



2023/2534

22.11.2023

COMMISSION DELEGATED REGULATION (EU) 2023/2534

of 13 July 2023

supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of household tumble dryers and repealing Commission Delegated Regulation (EU) No 392/2012

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EU) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU ⁽¹⁾, and in particular Article 16(1) thereof,

Whereas:

- (1) The Ecodesign Working Plan 2016-2019 ⁽²⁾ drawn up by the Commission sets out the working priorities under the ecodesign and energy labelling framework for the period 2016–2019. The Working Plan identifies energy-related product groups as priorities for preparatory studies and, if necessary, adoption of implementing measures. That includes household tumble dryers. Furthermore, household tumble dryers fall into the three main groups earmarked for review before the end of 2025 by the Ecodesign and Energy Labelling Working Plan 2022-2024 ⁽³⁾.
- (2) The measures envisaged by the Ecodesign and Energy Labelling Working Plan 2022-2024 have an estimated potential to deliver, in 2030, a total annual final energy savings in excess of 170 TWh, which is equivalent to reducing greenhouse gas emissions by approximately 24 million tonnes per year in 2030. For household tumble dryers, electricity savings of 0,6 TWh/year could potentially be achieved by 2030 and 1,7 TWh/year by 2040.
- (3) The Commission laid down provisions on the energy labelling of household tumble dryers in Delegated Regulation (EU) No 392/2012 ⁽⁴⁾.
- (4) Household tumble dryers are among the product groups covered by Article 11(4) of Regulation (EU) 2017/1369 for which the Commission is to adopt a delegated act to introduce an A to G rescaled label, to be displayed in shops and online 18 months after the date of entry into force of the delegated act.
- (5) Article 7 of Delegated Regulation (EU) No 392/2012 requires the Commission to review that Delegated Regulation in the light of technological progress. The Commission has carried out the review and analysed technical, environmental and economic aspects of tumble dryers as well as real-life user behaviour. The review was undertaken in close cooperation with stakeholders and interested parties from the Union and third countries. The results of the review were made public and presented to the Consultation Forum established in accordance with Article 14 of Regulation (EU) 2017/1369.
- (6) The review concluded that there was a need to amend the energy labelling requirements for household tumble dryers.

⁽¹⁾ OJ L 198, 28.7.2017, p. 1.

⁽²⁾ Communication from the Commission Ecodesign Working Plan 2016-2019 (COM(2016) 773 final of 30.11.2016).

⁽³⁾ Communication from the Commission Ecodesign and Energy Labelling Working Plan 2022-2024 2022/C 182/01 (OJ C 182, 4.5.2022, p. 1).

⁽⁴⁾ Commission Delegated Regulation (EU) No 392/2012 of 1 March 2012 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of household tumble driers (OJ L 123, 9.5.2012, p. 1).

- (7) The environmental aspects of household tumble dryers, identified as significant for the purposes of this Regulation, are the consumption of energy in the use phase, the generation of waste at the end of life, emissions to air in the production phase due to the extraction and processing of raw materials, and in the use phase due to the consumption of electricity.
- (8) The review concludes that the electricity consumption of household tumble dryers can be further reduced by implementing energy labelling measures which focus on differentiating better between products. This will incentivise suppliers to further improve the energy and resource efficiency of household tumble dryers.
- (9) The energy labelling of household tumble dryers enables consumers to make informed choices for more energy- and resource-efficient appliances. The information on the label was confirmed as understandable and relevant through a specific consumer survey in accordance with Article 14(2) of Regulation (EU) 2017/1369.
- (10) The EU action plan for the circular economy ⁽⁵⁾ and the Ecodesign and Energy Labelling Working Plan 2022-2024 underline the importance of using the ecodesign and energy labelling framework to support the move towards a more resource efficient and circular economy.
- (11) The review found that the lifetime of household tumble dryers has decreased from 14 years to around 12 years, and that that trend is likely to continue in the absence of incentives to properly maintain and repair household tumble dryers. A reparability score informing the user how easy it is to repair a household tumble dryer, could be a means to reduce material use and waste disposal by raising consumer's interest about the possibility to repair their tumble dryer instead of scrapping it, and by influencing product design. In addition, a reparability score applicable in the Union could prevent the proliferation of national schemes, which would risk undermining the internal market. The Commission should therefore analyse the possibilities for a reparability score.
- (12) Multi-drum household tumble dryers feature the same basic characteristics as standard household tumble dryers and should therefore be included in the scope of this Regulation.
- (13) Built-in household tumble dryers are encased by panels that retain the heat produced inside the tumble dryer, leading to higher energy efficiency. The definition of built-in household tumble dryers should be improved in order to distinguish them from other household tumble dryers that are simply placed under a panel but are not encased by panels, and therefore do not feature that additional means of retaining heat.
- (14) Household tumble dryers that are displayed at trade fairs should bear the energy label if the first unit of the model has already been placed on the market or is placed on the market at the trade fair.
- (15) Tumble dryers powered by batteries which can also be connected to the mains through an AC/DC converter purchased separately, are normally installed in mobile environments such as motorhomes and are not intended for use in households. Those tumble dryers should therefore be excluded from the scope of the requirements on energy labelling.
- (16) The Union market is now electric and gas-fired tumble dryers are increasingly rare. Therefore, the energy label can be simplified by removing the icon depicting the energy source powering the household tumble dryer.
- (17) The review indicates that the vast majority of household tumble dryers feature condensation efficiencies above 80 %. The number of condensation efficiency classes in the label can therefore be reduced and their thresholds raised to better reflect the overall improvement of the market in terms of condensation efficiency.

