)$ is the declared capacity for heating,
- (c) $elbu(T_j)$ is the electric resistance back-up heater capacity, and
- (d) $COP_{bin}(T_j)$ is the bin specified coefficient of performance.

4D. HEAT PUMP SPACE HEATERS, AND HEAT PUMP COMBINATION HEATERS, USING FUELS: SEASONAL SPACE HEATING ENERGY EFFICIENCY IN ACTIVE MODE (η_{son})

4D.1. The η_{son} for heat pump space heaters, and heat pump combination heaters, using fuels is derived from two energy input values per bin—

- (a) the gas utilisation factor GUE , and
- (b) the auxiliary electricity factor AEF .

4D.2. There is no back-up heater in the calculation of GUE , as the gas covers the full capacity.

4D.3. The value of AEF is corrected for primary energy, using the conversion coefficient CC , as described in point 4A.2.

4D.4. Apart from the specific points mentioned above, the calculation of $SGUE$ and $SAEF_{on}$ is similar to the calculation of $SCOP_{on}$.

4D.5. Once the gas utilisation factor GUE has been determined for each bin, the active mode seasonal gas utilisation factor $SGUE$ is to be calculated as follows—

$$SGUE = \frac{\sum_{j=1}^n H_j \times P_h(T_j)}{\sum_{j=1}^n H_j \left[\frac{P_h(T_j)}{GUE(T_j)} \right]}$$

where—

- (a) H_j is bin hours,
- (b) $P_h(T_j)$ is the part load for heating, and
- (c) $GUE(T_j)$ is the gas utilisation efficiency.

4D.6. Once the auxiliary energy factor AEF has been determined for each bin, the active mode seasonal auxiliary energy factor in active mode $SAEF_{on}$ is to be calculated as follows—

$$SAEF_{on} = \frac{\sum_{j=1}^n H_j \times P_h(T_j)}{\sum_{j=1}^n H_j \left[\frac{P_h(T_j)}{AEF(T_j)} \right]}$$

where—

- (a) H_j is bin hours,
- (b) $P_h(T_j)$ is the part load for heating, and
- (c) $AEF(T_j)$ is the auxiliary energy factor.

4E. HYBRID HEAT PUMPS: ACTIVE MODE COEFFICIENT OF PERFORMANCE $SCOP_{on}$

4E.1. For the separated testing method, the active mode coefficient of performance $SCOP_{on}$ is calculated as follows—

$$SCOP_{on} = \frac{\sum_{j=1}^n h_j \times P_h(T_j)}{\sum_{j=1}^n \left[\frac{P_h(T_j) - P_{sup}(T_j)}{COP_{bin}(T_j)} \right] + \left[\frac{P_{sup}(T_j)}{\eta_{s,fb} \times CC} \right] \times \left[\frac{\eta_{son} - f(1)}{\eta_{son}} \right]}$$

where—

- (a) j is the bin number,
- (b) T_j is the outdoor temperature in the specific bin,
- (c) n is the total number of bins,
- (d) $P_h(T_j)$ is the part load for heating at T_j ;
- (e) H_j is the bin hours for the specific bin,
- (f) $COP_{bin}(T_j)$ is the COP value of the heat pump space heater or heat pump combination heater at T_j , expressed in kW/kW;

- (g) $P_{sup}(T_j)$ is the rated heat output of the fuel boiler space heater or fuel boiler combination heater at T_j ,
- (h) $f(I)$ is the control correction,
- (i) η_{son} is the seasonal space heating energy efficiency of the fuel boiler space heater or fuel boiler combination heater in active mode,
- (j) η_{sfb} is the seasonal space heating energy efficiency of the fuel boiler space heater or fuel boiler combination heater, expressed as a %, and
- (k) CC is the conversion coefficient.

4E.2. For the combined method of testing, the active mode coefficient of performance $SCOP_{on}$ is calculated as follows—

$$SCOP_{on} = \frac{\sum_{j=1}^n H_j \times P_h(T_j)}{\sum_{j=1}^n H_j \times \frac{P_h(T_j)}{COP_{bin}(T_j)}}$$

where—

- (a) j is the bin number,
- (b) T_j is the outdoor temperature in the specific bin,
- (c) n is the total number of bins,
- (d) H_j is the bin hours for the specific bin,
- (e) $Ph(T_j)$ is the part load for heating at T_j ,
- (f) $COP_{bin}(T_j)$ is the COP value of the heat pump space heater or heat pump combination heater at T_j , expressed in kW/kW.

4E.3. For the purposes of points 4E.1 and 4E.2, $COP_{bin}(T_j)$ is calculated as follows—

$$COP_{bin}(T_j) = \frac{P_{designh} \times pl(T_j)}{CR \times \left(\frac{Q_{fb}}{CC} + P_{elec} \right) + (1 - CR) \times P_{hybrid, off}}$$

where—

- (a) T_j is the outdoor temperature for the part load conditions,
- (b) $P_{designh}$ is the design load for heating,
- (c) $pl(T_j)$ is the part load ratio at T_j ,
- (d) CR is the capacity ratio,
- (e) P_{elec} is the electrical power input at T_j for the relevant part load conditions, expressed in kW,
- (f) Q_{fb} is the fuel power input at T_j of the fuel boiler space heater, or fuel boiler combination heater, expressed in kW,
- (g) $P_{hybrid, off}$ is the electrical power input at T_j when the hybrid heat pump is off, expressed in kW, and

(h) CC is the conversion coefficient.

4E.4. After each part load test, the temperature set point is lowered until the hybrid heat pump switches off. The electrical power input to the hybrid heat pump $P_{hybrid,off}$ is measured for 5 minutes, after the hybrid heat pump has been switched off for 10 minutes.

4E.5. For the purposes of point 4E.3, the capacity ratio CR is the ratio of the required heating load and the heating capacity of the [hybrid heat pump] at the relevant set of part load conditions.

4F. CORRECTIONS FOR AUXILIARY ENERGY USE AND STANDBY HEAT LOSS

4F.1. The auxiliary energy correction $f(2)$ is—

- (a) 5%, for electric heat pumps;
- (b) for fuel boiler space heaters and fuel boiler combination heaters included or contained in a hybrid heat pump (“HP boilers”) is to be calculated as set out in point 4F.2.

4F.2. The auxiliary energy correction $f(2)$ for HP boilers is—

$$f(2) = \frac{CC \times (0.15 \times elmax + 0.85 \times elmin + 1.3 \times P_{SB})}{(0.15 \times P_4 + 0.85 \times P_1)}$$

where—

- (a) CC is the conversion coefficient,
- (b) $elmax$ is the electric power consumption at full load,
- (c) $elmin$ is the electric power consumption at part load,
- (d) P_{SB} is the standby mode power consumption,
- (e) P_4 is the useful heat output P at rated heat output and high-temperature regime, and
- (f) P_1 is the useful heat output at 30% of rated heat output and low-temperature regime.

4F.3. The standby heat loss correction $f(3)$ for HP boilers is to be calculated as follows—

$$f(3) = 0.5 \times P_{stby}/P_4$$

where—

- (a) P_{stby} is the standby heat loss, and
- (b) P_4 is the useful heat output P at rated heat output and high-temperature regime.

4F.4. For the purposes of points 4F.2 and 4F.3, the temperature regimes for the HP boilers are as described in notes a and b to Table 1 in Annex 2.”

(6) For Table 4 substitute—

“Table 4

Reference design conditions for heat pump space heaters and heat pump combination heaters, temperatures in dry bulb temperature (wet bulb air temperature indicated in brackets)

Reference design temperature	Bivalent temperature	Operation limit temperature	Ventilation exhaust air flow rate
$T_{designh}$	T_{biv}	TOL	Q_{xmaxh}
-10°C (-11°C)	maximum + 2°C	minimum -7°C	maximum $P_{designh}/0.01m^3h$.

(7) After Table 4 (as substituted) insert—

“Table 4A

Reference hours for heat pump space heaters and heat pump combination for each mode, in hours per year

Type of heat pump	Active mode	Thermostat off-mode	Standby mode	Off mode	Crankcase heater mode
	H_{HE}	H_{TO}	H_{SB}	H_{OFF}	H_{CK}
Heating only	2066	178	0	3672	3850
Reversible	2066	178	0	0	178

Table 4B

Part load test conditions for heat pump space heater and heat pump combination heaters

Part load	Part Load Ratio (%)	Outdoor heat exchanger				Indoor heat exchanger (emitter temperatures)	
		Inlet dry bulb (wet bulb) temperature or inlet/outlet temperature (°C)				Temperature regime	outlet - inlet/outlet temperature (°C)
	A	<i>outdoor temperature</i>	<i>exhaust air</i>	<i>water</i>	<i>brine or relevant DX pump^a</i>	temperature regime	T_A
A	88	-7(-8)	+20 (+15)	+10/x	+5/x	LT	$xx/+34$
						MT	$xx/+52$
						HT	$xx/+61$
B	54	+2(+1)	+20 (+15)	+10/x	+5/x	LT	$xx/+30$

Part load	Part Load Ratio (%)	Outdoor heat exchanger				Indoor heat exchanger (emitter temperatures)	
		Average climate (A)	Inlet dry bulb (wet bulb) temperature or inlet/outlet temperature (°C)			Temperature regime	outlet - inlet/outlet temperature (°C)
						MT	xx/+42
						HT	xx/+49
C	35	+7(+6)	+20 (+15)	+10/x	+5/x	LT	xx/+27
						MT	xx/+36
						HT	xx/+41
D	15	+12 (+11)	+20 (+15)	+10/x	+5/x	LT	xx/+24
						MT	xx/+30
						HT	xx/+32
E ^{b,c}	$(TOL - 16) / T_{designh} - 16)$	TOL	+20 (+15)	+10/x	+5/x	all	xxx/xxx
F ^{b,c}	$(T_{biv} - 16) / (T_{designh} - 16)$	T _{biv}	+20 (+15)	+10/x	+5/x	all	xxxx/xxxx
T _{designh}	100	-10 (-11)	+20 (+15)	+10/x	+5/x	LT	xx/35
						MT	xx/55
						HT	xx/65

Notes to Table 4B

Calculation of temperature *x* - temperature to be calculated with the flow rate as determined—

- (a) for heat pump space heaters and heat pump combination heaters with a fixed flow rate at the following standard rating conditions—
 - (i) water - outdoor heat exchanger inlet 10°C/outlet 7°C;
 - (ii) brine or relevant DX pump - outdoor heat exchanger inlet 0°C/outlet -3°C;
- (b) for heat pump space heaters and heat pump combination heaters with a variable flow rate, with a fixed water temperature difference 3K

For heaters with a variable flow rate, if the flow rate obtained from temperature difference 3K between the outlet and return temperatures is lower than the minimum flow rate indicated by the manufacturer, then the minimum flow rate must be used

Calculation of temperature **xx** - temperature to be calculated with the flow rate as determined in the following standard rating conditions—

- (a) for heat pump space heaters and heat pump combination heaters with a fixed flow rate, at 30°C/35°C for LT, 47°C/55°C for MT and 55°C/65°C for HT;
- (b) for heat pump space heaters and heat pump combination heaters with a variable flow rate, at a fixed water temperature difference of 5K for LT, 8K for MT and 10K for HT.

For heaters with a variable flow rate, if the flow rate obtained from 5K (for LT), 8K (for MT) or 10K (for HT) temperature difference between the outlet and return temperature is lower than the minimum flow rate indicated by the manufacturer, than the minimum flow rate must be used

If cycling occurs, the feed temperature increases to the adjusted outlet temperature for cycling $T_{cyc}(T_j)$. $T_{cyc}(T_j)$ is such that the average leaving temperature over the on and off periods equals the outlet temperature for a heat pump space heater or, as the case may be, heat pump combination heater, operating continuously at the same set of part load conditions.

Calculation of temperature **xxx** - temperature is to be calculated from the interpolation of supply/return temperatures at the set of part load test conditions:

- (a) higher than T_{biv} ,
- (b) lower than T_{biv} , and
- (c) closest to T_{biv} .

Calculation of temperature **xxxx**- temperature is to be calculated from the interpolation of supply/return temperatures at the set of part load test conditions:

- (a) higher than TOL ,
- (b) lower than TOL , and
- (c) closest to TOL .

note a - “relevant DX pump” means a direct exchange (DX) ground heat pump with a bath temperature of +4°C.

note b - if $TOL > T_{designh}$, then $T_{designh}$ can only be reached with an electric resistance back-up heater $elbu$.

note c - if $TOL < T_{designh}$, then TOL is deemed to be the same as $T_{designh}$ and this set of part load conditions is the same as set E.”.

(8) In Table 5—

- (a) in the heading, for “European reference” substitute “Reference”;
- (b) in the heading for column 1, for “**bin**” substitute “**bin number (j)**”;

Amendment of Annex 4 (product compliance verification by market surveillance authorities)

20. In Annex 4, for Table 8 substitute—

“Table 8

Verification tolerances

Parameter	Verification tolerance
Seasonal space-heating energy efficiency η_s of boiler space heaters and boiler combination heaters	The determined value must not be more than 4% lower than the declared value
Seasonal space-heating energy efficiency η_s of cogeneration space heaters, heat pump space heaters, heat pump combination heaters and hybrid heat pumps	The determined value must not be more than 8% lower than the declared value
Water heating energy efficiency η_{wh}	The determined value must not be more than 8% lower than the declared value
Sound power level L_{WA}	The determined value must not exceed the declared value by more than 2dB
Emissions of nitrous oxides NO_x	The determined value must not exceed the declared value by more than 20%
Class of temperature control	The class of temperature control must correspond to declared class of unit".

Amendment of Annex 5 (benchmarks)

21.—(1) Annex 5 is amended as follows.

(2) In the paragraph before point 1—

- (a) omit “At the time of entry into force of this Regulation,”;
- (b) for “was” substitute “has been”.

(3) For point 1 substitute—

“1. Benchmark for seasonal space heating energy efficiency η_s

Type of heater	η_s
Fuel boiler space heater, or fuel boiler combination heater, which generates heat using liquid fuel of fossil origin	93%
Fuel boiler space heater, or fuel boiler combination heater, which generates heat using gaseous fuel of fossil origin	95%
Hybrid heat pump	165%, when tested at medium-temperature application ^a
Low-temperature heat pump (other than a ground source heat pump)	260%, when tested in low-temperature application
Medium-temperature heat pump (other than a ground source heat pump)	234%, when tested in medium-temperature application

Type of heater	η_s
High-temperature heat pump (other than a ground source heat pump)	165%, when tested in high-temperature application
Ground source heat pump	229%, when tested in medium-temperature application.

Note to Table in point 1:

note a: a hybrid heat pump is in medium-temperature application with the electric heat pump contained or integrated in it operating at MT”.

PART 4

Energy labelling of space heaters and temperature controls

Amendment of the Labelling Regulation: introductory

22. The Labelling Regulation is amended in accordance with this Part.

Amendment of Article 2 (definitions)

23.—(1) Article 2 is amended as follows.

(2) In point (6), omit from “; for heat pump space heaters” to the end.

(3) After point (23) insert—

“(24) “heat pump space heater” means a space heater using ambient heat from an air source, water source or ground source or waste heat for heat generation; a heat pump space heater may be equipped with one or more supplementary heaters using the Joule effect in electric resistance heating elements;

(25) “heat pump combination heater” means a heat pump space heater that is designed also to provide heat to deliver hot drinking or sanitary water at given temperature levels, quantities and flow rates during given intervals and is connected to an external supply of drinking or sanitary water;

(26) “hybrid heat pump system” means a system of space heating, or space and water heating, that contains at least the following components (each a “necessary HHPS component”)—

- (a) a heat pump space heater, or heat pump combination heater, using electricity (an “electric heat pump”),
- (b) a fuel boiler space heater or a fuel boiler combination heater, and
- (c) a master controller which determines, based on operating conditions, the heat output of each of the heaters;

(27) “hybrid heat pump” means—

- (i) a package containing all the necessary HHPS components of a hybrid heat pump system, or
- (ii) all the necessary HHPS components of a hybrid heat pump system integrated in a unit,

whether or not the package, or unit, contains any other device;

(28) “hybrid heat pump space heater” means a hybrid heat pump which is a space heater;

(29) “hybrid heat pump combination heater” means a hybrid heat pump space heater which is a combination heater.”

Amendment of Article 3 (responsibilities of suppliers)

24.—(1) Article 3 is amended as follows.

(2) For paragraphs 1 and 2 substitute—

“1. From [date y], suppliers placing space heaters on the market or putting them into service (or both), including space heaters integrated in packages of space heater, temperature control and solar device, must ensure that—

(a) each space heater is supplied with a printed label in the format and containing the information set out in Annex 3;

(b) a product fiche is provided for each space heater with the content set out in Annex 4;

(c) the technical documentation, as set out in Annex 5, is provided on request of the authorities of Great Britain;

(d) any visual advertisement for a specific model of space heater must include—

(i) the seasonal space heating energy efficiency class of that specific model, and

(ii) the range of seasonal space heating energy efficiency classes available, (see Annex 2 for the seasonal space heating energy efficiency classes);

(e) any technical promotional material, or other promotional material concerning a specific model of space heater, including technical promotional or promotional material on the internet, contains on the label, in accordance with Annexes 6 and 9—

(i) the seasonal space heating energy efficiency class of that specific model, and

(ii) the range of seasonal space heating energy efficiency classes available;

(f) an electronic label in the format and containing the information set out in Annex 3 is made available to dealers for each model of space heater;

(g) an electronic product fiche, as set out in Annex 4, is made available to dealers for each model of space heater.

2. Where a space heater is both a hybrid heat pump and a heat pump space heater, suppliers need only comply with the requirements in paragraph 1 and Annexes 2 to 4, 6 and 9 that apply to hybrid heat pump space heaters.

2A. For the purposes of paragraph 1—

(a) in the case of a heat pump space heater or hybrid heat pump space heater—

(i) the label mentioned in subparagraph (a) of that paragraph must be provided in at least the packaging of the heat generator or, as the case may be, each of the heat generators;

- (ii) the product fiche mentioned in subparagraph (b) of that paragraph and the electronic product fiche mentioned in subparagraph (f) of that paragraph must be provided for at least the heat generator or, as the case may be, each of the heat generators;
 - (b) where a space heater is intended for use in a package of space heater, temperature control and solar device, a second product fiche must be provided (see point 5 of Annex 4);
 - (c) the seasonal space heating energy efficiency class must be based on the energy efficiency scale set out in Annex 2.
- 2B. From [date y], suppliers placing combination heaters, including those integrated in packages of combination heater, temperature control and solar device, on the market or putting them into service (or both), must ensure that—
- (a) each combination heater is supplied with a printed label in the format and containing the information set out in Annex 3;
 - (b) a product fiche is provided for each combination heater with the content as set out in Annex 4;
 - (c) the technical documentation, as set out in Annex 5, is provided on request of the authorities of Great Britain;
 - (d) any visual advertisement for a specific model of combination heater must include—
 - (i) the seasonal space heating energy efficiency class, and the water heating energy efficiency class, for that model, and
 - (ii) the range of seasonal space heating energy efficiency classes and the range of water heating energy efficiency classes available;
 - (e) any technical promotional material, or other promotional material concerning a specific model of space heater, including technical promotional or promotional material on the internet, contains on the label, in accordance with Annexes 6 and 9—
 - (i) the seasonal space heating energy efficiency class, and the water heating energy efficiency class, for that model, and
 - (ii) the range of seasonal space heating energy efficiency classes and the range of water heating energy efficiency classes available;
 - (f) an electronic label in the format and containing the information set out in Annex 3 is made available to dealers for each model of combination heater;
 - (g) an electronic product fiche, as set out in point 2 of Annex 4, is made available to dealers for each model of combination heater.
- 2C. Where a combination heater is both a heat pump combination heater and a hybrid heat pump combination heater, suppliers need only comply with the requirements in paragraph 2B and Annexes 2 to 4, 6 and 9 that apply to hybrid heat pump combinations heaters.

2D. For the purposes of paragraph 2B—

- (a) in the case of a heat pump combination heater or a hybrid heat pump combination heater—
 - (i) the label mentioned in subparagraph (a) of that paragraph must be provided in at least the packaging of the heat generator or, as the case may be, each of the heat generators;
 - (ii) the product fiche mentioned in subparagraph (b) of that paragraph and the electronic product fiche mentioned in subparagraph (f) of that paragraph must be provided for at least the heat generator or, as the case may be, each of the heat generators;
- (b) where a combination heater is intended for use in a package of combination heater, temperature control and solar device, a second product fiche must be provided (see point 6 of Annex 4);
- (c) the seasonal space heating energy efficiency class and the water heating energy efficiency class must be based on the energy efficiency scales set out in Annex 2.”.

(3) In paragraph 3, for “26 September 2015” substitute “[date y]”

(4) In paragraph 5, omit subparagraphs (a) and (f).

(5) In paragraph 6, omit subparagraphs (a) and (f).

Amendment of Article 4 (responsibilities of dealers)

25. In Article 4—

- (a) in paragraph 3
 - (i) in subparagraph (a), omit the words from “displaying with the package” to “point 3 of Annex III and”;
 - (ii) in subparagraph (b), for “point 3” substitute “point 1”;
- (b) in paragraph 4—
 - (i) in subparagraph (a), omit the words from “displaying with the package” to “point 4 of Annex III and”;
 - (ii) in subparagraph (b), for “point 4” substitute “point 2”.