⁽⁵⁾ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Closing the loop – An EU action plan for the circular economy (COM(2015) 614 final of 2.12.2015).

- (18) The energy label in accordance with Delegated Regulation (EU) No 392/2012 shows the acoustic airborne noise emission from household tumble dryers in dB(A), but no noise classes have been defined. The user is therefore presented with an absolute value with no indication of how good that value is. Noise emission classes have already been included on the labels for washing machines, dishwashers and refrigerators. It is therefore appropriate to define such emission classes and to include them on the labels for household tumble dryers.
- (19) The relevant product parameters should be measured using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council ⁽⁶⁾.
- (20) Recognising the growth of sales of energy-related products through providers of online platforms, as defined in Regulation (EU) 2022/2065 of the European Parliament and of the Council ⁽⁷⁾, rather than directly from suppliers' websites, it should be clarified that such providers of online platforms should enable traders to provide information concerning the labelling of the product concerned, in compliance with Article 31(2) of Regulation (EU) 2022/2065. The 'information concerning the labelling and marking' referred to in Article 31(2), point (c) of Regulation (EU) 2022/2065 should, in the context of this Regulation, be understood as encompassing both the energy label and the product information sheet. In line with Article 6 of Regulation (EU) 2022/2065, providers of online platforms are not liable for products sold through their interfaces on the condition that they do not have actual knowledge of the illegality of such products and upon receiving knowledge on the illegality of the products they act expeditiously to remove them from their interfaces. A supplier selling directly to end-users via its own website is covered by dealers' distance selling obligations referred to in Article 5 of Regulation (EU) 2017/1369.
- (21) Commission Delegated Regulation (EU) 2023/807 ⁽⁸⁾ establishes a primary energy factor for electricity of 1,9 (conversion coefficient) to be applied when energy savings are calculated in primary energy terms based on final energy consumption. This primary energy factor should be applied when comparing the energy consumption for electric and gas-fired tumble dryers.
- (22) The verification procedure for market surveillance purposes should provide for cases where tests performed on household tumble dryers do not reach the adequate final moisture content.
- (23) Delegated Regulation (EU) No 392/2012 should be repealed with effect from 30 June 2025,

HAS ADOPTED THIS REGULATION:

Article 1

Subject matter and scope

1. This Regulation lays down requirements for the labelling of electric mains-operated and gas-fired household tumble dryers and the provision of supplementary information regarding such household tumble dryers. It also applies to built-in household tumble dryers, multi-drum household tumble dryers and electric-mains operated household tumble dryers that can also be powered by batteries.

⁽⁶⁾ Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council (OJ L 316, 14.11.2012, p. 12).

⁽⁷⁾ Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act) (OJ L 277, 27.10.2022, p. 1).

⁽⁸⁾ Commission Delegated Regulation (EU) 2023/807 of 15 December 2022 on revising the primary energy factor for electricity in application of Directive 2012/27/EU of the European Parliament and of the Council (OJ L 101, 14.4.2023, p. 16).

2. This Regulation shall not apply to:

- (a) household washer-dryers and household spin-extractors;
- (b) tumble dryers within the scope of Directive 2006/42/EC of the European Parliament and of the Council ⁽⁹⁾;
- (c) battery-operated household tumble dryers that can be connected to the mains through an AC/DC converter purchased separately.