Amendment of Annex 1 (definitions applicable for Annexes 2 to 8)

26.—(1) Annex 1 is amended as follows.

(2) For point (3) substitute—

“(3) “heat pump”, in figures 1 and 3 in Annex 4, means a heat pump space heater or, as the case may be, a heat pump combination heater;”.

(3) Omit point (4).

(4) In point (11) (definition of “conversion coefficient”) for “2,5” substitute “1.9”.

(5) After point (16) insert—

“(16A)“electric power output” means net AC electric power output, expressed in kW;”.

(6) For point (23) substitute—

“(23)“reference design temperature” ($T_{designh}$), in relation to space heating, means the outdoor temperature at which the part load ratio is equal to 1 (100%), expressed in degrees Celsius;”.

(7) In point (35) (definition of “declared capacity for heating”)—

(a) after “($P_{dh}(T_j)$)” insert “in relation to a heat pump space heater or heat pump combination heater”, and

(b) for “a heat pump space heater or heat pump combination heater” substitute “the heater”.

(8) After point (37) insert—

“(37A)the rated heat output ($P_{rated, hp}$) of a heat pump space heater, or heat pump combination heater, is the useful heat output of the heater at the higher, in average climate conditions, of—

(a) the operation limit temperature TOL , and

(b) the reference design temperature $T_{designh}$,
expressed in kW;”.

(9) For points (52) to (54) substitute—

“(52)“low-temperature only heat pump” has the meaning given for the purposes of the Ecodesign Regulation (see Article 2(18B) of that Regulation);

(53) “low-temperature heat pump” has the meaning given for the purposes of the Ecodesign Regulation (see Article 2(18A) of that Regulation);

(54) “low-temperature application” has the meaning given for the purposes of the Ecodesign Regulation (see Article 2(18C) of that Regulation);

(54A) “medium-temperature heat pump” has the meaning given for the purposes of the Ecodesign Regulation (see Article 2(18D) that Regulation);

(54B) “medium-temperature application” has the meaning given for the purposes of the Ecodesign Regulation (see Article 2(18E) of that Regulation);”.

(10) After point (78) insert—

“(79)“the QR code”, in relation to a heater, is a dynamic quick response code that links to the place on a publicly accessible website where the information required to be provided in the technical documentation for that heater in accordance with Article 3(1) or (2B) is available;

(80) “qualifying communication protocol” has the meaning given for the purposes of the Ecodesign for Energy-Related Products and Energy Information (Space Heaters and Temperature Controls) Regulations 20** (see regulation 5(1) of those Regulations);

(81) “FBCH temperature control” has the meaning given for the purposes of the Ecodesign for Energy-Related Products and Energy Information (Space Heaters and Temperature Controls) Regulations 20** (see regulation 5(1) of those Regulations);

(82) “FB combination heater” has the meaning given for the purposes of the Ecodesign Regulation (see Article 2(15F) of that Regulation);

(83) “the Ecodesign Regulation” means Commission Regulation (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters;”.

Amendment of Annex 2 (energy efficiency classes)

27.—(1) Annex 2 is amended as follows.

(2) For Tables 1 and 2 substitute—

“Table 1

Seasonal space heating energy efficiency classes of heaters other than low-temperature only heat pumps and heat pump space heaters in low-temperature application

Seasonal space heating energy class	Seasonal space heating energy efficiency η_s in %
A	$\eta_s \geq 260$
B	$200 \leq \eta_s < 260$
C	$175 \leq \eta_s < 200$
D	$125 \leq \eta_s < 175$
E	$100 \leq \eta_s < 125$
F	$92 \leq \eta_s < 100$
G	$\eta_s < 92$

Table 2

Seasonal space heating energy efficiency classes of low-temperature only heat pumps and heat pump space heaters in low-temperature application

Seasonal space heating energy class	Seasonal space heating energy efficiency η_s in %
A	$\eta_s \geq 325$
B	$250 \leq \eta_s < 325$
C	$219 \leq \eta_s < 250$
D	$156 \leq \eta_s < 219$
E	$125 \leq \eta_s < 156$
F	$115 \leq \eta_s < 125$
G	$\eta_s < 115$ ”

Amendment of Annex 3 (the labels)

28. Annex 3 is amended in accordance with Schedule 1.

Amendment of Annex 4 (product fiche)

29.—(1) Annex 4 is amended as follows.

(2) In point 2 (combination heaters), after point 2.1(n) insert—

“in addition, for FB combination heaters—

“(o) the qualifying communication protocol(s) enabled on the heater.”.

(3) In point 3 (temperature controls), after point 3.1(d) insert—

“(e) if the temperature control is an FBCH temperature control, the qualifying communication protocol(s) enabled on the temperature control.”.

Amendment of Annex 5 (technical documentation)

30.—(1) Annex 5 is amended as follows.

(2) In point 1(f) (space heaters)—

(a) in the second indent, after “heaters” insert “other than those contained in hybrid heat pump space heaters”;

(b) after that indent insert—

“— for hybrid heat pump space heaters, the technical parameters set out in Table 8A, measured and calculated in accordance with Annex 7;”;

(c) in the final indent, after “heaters” insert “and hybrid heat pump space heaters”.

(3) In point 2 (combination heaters)—

(a) in point (f)—

(i) in the second indent, after “heaters” insert “other than those comprised in hybrid heat pump combination heaters”;

(ii) after that indent insert—

“— for hybrid heat pump combination heaters, the technical parameters set out in Table 8A, measured and calculated in accordance with Annex 7;”;

(iii) in the final indent, after “heaters” insert “and hybrid heat pump combination heaters”;

(b) after point (g) insert—

“(h) if the combination heater is an FB combination boiler, the qualifying communication protocol(s) enabled on the heater, and how to set up the heater so that it can use that protocol or one of those protocols”.

(4) In point 3 (temperature controls), after point (g) insert—

“(h) if the temperature control is an FBCH temperature control, the qualifying communication protocol(s) enabled on the temperature control and how to set up the temperature control so that it can use that protocol or one of those protocols.”.

(5) In Table 8 for the row beginning “Parameters shall be declared” substitute—

“Parameters are to be declared for medium-temperature application, except for low-temperature only heat pumps. For low-temperature only heat pumps, parameters are to be declared for low-temperature application.”.
--

(6) After Table 8 insert—

“Table 8A

Information requirements for hybrid heat pumps

Model(s): [information identifying the model(s) to which the information relates]							
Primary heat source: [heat pump/boiler]							
Testing standard used:							
Air-to-water heat pump: [yes/no]							
Brine-to-water heat pump: [yes/no]							
Low-temperature only heat pump: [yes/no]							
Heat pump combination heater: [yes/no]							
B1 boiler: [yes/no]							
Boiler combination heater: [yes/no]							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output of heat pump at temperature $T_{hp,on}$	P_{hp}	x	kW	Seasonal space heating energy efficiency	η_s	x	%
Rated heat output of boiler at temperature $T_{fb,off}$	P_{fb}	x	kW				
Declared capacity for heating of the hybrid heat pump at indoor temperature of 20°C and outdoor temperature T_j				Declared coefficient of performance or primary energy ratio of the hybrid heat pump at indoor temperature of 20°C and outdoor temperature of T_j			
$T_j = -7^\circ\text{C}$	P_{dh}	x.x	kW	$T_j = -7^\circ\text{C}$	COP_d or PER_d	x.xx or x.x	— or %
$T_j = +2^\circ\text{C}$	P_{dh}	x.x	kW	$T_j = +2^\circ\text{C}$	COP_d or PER_d	x.xx or x.x	— or %
$T_j = +7^\circ\text{C}$	P_{dh}	x.x	kW	$T_j = +7^\circ\text{C}$	COP_d or PER_d	x.xx or x.x	— or %
$T_j = +12^\circ\text{C}$	P_{dh}	x.x	kW	$T_j = +12^\circ\text{C}$	COP_d or PER_d	x.xx or x.x	— or %
Switch temperature boiler off	$T_{fb,off}$	x	°C	Cycling interval efficiency	COP_{cyc} or PER_{cyc}	x.xx or x.x	— or %

Switch temperature heat pump on	$T_{hp,on}$	x	°C		Heating water operation limit temperature	$WTOL$	x	°C	
Cycling interval capacity for heating	P_{cyc}	x.x	kW						
Degradation coefficient ^(a)	Cdh	x.x	—						
Power consumption of the heat pump space heater or heat pump combination heater in modes other than active mode									
Off mode	P_{OFF}	x.xxx	kW						
Thermostat-off mode	P_{TO}	x.xxx	kW						
Standby mode	P_{SB}	x.xxx	kW						
Crankcase heater mode	P_{CK}	x.xxx	kW						
Other items									
Capacity control	[fixed/variable]				For air-to-water heat pumps, rated air flow rate, outdoors	—	x	m ³ /h	
Sound power level, indoors	L_{WA}	x	dB		For water-/brine-to water heat pumps, flow rate, outdoor heat exchanger	—	x	m ³ /h	
Sounds power level, outdoors	L_{WA}	x	dB						
Emissions of nitrogen oxides	NOx	x	mg/kWh						
For a boiler combination heater (if applicable)									
Declared load profile	x				Water heating energy efficiency	η_{wh}	x	%	
Daily electricity consumption	Q_{elec}	x.xxx	kWh		Daily fuel consumption	Q_{fuel}	x.xxx	kWh	
Contact details	Name and address of the manufacturer(s) or their authorised representative".								

Amendment of Annex 6 (information to be provided in cases where end-users cannot be expected to see the product displayed except on the internet)

31. For Annex 6 substitute the Annex set out in Schedule 2.

Amendment of Annex 7 (measurements and calculations)

32. Annex 7 is amended as follows. [TO BE ALIGNED WITH THE AMENDMENTS BEING MADE TO ANNEX 3 OF THE ECODESIGN REGULATION].

Amendment of Annex 8 (product compliance verification by market surveillance authorities)

33. In Annex 8, for Table 16 substitute—

“Table 16

Verification tolerances

Parameters	Verification tolerances
Seasonal space-heating energy efficiency η_s of boiler space heaters and boiler combination heaters	The determined value must not be more than 4% lower than the declared value
Seasonal space-heating energy efficiency η_s of cogeneration space heaters, heat pump space heaters, heat pump combination heaters and hybrid heat pumps	The determined value must not be more than 8% lower than the declared value
Water heating energy efficiency η_{wh}	The determined value must not be more than 8% lower than the declared value
Class of temperature control	The class of temperature control must correspond to declared class of unit
Collector efficiency η_{col}	The determined value must not be more than 5% lower than the declared value
Standing loss S	The determined value must not exceed the declared value by more than 5%
Auxiliary energy consumption Q_{aux}	The determined value must not exceed the declared value by more than 5%”.

Amendment of Annex 9 (information to be provided in the case of sale, hire or hire-purchase through the internet)

34. For Annex 9 substitute the Annex set out in Schedule 3.

PART 5
Consequential provisions

Amendment of the Principal Ecodesign Regulations

- 35.—(1) The Principal Ecodesign Regulations are amended as follows.
(2) After regulation 20B, insert—

“Expiry of regulation 20B in relation to heaters

20BA—(1) Regulation 20B ceases to have effect as follows—

- (a) in relation to temperature controls, electric boiler space heaters, electric boiler combination heaters, gas boiler combination heaters (other than type B1 combination boilers) and hybrid heat pumps, at the end of the day before [date y];
- (b) in relation to heat pump space heaters and heat pump combination heaters, at the end of the day before [date y + 12 months];
- (c) in relation to oil boiler combination heaters, at the end of the day before [day y + 24 months]

(2) For the purposes of this regulation—

“Space Heaters Regulation” means Commission Regulation (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters;

“electric boiler combination heater” has the meaning given for the purposes of the Space Heaters Regulation (see Article 2(15) of that Regulation);

“electric boiler space heater” has the meaning given for the purposes of the Space Heaters Regulation (see Article 2(14) of that Regulation);

“gas boiler combination heater” has the meaning given for the purposes of the Space Heaters Regulation (see Article 2(15D) of that Regulation);

“heat pump combination heater” has the meaning given for the purposes of the Space Heaters Regulation (see Article 2(18) of that Regulation);

“heat pump space heater” has the meaning given for the purposes of the Space Heaters Regulation (see Article 2(17) of that Regulation);

“hybrid heat pump” has the meaning given for the purposes of the Space Heaters Regulation (see Article 2(18I) of that Regulation);

“oil boiler combination heater” has the meaning given for the purposes of the Space Heaters Regulation (see Article 2(15E) of that Regulation);

“temperature control” has the meaning given for the purposes of the Ecodesign for Energy-Related Products and Energy Information (Space Heaters and Temperature Controls) Regulations 20** (see regulation 5(1) of that Regulation);

“type B1 combination boiler” has the meaning given for the purposes of the Space Heaters Regulation (see Article 15G of that Regulation).”.

(3) At the end of the table in paragraph 4 of Schedule 1 insert—

“33	A temperature control for a heater	The Ecodesign for Energy-Related Products and Energy Information (Space Heaters and Temperature Controls) Regulations 20**”.
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draft

Name
Parliamentary Under Secretary of State
Department for Energy Security and Net Zero

SCHEDULES

SCHEDULE 1

Regulation 28

Amendment of Annex 3 to the Labelling Regulation

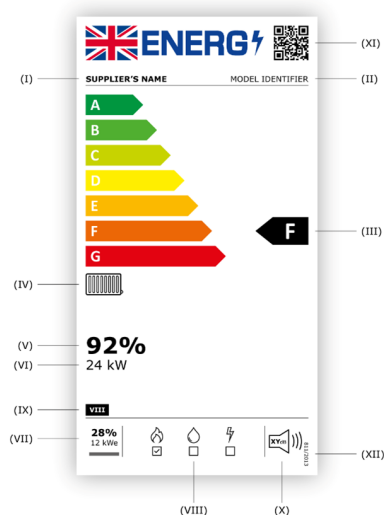
Amendment of point 1 (labels for space heaters)

1. For point 1 substitute—

“1. **Content of labels for space heaters**

1.1. Boiler space heaters other than those in hybrid heat pumps

1.1.1. The content of the label for boiler space heaters is as follows



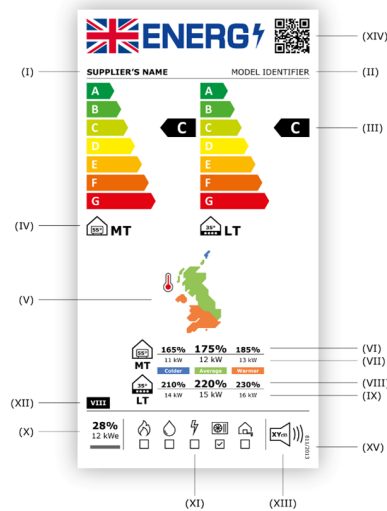
1.1.2 The following information must be included in the label at the points specified in the diagram above—

- point I: supplier's name or trade mark;
- point II: supplier's model identifier;
- point III: the seasonal space heating energy efficiency class, determined in accordance with point 1 of Annex 2;
- point IV: the space heating function;
- point V: the seasonal space heating energy efficiency expressed as a percentage, rounded to the nearest integer;
- point VI: the rated heat output, rounded to the nearest integer;
- point VII: where the device is a cogeneration space heater, the electrical efficiency, rounded to the nearest integer, and the electric power output, expressed in kW;

- (h) point VIII: symbols for gaseous fuel, liquid fuel and electric resistance, and tick boxes to indicate the process(es) used to generate heat;
- (i) point IX: where the space heater is placed on the market in a package with a temperature control, the class of the control;
- (j) point X: the sound power level indoors, rounded to the nearest integer;
- (k) point XI: the QR code;
- (l) point XII: the number of this Regulation.

1.2 Heat pump space heaters and hybrid heat pump space heaters

1.2.1. The content of the label for heat pump space heaters and hybrid heat pump space heaters is as follows.



1.2.2 The following information must be included in the label at the points specified in the diagram above—

- (a) point I: supplier's name or trade mark;
- (b) point II: supplier's model identifier;
- (c) point III: the seasonal space heating energy efficiency class under average climate conditions, determined in accordance with point 1 of Annex 2—
 - (i) for hybrid heat pump space heaters, at medium-temperature application;
 - (ii) for heat pump space heaters (other than low-temperature only heat pumps), at low and medium-temperature applications;
 - (iii) for low-temperature only heat pumps, at low-temperature application;
- (d) point IV: the space heating function—
 - (i) for hybrid heat pump space heaters, at medium-temperature application;
 - (ii) for heat pump space heaters (other than low-temperature only heat pumps), at low and medium-temperature applications;
 - (iii) for low-temperature only heat pumps, at low-temperature application;

- (e) point V: United Kingdom temperature map displaying three indicative temperature zones;
- (f) point VI: for heat pump space heaters (other than low-temperature only heat pumps) and hybrid heat pumps, the seasonal space heating energy efficiency at medium-temperature application for each of the temperature zones, determined in accordance with Annex 7, expressed as a percentage and rounded to the nearest integer;
- (g) point VII: for heat pump space heaters (other than low-temperature only heat pumps) only, the rated heat output (rounded to the nearest integer) at medium-temperature application for each of the temperature zones;
- (h) point VIII: for heat pump space heaters only, the seasonal space heating energy efficiency at low-temperature application for each of the temperature zones, determined in accordance with Annex 7, expressed as a percentage and rounded to the nearest integer;
- (i) point IX: for heat pump space heaters only, the rated heat output (rounded to the nearest integer) at low-temperature application for each of the temperature zones;
- (j) point X: where the device is a cogeneration space heater, the electrical efficiency, rounded to the nearest integer, and the electric power output, expressed in kW;
- (k) point XI: symbols for gaseous fuel, liquid fuel, electric resistance, air source and ground source and tick boxes to indicate the process(es) used to generate heat;
- (l) point XII: where the heater is placed on the market in a package with a temperature control, the class of the control;
- (m) point XIII: the sound power level indoors, rounded to the nearest integer;
- (n) point XIV: the QR code;
- (o) point XV: the number of this Regulation.”.

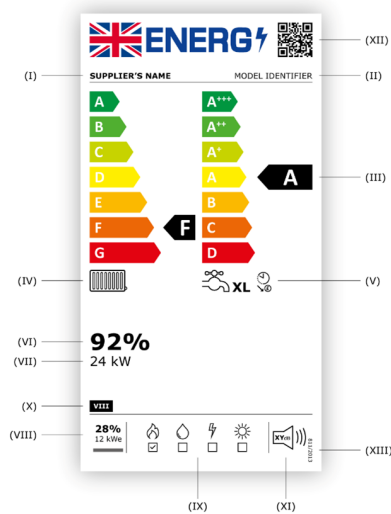
Amendment of point 2 (labels for combination heaters)

2. For point 2 substitute—

“2. **Content of labels for combination heaters**

2.1 Boiler combination heaters

2.1.1. The content of the label for boiler combination heaters is as follows.

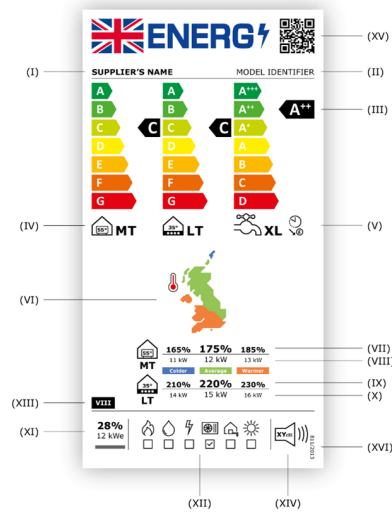


2.1.2 The following information must be included in the label at the points specified in the diagram above—

- (a) point I: supplier's name or trade mark;
- (b) point II: supplier's model identifier;
- (c) point III: the seasonal space heating energy efficiency class and the water heating energy efficiency class, determined in accordance with points 1 and 2 of Annex 2;
- (d) point IV: the space heating functions and the water heating function, including the declared load profile expressed as the appropriate letter in accordance with Table 15 of Annex 7;
- (e) point V: for boiler combination heaters able to work only during off-peak hours, the pictogram referred to in point 2A(8)(g) may be added;
- (f) point VI: the seasonal space heating energy efficiency value, expressed as a percentage and rounded to the nearest integer;
- (g) point VII: the rated heat output, rounded to the nearest integer;
- (h) point VIII: where the device is a cogeneration space heater, the electrical efficiency, rounded to the nearest integer, and the electric power output, expressed in kW;
- (i) point IX: symbols for gaseous fuel, liquid fuel, electric resistance and solar collector, and tick boxes to indicate the process(es) used to generate heat or solar collection (or both);
- (j) point X: where the boiler combination heater is placed on the market in a package with a temperature control, the class of the control;
- (k) point XI: the sound power level indoors, rounded to the nearest integer;
- (l) point XII: the QR code;
- (m) point XIII: the number of this Regulation.

2.2 Heat pump combination heaters and hybrid heat pump combination heaters

2.2.1. The content of the label for heat pump combination heaters and hybrid heat pump combination heaters is as follows.