Article 2

Definitions

For the purposes of this Regulation, the following definitions shall apply:

- (1) 'mains' means the electricity supply from the grid of 230 (\pm 10 %) volts of alternating current at 50 Hz;
- (2) 'household tumble dryer' means an appliance in which laundry is dried by tumbling in a rotating drum through which heated air is passed and which is declared by the manufacturer in the declaration of conformity as complying with Directive 2014/35/EU of the European Parliament and of the Council ⁽¹⁰⁾ or with Directive 2014/53/EU of the European Parliament and of the Council ⁽¹¹⁾;
- (3) 'built-in household tumble dryer' means a household tumble dryer that is designed, tested and marketed exclusively to comply with all the following characteristics:
 - (a) to be installed in cabinetry or encased (top and/or bottom, and sides) by panels;
 - (b) to be securely fastened to the sides, top or floor of the cabinetry or panels;
 - (c) to be equipped with an integral factory-finished face or to be fitted with a custom front panel;
- (4) 'household washer-dryer' means an appliance as defined in Article 2, point (4), of Commission Regulation (EU) 2019/2023 ⁽¹²⁾;
- (5) 'household spin-extractor' means an appliance in which water is removed from the laundry by centrifugal action in a rotating drum and drained through an automatic pump or by gravity and which is designed to be used principally for non-professional purposes and is also commercially known as 'spin-dryer';
- (6) 'programme' means a series of operations that are pre-defined and which are declared by the supplier as suitable for drying certain types of textile;
- (7) 'point of sale' means a location where household tumble dryers are displayed or offered for sale, hire or hire-purchase;
- (8) 'multi-drum household tumble dryer' means a household tumble dryer equipped with more than one drum, whether in separate units or in the same casing.

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

⁽⁹⁾ Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (OJ L 157, 9.6.2006, p. 24).

⁽¹⁰⁾ Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits (OJ L 96, 29.3.2014, p. 357).

⁽¹¹⁾ Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC (OJ L 153, 22.5.2014, p. 62).

⁽¹²⁾ Commission Regulation (EU) 2019/2023 of 1 October 2019 laying down ecodesign requirements for household washing machines and household washer-dryers pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Commission Regulation (EC) No 1275/2008 and repealing Commission Regulation (EU) No 1015/2010 (OJ L 315, 5.12.2019, p. 285).

*Article 3***Obligations of suppliers**

1. Suppliers shall ensure that:
 - (a) each household tumble dryer is supplied with a printed label in the format as set out in Annex III and, for a multi-drum household tumble dryer, in accordance with Annex X;
 - (b) the values for the parameters of the product information sheet, as set out in Annex V, are entered into the public part of the product database;
 - (c) where specifically requested by a dealer, the product information sheet is made available in printed form;
 - (d) the content of the technical documentation set out in Annex VI is entered into the product database;
 - (e) any visual advertisement concerning a specific model of household tumble dryer contains the energy efficiency class and range of energy efficiency classes available on the label in accordance with Annexes VII and VIII;
 - (f) any technical promotional material concerning a specific model of household tumble dryer, including technical promotional material on the internet, which describes its specific technical parameters, includes the energy efficiency class of that model and the range of energy efficiency classes available on the label, in accordance with Annex VII;
 - (g) an electronic label in the format and containing the information as set out in Annex III is made available to dealers for each model of household tumble dryer;
 - (h) an electronic product information sheet, as set out in Annex V, is made available to dealers for each model of household tumble dryer.
2. The energy efficiency class, the acoustic airborne noise emission class and, where relevant, the condensation efficiency class, as set out in Annex II shall be calculated in accordance with Annex IV.

*Article 4***Obligations of dealers**

Dealers shall ensure that:

- (a) each household tumble dryer, at the point of sale, including at trade fairs, bears the label provided by suppliers in accordance with point (a) of Article 3(1), with the label being displayed for built-in appliances in such a way as to be clearly visible, and for all other appliances in such a way as to be clearly visible on the outside on the front or top of the household tumble dryer;
- (b) in the event of distance selling, the label and product information sheet are provided in accordance with Annexes VII and VIII;
- (c) any visual advertisement for a specific model of household tumble dryer, including on the internet, contains the energy efficiency class and the range of energy efficiency classes available on the label, in accordance with Annex VII;
- (d) any technical promotional material concerning a specific model of household tumble dryer, including technical promotional material on the internet, which describes its specific technical parameters includes the energy efficiency class of that model and the range of energy efficiency classes available on the label, in accordance with Annex VII.

*Article 5***Measurement and calculation methods**

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

*Article 6***Verification procedure for market surveillance purposes**

Member States shall apply the procedure laid down in Annex IX to this Regulation when performing the market surveillance checks referred to in Article 8(3) of Regulation (EU) 2017/1369.

*Article 7***Review**

1. The Commission shall review this Regulation in the light of technological progress and present the results of that review including, if appropriate, a draft revision proposal, to the Consultation Forum by 1 January 2030.

The review shall in particular assess the following elements:

- (a) the improvement potential with regard to the energy consumption, functional and environmental performance of household tumble dryers;
- (b) the effectiveness of existing measures in prompting end-users to purchase appliances that are more energy- and resource-efficient and to use more energy- and resource-efficient programmes;
- (c) the scope for addressing circular economy objectives.