2.2.2. The following information must be included in the label at the points specified in the diagram above—

- (a) point I: supplier's name or trade mark;
- (b) point II: supplier's model identifier;
- (c) point III—
 - (i) the seasonal space heating energy efficiency class under average climate conditions, determined in accordance with points 1 and 2 of Annex 2—
 - (aa) for hybrid heat pump combination heaters, at medium-temperature application;
 - (bb) for heat pump combination heaters (other than low-temperature only heat pumps), at low and medium-temperature applications;
 - (cc) for heat pump combination heaters which are low-temperature only heat pumps, at low-temperature application, and
 - (ii) the water heating energy efficiency class determined in accordance with point 2 of that Annex;
- (d) point IV—
 - (i) the space heating function—
 - (aa) for hybrid heat pump combination heaters, at medium-temperature application;
 - (bb) for heat pump combination heaters (other than low-temperature only heat pumps), at low and medium-temperature applications;
 - (cc) for heat pump combination heaters which are low-temperature only heat pumps, at low-temperature application, and
 - (iii) the water heating function, including the declared load profile expressed as the appropriate letter in accordance with Table 15 of Annex 7;

- (e) point V: for heat pump combination heaters able to work only during off-peak hours, the pictogram referred to in point 2A(8)(g) may be added;
- (f) point VI: United Kingdom temperature map displaying three indicative temperature zones;
- (g) point VII: for heat pump combination heaters (other than low-temperature only heat pumps) only, the seasonal space heating energy efficiency at medium-temperature application for each of the temperature zones, determined in accordance with Annex 7, expressed as a percentage and rounded to the nearest integer;
- (h) point VIII: for heat pump combination heaters (other than low-temperature only heat pumps) only, the rated heat output (rounded to the nearest integer) at medium-temperature application for each of the temperature zones;
- (i) point IX: for heat pump combination heaters only, the seasonal space heating energy efficiency at low-temperature application for each of the temperature zones, determined in accordance with Annex 7, expressed as a percentage and rounded to the nearest integer;
- (j) point X: for heat pump combination heaters only, the rated heat output (rounded to the nearest integer) at low-temperature application for each of the temperature zones;
- (k) point XI: where the device is a cogeneration space heater, the electrical efficiency, rounded to the nearest integer, and the electric power output, expressed in kW;
- (l) point XII: symbols for gaseous fuel, liquid fuel, electric resistance, solar collector, air source and ground source and tick boxes to indicate the process(es) used to generate heat;
- (m) point XIII: where the combination heater is placed on the market in a package with a temperature control, the class of the control;
- (n) point XIV: the sound power level indoors, rounded to the nearest integer;
- (o) point XV: the QR code;
- (p) point XVI: the number of this Regulation.”.

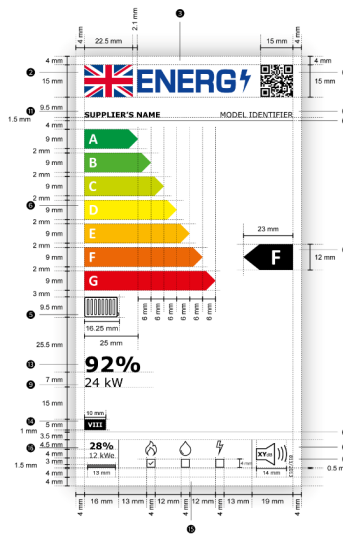
Insertion of new point 2A

3. After point 2 (as substituted by paragraph 2 above) insert—

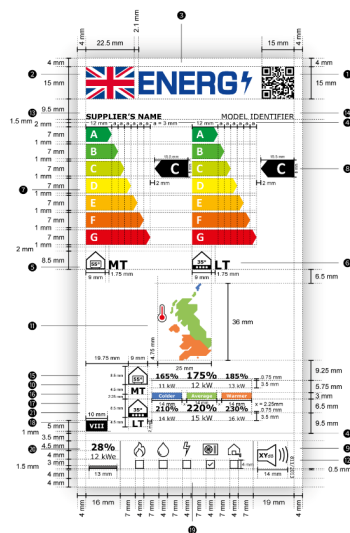
“2A. **Design of labels for heaters**

2A.1. The label designs are as follows—

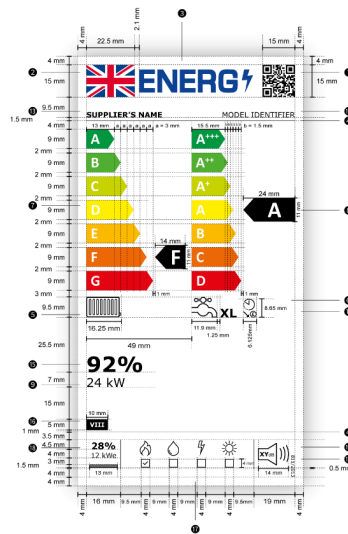
- (a) for boiler space heaters—



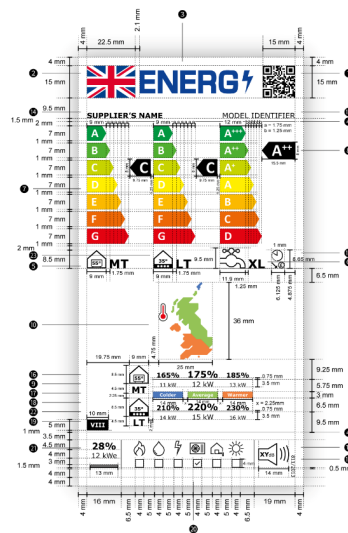
(b) for heat pump space heaters and SH hybrid heat pumps—



(c) for boiler combination heaters—



(d) for heat pump combination heaters and CH hybrid heat pumps—



2A2. A label must meet all of the following general requirements—

- (a) the label must be a minimum size of 105 mm wide and 200 mm high, and if it is printed larger than the minimum, its content must remain proportionate to the following specifications;
- (b) the background of the label must be 100% white;
- (c) the typefaces used must be Verdana and Calibri, using formatting specified in point 2A.5 and the relevant design point;
- (d) the dimensions and specifications of the elements constituting the label must be as indicated in the label designs in point 2A.1;
- (e) the colours used must be cyan, magenta, yellow and black (CMYK), in the proportions specified in point 2A.4 and the relevant design point.

2A.3. A label must also meet—

- (a) all of the requirements for areas 1 to 4 specified in point 2A.5, and
- (b) all of the requirements for the remaining areas of the label specified—
 - (i) for boiler space heaters, in point 2A.6;
 - (ii) for heat pump space heaters and hybrid heat pump space heaters, 2A.7;
 - (iii) for boiler combination heaters, in point 2A.8;
 - (iv) for heat pump combination heaters and hybrid heat pump combination heaters, in point 2A.9.

2A.4. In points 2A.5 to 2A.10, colour proportions are expressed in CMYK percentages, for example—

0,70,100,0 = 0% cyan, 70% magenta, 0% yellow, 0% black.

2A.5. The requirements mentioned in point 2A.(3)(a) for areas 1 to 4 of each label are as follows—

- (a) area 1: the QR code must be 100% black;
- (b) area 2: the colours of the United Kingdom flag must be as follows—
 - (i) the blue background: 100,72,0,18;
 - (ii) the red crosses: 0,100,81,4;
 - (iii) the remaining part: 100% white;
- (c) area 3: the colour of the energy logo must be 100,80,0,0;
- (d) area 4: the internal dividers must have a line weight of 0.5 pt and be 100% black.

2A.6. 1 The requirements mentioned in point 2A(3)(b)(i) for areas 5 to 16 of the boiler space heater label are as follows—

- (a) area 5: the space heating function pictogram must be as shown in the label design and 100% black;
- (b) area 6: the boiler seasonal space heating energy efficiency scale requirements;
- (c) area 7: the boiler seasonal space heating efficiency class requirements;
- (d) area 8: the sound power level indoors requirements;
- (e) area 9: the rated heat output must be in Verdana Regular 16pt and 100% black;
- (f) area 10: the number of this Regulation must be in Verdana Regular 6pt and 100% black;
- (g) area 11: the supplier's name or trademark must be in Verdana Bold 9.75pt and 100% black;
- (h) area 12: the supplier's model identifier must be in Verdana Regular 9.75pt and 100% black;
- (i) area 13: the seasonal space heating energy efficiency must be in Verdana Bold 28pt and 100% black;
- (j) area 14: the control class requirements (if applicable);

- (k) area 15: process of generating heat—
 - (i) the gaseous fuel, liquid fuel and electric resistance pictograms must be shown as in the label design and 100% black,
 - (ii) the outline of the tick boxes must have a line weight of 0.5pt and be 100% black, and
 - (iii) each tick in the tick boxes must have a line weight of 1pt and be 100% black;
 - (l) area 16: the electricity production requirements (if applicable);
- 2A.7. The requirements mentioned in point 2A(3)(b)(ii) for areas 5 to 21 of the label for heat pump space heaters and hybrid heat pump space heaters are as follows—
- (a) area 5: the space heating function at medium-temperature application pictogram must, if applicable, be as shown in the label design and 100% black;
 - (b) area 6: the space heating function at low-temperature application pictogram must, if applicable, be as shown in the label design and 100% black;
 - (c) area 7: the HP seasonal space heating energy efficiency scale requirements at (as the case may be)—
 - (i) low-temperature application only,
 - (ii) medium-temperature application only, or
 - (iii) low and medium-temperature applications;
 - (d) area 8: the HP seasonal space heating energy efficiency class requirements;
 - (e) area 9: the sound power level indoors requirements;
 - (f) area 10: the rated heat output at medium-temperature application (if applicable) must be 100% black and—
 - (i) for colder temperature, in Verdana Regular 7pt;
 - (ii) for average temperature, in Verdana Regular 9pt;
 - (iii) for warmer temperature, in Verdana Regular 7pt;
 - (g) area 11: the UK temperature map requirements;
 - (h) area 12: the number of this Regulation must be in Verdana Regular 6pt and 100% black;
 - (i) area 13: the supplier's name or trademark must be in Verdana Bold 9.75pt and 100% black;
 - (j) area 14: the supplier's model identifier must be in Verdana Regular 9.75pt and 100% black;
 - (k) area 15: the values of the seasonal space heating energy efficiencies at medium-temperature application (if applicable) must be 100% black and—
 - (i) for colder temperature, in Verdana Bold 9pt;
 - (ii) for average temperature, in Verdana Bold 12pt;
 - (iii) for warmer temperature, in Verdana Bold 9pt;
 - (l) area 16: the colder, average and warmer temperature bars—
 - (i) the colours of the bars must be—

- colder: 75,50,0,0,
- average: 50,0,80,0, and
- warmer: 0,60,80,0, and
- (ii) the text must be—
 - in Verdana Bold 6pt,
 - 100% white, and
 - centred horizontally and vertically in the bars;
- (m) area 17: the values of the seasonal space heating energy efficiencies at low-temperature application (if applicable) must be 100% black and—
 - (i) for colder temperature, in Verdana Bold 9pt;
 - (ii) for average temperature, in Verdana Bold 12pt
 - (iii) for warmer temperature, in Verdana Bold 9pt,
- (n) area 18: the controls class requirements (if applicable);
- (o) area 19: process of generating heat—
 - (i) the gaseous fuel, liquid fuel, electric resistance, air and ground source pictograms must be shown as in the label design and 100% black,
 - (ii) the outline of the tick boxes must have a line weight of 0.5pt and be 100% black, and
 - (iii) each tick in the tick boxes must have a line weight of 1pt and be 100% black;
- (p) area 20: the electricity production requirements (if applicable);
- (q) area 21: the values of the rated heat output at low-temperature application (if applicable) must be 100% black and—
 - (i) for colder temperature, in Verdana Bold 7pt;
 - (ii) for average temperature, in Verdana Bold 9pt;
 - (iii) for warmer temperature, in Verdana Bold 7pt.

2A.8. The requirements mentioned in point 2A(3)(b)(iii) for areas 5 to 18 of the label for boiler combination heaters are as follows—

- (a) area 5: the space heating function pictogram must be as shown in the label design and 100% black;
- (b) area 6—
 - (i) the water heating function pictogram must be as shown in the label design and 100% black, and
 - (ii) the declared load profile must be—
 - in Verdana Bold 16pt and 100% black,
 - aligned with the bottom edge of the pictogram, and
 - positioned 1.25mm from the right edge of the pictogram;

- (c) area 7—
- (i) the boiler seasonal space heating energy efficiency scale requirements, and
 - (ii) the water heating energy efficiency scale—
 - (aa) the letters of the scale must be—
 - 100% white,
 - in Calibri Bold 20pt, and
 - positioned 2.5mm from the left side of the arrows and centred vertically within the arrows;
 - (bb) the “+” symbols in the class must be—
 - 100% white,
 - in Calibri Bold 12pt, and
 - aligned with the top of the letter “A”;
 - (cc) the colours of the scale must be as follows—
 - A⁺⁺⁺ class: 100,0,100,0;
 - A⁺⁺ class: 70,0,100,0;
 - A⁺ class: 30,0,100,0;
 - A class: 0,0,100,0;
 - B class: 0,30,100,0;
 - C class: 0,70,100,0;
 - D class: 0,100,100,0;
- (d) area 8—
- (i) the boiler seasonal space heating energy efficiency class requirements, and
 - (ii) the water heating energy efficiency class—
 - (aa) the letter of the water heating energy efficiency class must be—
 - 100% white,
 - in Calibri Bold 30pt, and
 - positioned in the centre of the rectangular part of the arrow;
 - (bb) the “+” symbol in the class (if applicable) must be—
 - 100% white,
 - in Calibri Bold 18pt, and
 - aligned with the top of the letter “A”;
 - (cc) the arrow must be—
 - 100% black, and
 - positioned so that its tip aligns with the tip of the corresponding arrow in the water heating energy efficiency scale in area 7;

- (e) area 9: the rated heat output must be in Verdana Regular 16pt and 100% black;
- (f) area 10: the sound power level indoors requirements;
- (g) area 11: the off-peak fitness pictogram as shown in the label design and 100% black (if applicable);
- (h) area 12: the number of this Regulation must be in Verdana Regular 6pt and 100% black;
- (i) area 13: the supplier's name or trademark must be in Verdana Regular Bold 9.75pt and 100% black;
- (j) area 14: the supplier's model identifier must be in Verdana Regular 9.75pt and 100% black;
- (k) area 15: the seasonal space heating energy efficiency must be in Verdana Bold 28pt and 100% black;
- (l) area 16: the control class requirements (if applicable);
- (m) area 17: process of generating heat and solar collection—
 - (i) the gaseous fuel, liquid fuel and electric resistance and solar collection pictograms must be shown as in the label design and 100% black,
 - (ii) the outline of the tick boxes must have a line weight of 0.5pt and be 100% black, and
 - (iii) each tick in the tick boxes must have a line weight of 1pt and be 100% black;
- (n) area 18: the electricity production requirements (if applicable).

2A9. The requirements mentioned in point 2A(3)(b)(iv) for areas 5 to 23 of the labels for heat pump combination heaters and hybrid heat pump combination heaters are as follows—

- (a) area 5: space heating function at medium-temperature application must, if applicable, be as shown in the label design and 100% black;
- (b) area 6—
 - (i) the water heating function pictogram must be as shown in the label design and 100% black, and
 - (ii) the declared load profile must be—
 - in Verdana Bold 16pt and 100% black,
 - aligned with the bottom edge of the pictogram, and
 - positioned 1.25mm from the right edge of the pictogram;
- (c) area 7—
 - (i) the HP seasonal space heating energy efficiency scale requirements at (as the case may be)—
 - (aa) low-temperature application only,
 - (bb) medium-temperature application, or
 - (cc) low and medium-temperature applications;

- (ii) the water heating energy efficiency scale—
 - (aa) the letters of the scale must be—
 - 100% white,
 - in Calibri Bold 16pt, and
 - positioned 2mm from the left side of the arrows and centred vertically within the arrows,
 - (bb) the “+” symbols in the scale must be—
 - 100% white,
 - in Calibri Bold 9.5pt, and
 - aligned with the top of the letter “A”, and
 - (cc) the colours of the scale must be follows—
 - A⁺⁺⁺ class: 100,0,100,0;
 - A⁺⁺ class: 70,0,100,0;
 - A⁺ class: 30,0,100,0;
 - A class: 0,0,100,0;
 - B class: 0,30,100,0;
 - C class: 0,70,100,0;
 - D class: 0,100,100,0;
- (d) area 8—
 - (i) the HP seasonal space heating energy efficiency class requirements, and
 - (ii) the water heating energy efficiency class—
 - (aa) the letter must be—
 - 100% white,
 - in Calibri Bold 22pt, and
 - positioned in the centre of the rectangular part of the arrow;
 - (bb) the “+” symbols (if applicable) must be—
 - 100% white,
 - in Calibri Bold 13.2pt, and
 - aligned with the top of the letter “A”, and
 - (cc) the arrow must be—
 - 100% black, and
 - positioned so that its tip aligns with the tip of the corresponding arrow in water heating energy efficiency scale in area 7;
- (e) area 9: the values of the rated heat output at medium-temperature application (if applicable) must be 100% black and—
 - (i) for colder temperature, in Verdana Regular 7pt;

- (ii) for average temperature, in Verdana Regular 9pt;
 - (iii) for warmer temperature, in Verdana Regular 7pt;
- (f) area 10: the UK temperature map requirements;
- (g) area 11: the sound power level indoors requirements;
- (h) area 12: the off-peak fitness pictogram must, if applicable, be as shown in the label design and 100% black;
- (i) area 13: the number of this Regulation must be in Verdana Regular 6pt and 100% black;
- (j) area 14: the supplier's name or trademark must be in Verdana Bold 9.75pt and 100% black;
- (k) area 15: the supplier's model identifier must be in Verdana Regular 9.75pt and 100% black;
- (l) area 16: the values of the seasonal space heating energy efficiencies at medium-temperature application (if applicable) must be 100% black and—
 - (i) for colder temperature, in Verdana Bold 9pt;
 - (ii) for average temperature, in Verdana Bold 12pt;
 - (iii) for warmer temperature, in Verdana Bold 9pt,
- (m) area 17: colder, warmer and average temperature bars—
 - (i) the colours of the bars must be as follows—
 - colder: 75,50,0,0;
 - average: 50,0,80,0;
 - warmer: 0,60,80,0, and
 - (ii) the text must be in Verdana Bold 6pt and centred horizontally and vertically in the bars;
- (n) area 18: the values of the seasonal space heating energy efficiencies at low-temperature application (if applicable) must be 100% black and—
 - (i) for colder temperature, in Verdana Bold 9pt;
 - (ii) for average temperature, in Verdana Bold 12pt;
 - (iii) for warmer temperature, in Verdana Bold 9pt;
- (o) area 19: the controls class requirements (if applicable);
- (p) area 20: process of generating heat and solar collection—
 - (i) the gaseous fuel, liquid fuel and electric resistance and solar collector pictograms must be as shown as in the label design and 100% black,
 - (ii) the outline of the tick boxes must have a line weight of 0.5pt and be 100% black, and
 - (iii) each tick in the tick boxes must have a line weight of 1pt and be 100% black;
- (q) area 21: the electricity production requirements (if applicable);

- (r) area 22: the values of the rated heat output at low-temperature application (if applicable) must be 100% black and—
 - (i) for colder temperature, in Verdana Bold 7pt;
 - (ii) for average temperature, in Verdana Bold 9pt;
 - (iii) for warmer temperature, in Verdana Bold 7pt;
- (s) area 23: the space heating at low-temperature function pictogram must, if applicable, be as shown in the label design and 100% black.

2A10. In points 2A(2) to 2A(9)—

- (a) “area”, in relation to a label, means an area marked by a number in the label design for that label in point 2A(1);
- (b) “the boiler seasonal space heating energy efficiency class requirements” are that—
 - (i) the arrow must be—
 - (aa) 100% black, and
 - (bb) positioned so that its tip aligns with the tip of the corresponding arrow in the boiler space heating energy efficiency scale, and
 - (ii) the letter must be—
 - (aa) 100% white,
 - (bb) in Calibri Bold 30pt, and
 - (cc) positioned in the centre of the rectangular part of the arrow;
- (c) “the boiler seasonal space heating energy efficiency scale requirements” are that—
 - (i) the letters must be—
 - (aa) 100% white,
 - (bb) in Calibri Bold 20pt, and
 - (cc) positioned 2.5mm from the left side of the arrow and centred vertically within the arrow, and
 - (ii) the colours of the scale must be as follows—
 - (aa) A class: 100,0,100,0;
 - (bb) B class: 70,0,100,0;
 - (cc) C class: 30,0,100,0;
 - (dd) D class: 0,0,100,0;
 - (ee) E class: 0,30,100,0;
 - (ff) F class: 0,70,100,0;
 - (gg) G class: 0,100,100,0;
- (d) “the control class requirements” are that the control class must be—
 - (i) in Roman numerals,
 - (ii) in Verdana Bold 8pt, and

- (iii) 100% white against a 100% black background;
- (e) “the electricity production requirements” are that—
 - (i) the electrical efficiency must be in Verdana Bold 12pt and 100% black,
 - (ii) the electricity power output must be in Verdana Regular 9pt and 100% black,
 - (iii) the colour of the horizontal line must be 0,0,0,75, and
 - (iv) the vertical line divider must have a line weight of 0.5pt and be 100% black;
- (f) “the HP seasonal space heating energy efficiency class requirements” are that—
 - (i) the arrow must be—
 - (aa) 100% black, and
 - (bb) positioned so that its tip aligns with the tip of the corresponding arrow in the HP seasonal heating energy efficiency scale, and
 - (ii) the letter must be—
 - (aa) 100% white,
 - (bb) in Calibri Bold 22pt, and
 - (cc) positioned in the centre of the rectangular part of the arrow;
- (g) “the HP space heating energy efficiency scale requirements” are that—
 - (i) the letters must be—
 - (aa) 100% white,
 - (bb) in Calibri Bold 16pt, and
 - (cc) positioned 2mm from the left side of the arrow and centred vertically within the arrow, and
 - (ii) the colours of the scale must be as follows—
 - (aa) A class: 100,0,100,0
 - (bb) B class: 70,0,100,0
 - (cc) C class: 30,0,100,0
 - (dd) D class: 0,0,100,0
 - (ee) E class: 0,30,100,0
 - (ff) F class: 0,70,100,0;
 - (gg) G class: 0,100,100,0;
- (h) “pt”, in relation to a type face, means point;
- (i) “the sound power level indoors requirements” are that—
 - (i) the sound power level indoors pictogram must be as shown in the label design and 100% black,
 - (ii) the value must be in Verdana Bold 7.8pt and 100% black,
 - (iii) the text “dB” must be in Verdana Regular 5.85pt and 100% black, and

- (iv) the vertical line divider must have a line weight 0.5pt and be 100% black;
- (j) “the UK temperature map requirements” are that—
 - (i) the United Kingdom map and thermometer pictograms must be as shown in the label design,
 - (ii) the colours in the map must be as follows—
 - (aa) colder: 75,50,0,0;
 - (bb) average: 50,0,80,0;
 - (cc) warmer: 0,60,80,0, and
 - (iii) the colours in the thermometer must be—
 - (aa) red: 0,100,100,0, and
 - (bb) outline: 100% black.”.

Omission of points 3 and 4 (labels for packages of heater, temperature control and solar device)

4. Omit points 3 and 4.

Omission of points 5 to 12 (design of labels for space heaters, combination heaters and packages)

5. Omit points 5 to 12.

SCHEDULE 2

Regulation 31

Amendment of Annex 6 to the Labelling Regulation

1. The Annex to be substituted for Annex 6 to the Labelling Regulation is as follows—

“ANNEX 6

INFORMATION TO BE PROVIDED IN THE CASES WHERE END-USERS CANNOT BE EXPECTED TO SEE THE PRODUCT DISPLAYED, EXCEPT ON THE INTERNET

1. SPACE HEATERS

1.1. BOILER SPACE HEATERS

1.1.1 In—

- (a) visual advertisements for boiler space heaters for the purposes of Articles 3(1)(d) and 4(1)(b), and
- (b) technical promotional material or other promotional material for space heaters for the purposes of Articles 3(1)(e) and 4(1)(d),

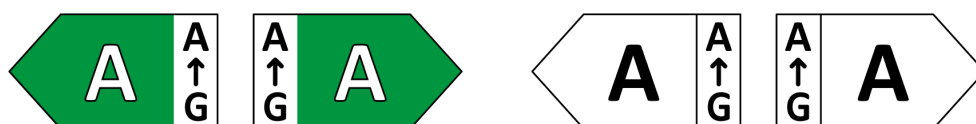
the seasonal space heating energy efficiency class and the range of the seasonal space heating energy efficiency classes available on the label must be as set out in point 1.1.2.

1.1.2. The seasonal space heating energy efficiency class of the boiler space heater and range of energy efficiency classes for boiler space heaters must be shown, as indicated in Figure 1, with—

- (a) the arrow containing the letter of the seasonal space heating energy efficiency class, in 100% white, in Calibri Bold and—
 - (i) if the price is shown, in a font size at least equivalent to that of the price, and
 - (ii) otherwise, in a font size that is clear and legible,
- (b) subject to point 1.1.3, the colour of the arrow must match the colour of the seasonal space heating energy efficiency class as specified in Annex 3 (see point 2A(10)(c) of that Annex);
- (c) the range of available energy efficiency classes shown in 100% black,
- (d) the size such that the arrow is clearly visible and legible, and
- (e) the letter of the seasonal heating energy efficiency class arrow positioned in the centre of the rectangular part of the arrow, with a border of 0.5pt in 100% black around the arrow and the letter of the seasonal space heating energy efficiency class.

1.1.3. If the visual advertisement, technical promotional material or other promotional material or paper-based distance selling is printed in monochrome, the arrow may be monochrome with the letter of the seasonal space heating energy efficiency class in 100% black.

Figure 1



1.1.4 Where a product is sold through telemarketing based distance selling, the manufacturer, importer or authorised representative must ensure that the customer is specifically informed of the seasonal space heating energy efficiency class of the product and the range of seasonal space heating energy efficiency classes available on the label, and that the customer can access the full label and the product information sheet by requesting a printed copy or accessing a website where it is available free of charge.

1.1.5. For all of the situations referred to in points 1.1.1 and 1.1.4, it must be possible for the customer to obtain a printed copy of the label and the product information sheet on request.

1.2. HEAT PUMP SPACE HEATERS AND HYBRID HEAT PUMP SPACE HEATERS

1.2.1. In—

- (a) visual advertisements for heat pump space heaters and hybrid heat pump space heaters for the purposes of Articles 3(1)(d) and 4(1)(b), and

- (b) technical promotional material or other promotional material for space heaters for the purposes of Articles 3(1)(d) and 4(1)(e),

the seasonal space heating energy efficiency class and the range of the seasonal space heating energy efficiency classes available on the label must be as set out in point 1.2.2 or point 1.2.4.

1.2.2. For relevant heaters, the seasonal space heating energy efficiency class of the heater and the range of energy efficiency classes for heat pump space heaters and hybrid heat pump space heaters must be shown, as indicated in Figure 1, with—

- (a) an arrow containing the letter of the seasonal space heating energy efficiency class, in 100% white, in Calibri Bold and—
 - (i) if the price is shown, in a font size at least equivalent to that of the price, and
 - (ii) otherwise in, a font size that is clear and legible,
- (b) subject to point 1.2.5, the colour of the arrow must match the colour of the seasonal space heating energy efficiency class as specified in Annex 3 (see point 2A(10)(g) of that Annex),
- (c) the range of available energy efficiency classes shown in 100% black,
- (d) the size such that the arrow is clearly visible and legible, and
- (e) the letter of the seasonal heating energy efficiency class arrow positioned in the centre of the rectangular part of the arrow, with a border of 0.5pt in 100% black around the arrow and the letter of the seasonal space heating energy efficiency class.

1.2.3. In point 1.2.2 “relevant heater” means—

- (a) a hybrid heat pump space heater,
- (b) a heat pump space heater that has the same seasonal space heating energy efficiency class at both low and medium-temperature application, or
- (c) a heat pump space heater that is a low-temperature only heat pump.

1.2.4 For heat pump space heaters that have different seasonal space heating energy efficiency classes at low and medium-temperature application, the seasonal space heating energy efficiency class of the heater at both of those applications and the range of energy efficiency classes for heat pump space heaters must be shown, as indicated in Figures 2 and 3, with—

- (a) arrows containing—
 - (i) the letter of the seasonal space heating energy efficiency class in 100% white, in Calibri Bold and—
 - (aa) if the price is shown, in a font size at least equivalent to that of the price, and
 - (bb) otherwise, in a font size that is clear and legible, and
 - (iii) the space heating pictogram and temperature, as shown in Figures 2 and 3 and in 100% black,

- (b) subject to point 1.2.5, the colour of the arrows must match the colour of the seasonal space heating energy efficiency class as specified in Annex 3 (see point 2A(10)(g) of that Annex),
- (c) the range of available energy efficiency classes shown in 100% black,
- (d) the size such that the arrows are clearly visible and legible, and
- (e) the letters of the seasonal heating energy efficiency class positioned in the centre of the rectangular part of the arrows, with a border of 0.5pt in 100% black around each arrow and the letter of each seasonal space heating energy efficiency class.

1.2.5 If the visual advertisement, technical promotional material or other promotional material or paper-based distance selling is printed in monochrome, the arrow may be monochrome with the letters of the seasonal space heating energy efficiency class(es) in 100% black.

Figure 2

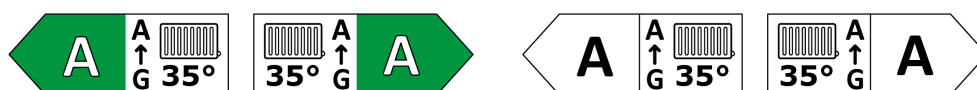
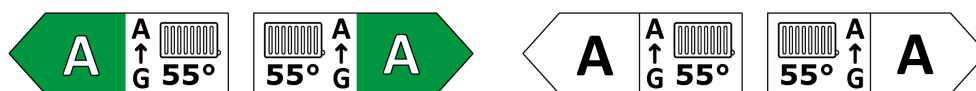


Figure 3



- 1.2.6 Where a product is sold through telemarketing based distance selling, the manufacturer, importer or authorised representative must ensure that the customer is specifically informed of the seasonal space heating energy efficiency class of the product and the range of seasonal space heating energy efficiency classes available on the label, and that the customer can access the full label and the product information sheet by requesting a printed copy or accessing a website where it is available free of charge.
- 1.2.7 For all of the situations referred to in points 1.2.1 and 1.2.6, it must be possible for the customer to obtain a printed copy of the label and the product information sheet on request.

2. COMBINATION HEATERS

2.1. Boiler combination heaters

2.1.1. In—

- (a) visual advertisements for boiler combination heaters for the purposes of Articles 3(2B)(d) and 4(2)(b), and
- (b) technical promotional material or other promotional material for space heaters for the purposes of Articles 3(2B)(e) and 4(2)(d),

the seasonal space heating energy efficiency class and the range of the seasonal space heating energy efficiency classes available on the label must be as set out in point 2.1.2, and the water heating energy efficiency class and the range of the water heating energy classes available on the label must be as set out in point 2.1.3.

2.1.2. The seasonal space heating energy efficiency class of the boiler combination heater and range of seasonal energy efficiency classes for boiler space heaters must be shown, as indicated in Figure 4, with—

- (a) the arrow containing—
 - (i) the letter of the seasonal space heating energy efficiency class in 100% white, in Calibri Bold and—
 - (aa) if the price is shown, in a font size at least equivalent to that of the price, and
 - (bb) otherwise, in a font size that is clear and legible,
 - (ii) the space heating pictogram as shown in the Figure and in 100% black,
- (b) subject to point 2.1.4, the colour of the arrow must match the colour of the seasonal space heating energy efficiency class as specified in Annex 3 (see point 2A(10)(c) of that Annex),
- (c) the range of available energy efficiency classes in 100% black,
- (d) the size such that the arrow is clearly visible and legible, and
- (e) the letter of the seasonal space heating energy efficiency class positioned in the centre of the rectangular part of the arrow, with a border of 0.5pt in 100% black around the arrow and the letter.

2.1.3. The water heating energy efficiency class of the boiler combination heater and range of energy efficiency classes for boiler space heaters must be shown, as indicated in Figure 5, with—

- (a) the arrow containing—
 - (i) the letter of the water heating energy efficiency class in 100% white Calibri Bold and—
 - (aa) if the price is shown, in a font size at least equivalent to that of the price, and
 - (bb) otherwise, in a font size that is clear and legible,
 - (ii) the water heating pictogram as shown in the Figure and in 100% black,
- (b) subject to point 2.1.4, the colour of the arrow must match the colour of the seasonal space heating energy efficiency class as specified in Annex 3 (see point 2A(8) of that Annex),
- (c) the range of available energy efficiency classes shown in 100% black,
- (d) the size such that the arrows are clearly visible and legible, and
- (e) the letter of the water heating energy efficiency class positioned in the centre of the rectangular part of the arrow, with a border of 0.5pt in 100% black around the arrow and the letter.

2.1.4. If the visual advertisement, technical promotional material or other promotional material or paper-based distance selling is printed in monochrome, the arrows may be monochrome with the letters of the seasonal space heating energy efficiency class and the water heating energy efficiency class in 100% black.

Figure 4

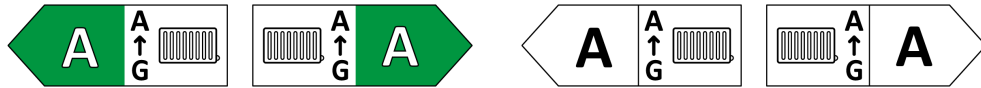
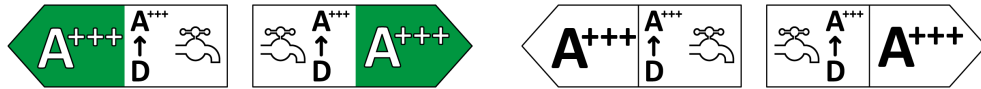


Figure 5



2.1.5 Where a product is sold through telemarketing based distance selling, the manufacturer, importer or authorised representative must ensure that the customer is specifically informed—

- (a) of the seasonal space heating energy efficiency class of the product and the range of seasonal space heating energy efficiency classes available on the label,
- (b) of the water heating energy efficiency class of the product and the range of water heating energy efficiency classes available on the label, and
- (c) that the customer can access the full label and the product information sheet by requesting a printed copy or accessing a website where it is available free of charge.

2.1.6 For all of the situations referred to in points 2.1.2 and 2.1.5, it must be possible for the customer to obtain a printed copy of the label and the product information sheet on request.

2.2. Heat pump combination heaters and hybrid heat pump combination heaters

2.2.1. In—

- (a) visual advertisements for heat pump combination heaters and hybrid heat pump combination heaters for the purposes of Articles 3(2B)(d) and 4(2)(b), and
- (b) technical promotional material or other promotional material for space heaters for the purposes of Articles 3(2B)(e) and 4(2)(d),

the seasonal space heating energy efficiency class of the heater and the range of the seasonal space heating energy efficiency classes available on the label must be as set out in point 2.2.2 or 2.2.4, and the water heating energy efficiency class and the range of the water heating energy classes available on the label must be as set out in point 2.2.5.

2.2.2. For relevant heaters, the seasonal space heating energy efficiency class of the heater and the range of energy efficiency classes for heat pump space heaters and hybrid heat pump space heaters must be shown, as indicated in Figure 4, with—

- (a) the arrow containing the letter of the seasonal space heating energy efficiency class, in 100% white, in Calibri Bold and—
 - (i) if the price is shown, in a font size at least equivalent to that of the price, and
 - (ii) otherwise, in a font size that is clear and legible,

- (b) subject to point 2.2.6, the colour of the arrow must match the colour of the seasonal space heating energy efficiency class as specified in Annex 3 (see point 2A(10)(g) of that Annex),
- (c) the range of available energy efficiency classes shown in 100% black,
- (d) the size such that the arrow is clearly visible and legible, and
- (e) the letter of the seasonal heating energy efficiency class positioned in the centre of the rectangular part of the arrow, with a border of 0.5pt in 100% black around the arrow and the letter.

2.2.3 In point 2.2.2, “relevant heater” means—

- (a) a hybrid heat pump combination heater,
- (b) a heat pump combination heater with the same seasonal space heating energy efficiency class at both low and medium-temperature application, or
- (c) a heat pump combination heater which is a low-temperature only heat pump.

2.2.4 For heat pump combination heaters that have different seasonal space heating energy efficiency classes at low-temperature and medium-temperature application, the seasonal space heating energy efficiency class of the heater at both of those applications and the range of energy efficiency classes for heat pump space heaters must be shown, as indicated in Figures 2 and 3, with—

- (a) the arrows containing—
 - (i) the letter of the seasonal space heating energy efficiency class in 100% white, in Calibri Bold and
 - (aa) if the price is shown, in a font size at least equivalent to that of the price, and
 - (bb) otherwise, in a font size that is clear and legible,
 - (ii) the space heating pictogram and temperature, as shown in Figures 2 and 3 and in 100% black,
- (b) subject to point 2.2.6, the colour of the arrows must match the colour of the seasonal space heating energy efficiency class as specified in Annex 3 (see point 2A(10)(g) of that Annex),
- (c) the range of available energy efficiency classes shown in 100% black,
- (d) the size such that the arrows are clearly visible and legible, and
- (e) the letters of the seasonal heating energy efficiency classes positioned in the centre of the rectangular part of the arrow, with a border of 0.5pt in 100% black around the arrows and the letters.

2.2.5 The water heating energy efficiency class of the heat pump combination heater or hybrid heat pump combination heater and range of water heating energy efficiency classes for combination heaters must be shown, as indicated in Figure 5, with—

- (a) the arrow containing—
 - (i) the letter of the water heating energy efficiency class in 100% white Calibri Bold and—
 - (aa) if the price is shown, in a font size at least equivalent to that of the price, and

- (bb) otherwise, in a font size that is clear and legible,
 - (b) subject to point 2.2.6, the colour of the arrow must match the colour of the water heating energy efficiency class as specified in Annex 3 (see point 2A(9) of that Annex),
 - (c) the range of available water heating energy efficiency classes shown in 100% black,
 - (d) the size such that the arrow is clearly visible and legible, and
 - (e) the letter of the water heating energy efficiency class positioned in the centre of the rectangular part of the arrow, with a border of 0.5pt in 100% black around the arrow and the letter.
- 2.2.6 If the visual advertisement, technical promotional material or other promotional material or paper-based distance selling is printed in monochrome, the arrow may be monochrome with the letter(s) of the seasonal space heating energy efficiency class(es) and water heating energy efficiency class in 100% black.
- 2.2.7. Where a product is sold through telemarketing based distance selling, the manufacturer, importer or authorised representative must ensure that the customer is specifically informed—
- (a) of the seasonal space heating energy efficiency class(es) of the product and the range of seasonal space heating energy efficiency classes available on the label,
 - (b) of the water heating energy efficiency class of the product and the range of water heating energy efficiency classes available on the label, and
 - (c) that the customer can access the full label and the product information sheet by requesting a printed copy or accessing a website where it is available free of charge.
- 2.2.8. For all of the situations referred to in points 2.2.2 and 2.2.7, it must be possible for the customer to obtain a printed copy of the label and the product information sheet on request.”.

SCHEDULE 3

Regulation 34

Amendment of Annex 9 to the Labelling Regulation

1. The Annex to be substituted for Annex 9 is as follows—

“ANNEX 9

INFORMATION TO BE PROVIDED IN THE CASE OF SALE, HIRE OR HIRE-PURCHASE THROUGH THE INTERNET

- “1. The requirements in this Annex apply to distance selling through the internet.
2. The appropriate label made available by suppliers in accordance with Article 3 must be shown on the display mechanism—
 - (a) if the price is shown, in proximity to the price of the product, and

- (b) in all other cases, in proximity to the product.
3. The size of the label must be such that the label is clearly visible and legible, and must be proportionate to the size specified in point 2A.2(a) of Annex 3.
 4. If the label is displayed using a nested display, the image used for accessing the label must comply with the specifications set out in point 5.
 5. If a nested display is used—
 - (a) the label must appear on the first mouse click, mouse roll-over or tactile screen expansion on the image;
 - (b) the image used for accessing the label in the case of a nested display as indicated in—
 - (i) Figure 1 for—
 - (aa) boiler space heaters;
 - (bb) hybrid heat pump space heaters;
 - (cc) heat pump space heaters with the same seasonal space heating energy efficiency class at low and medium-temperature applications;
 - (dd) heat pump space heaters that are low-temperature only heat pumps;
 - (ii) Figures 2 and 3 for heat pump space heaters with different energy efficiency classes at low and medium-temperature applications;
 - (iii) Figures 4 and 5 for—
 - (aa) boiler combination heaters;
 - (bb) hybrid heat pump combination heaters;
 - (cc) heat pump combination heaters with the same seasonal space heating energy efficiency class at low and medium-temperature applications;
 - (dd) heat pump combination heaters that are low-temperature only heat pumps;
 - (iv) Figures 2, 3 and 5 for heat pump combination heaters with different seasonal space heating energy efficiency classes at low and medium-temperature applications.
 6. In the case of a nested display, the sequence of display of the label must be as follows—
 - (a) the image referred to in point 4 must be shown on the display mechanism—
 - (i) if the price is shown, in proximity to the price of the product, and
 - (ii) in all other cases, in proximity to the product,
 - (b) the image must link to the label set out in Annex 3,
 - (c) the label must be displayed by pop-up, new tab, new page or inset screen display,
 - (d) for magnification of the label on tactile screens, the device conventions for tactile magnifications must apply,

- (e) the label must cease to be displayed by means of a close option or other standard closing mechanism,
 - (f) the alternative text for the graphic, to be displayed on failure to display the label must be—
 - (i) in the case of a heater falling within point 5(b)(i), the seasonal space heating energy efficiency class;
 - (ii) in the case of a heater falling within point 5(b)(ii), the seasonal space heating energy efficiency class at low-temperature application and the seasonal space heating energy efficiency class at medium-temperature application;
 - (iii) in the case of a heater falling within point 5(b)(iii), the seasonal space heating energy efficiency class and the water heating energy efficiency class;
 - (iv) in the case of a heater falling within point 5(b)(iv), the seasonal space heating energy efficiency class at low-temperature application, the seasonal space heating energy efficiency class at medium-temperature application and the water heating energy efficiency class.
7. For the purposes of point 6(g), the relevant energy efficiency class(es) must be—
- (a) if the price is shown, in a font size equivalent to that of the price;
 - (b) otherwise, in a font size that is clearly visible and legible.
8. In this Annex—

“display mechanism” means any screen, including a tactile screen, or other visual technology used for displaying internet content to users;

“nested display” means a 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;

“tactile screen” means a screen responding to touch, such as that of a tablet computer, smart computer or smartphone.”

EXPLANATORY NOTE

(This note is not part of the Regulations)

[...]