2. No later than 1 January 2025, the Commission shall present the Consultation Forum a reparability score for household tumble dryers and if appropriate, a draft proposal on a reparability score for household tumble dryers.

*Article 8***Repeal**

Delegated Regulation (EU) No 392/2012 is repealed.

*Article 9***Transitional measures**

Until 30 June 2025, the product fiche required under Article 3, point (b), of Delegated Regulation (EU) No 392/2012 may be made available through the product database instead of being provided in printed form with the product. However, where the dealer so requests, the supplier shall ensure that the product fiche is made available in printed form.

*Article 10***Entry into force and application**

This Regulation shall enter into force on 1 January 2024.

It shall apply from 1 July 2025. However, Article 9 shall apply from 1 January 2024 and Article 3(1), points (a) and (b), shall apply from 1 March 2025.

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

Done at Brussels, 13 July 2023.

For the Commission
The President
Ursula VON DER LEYEN

—

ANNEX I

Definitions

For the purposes of Annexes II to X, the following definitions apply:

- (1) 'air-vented tumble dryer' means a household tumble dryer that draws in fresh air, passes it over the laundry and vents the resulting moist air into the room or outside;
- (2) 'condenser tumble dryer' means a household tumble dryer that includes a system, using condensation or any other means, for removing moisture from the air used for the drying process;
- (3) 'gas-fired tumble dryer' means a household tumble dryer which uses gas to heat the inside air;
- (4) 'Energy Efficiency Index' or 'EEI' means the ratio of the weighted energy consumption to the standard drying cycle energy consumption of a specific household tumble dryer model;
- (5) 'drying cycle' means a complete drying process, as defined by the required programme, consisting of a series of different operations including heating and tumbling;
- (6) 'programme duration' means the length of time beginning with the initiation of the programme selected, excluding any user programmed delay, until an end of programme indicator is activated, and the user has access to the load;
- (7) 'rated capacity' means the maximum mass in kilograms, stated by the manufacturer importer or authorised representative, at 0,5 kilogram intervals, of dry laundry of a particular type which can be treated in one drying cycle of a household tumble dryer on the selected programme, when loaded in accordance with the manufacturer's instructions;
- (8) 'full load' means the rated capacity of a household tumble dryer for a given programme;
- (9) 'partial load' means half of the rated capacity of a household tumble dryer for a given programme;
- (10) 'condensation efficiency' means the ratio between the mass of moisture condensed by a condenser tumble dryer and the mass of moisture removed from the load at the end of a drying cycle;
- (11) 'quick response code' or 'QR code' means a matrix barcode included on the energy label of a product model that links to that model's information in the public part of the product database;
- (12) 'off mode' means a condition in which the household tumble dryer is connected to the mains and is not providing any function, including the following conditions:
 - (a) conditions providing only an indication of off mode;
 - (b) conditions providing only functionalities intended to ensure electromagnetic compatibility pursuant to Directive 2014/30/EU of the European Parliament and of the Council ⁽¹⁾;
- (13) 'standby mode' means a condition where the household tumble dryer is connected to the mains, and provides only the following functions or some of those functions, which may persist for an indefinite time:
 - (a) reactivation function, or reactivation function and indication of enabled reactivation function;
 - (b) reactivation function through a connection to a network ('networked standby');
 - (c) information or status display;
 - (d) detection function for emergency measures;

⁽¹⁾ Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (OJ L 96, 29.3.2014, p. 79).

- (14) 'network' means a communication infrastructure with a topology of links, an architecture, including the physical components, organisational principles, communication procedures and formats (protocols);
- (15) 'wrinkle guard function' means an operation of the household tumble dryer after completion of a programme to prevent excessive wrinkle building in the laundry;
- (16) 'delay start' means a condition where the user has selected a specified delay to the beginning or end of the drying cycle of the selected programme;
- (17) 'display mechanism' means any screen, including tactile screen, or other visual technology used for displaying internet content to users;
- (18) '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;
- (19) 'tactile screen' means a screen responding to touch, such as that of a tablet computer, slate computer or a smartphone;
- (20) 'alternative text' means text provided as an alternative to a graphic image allowing information to be presented in non-graphical form where a display device cannot render the graphic image or as an aid to accessibility such as input to voice synthesis applications;
- (21) 'eco programme' means a programme which is able to dry cotton laundry from an initial moisture content of the load of 60 % down to a final moisture content of the load of 0 %;
- (22) 'initial moisture content' means the amount of moisture contained in the load at the beginning of the drying cycle;
- (23) 'final moisture content' means the amount of moisture contained in the load at the end of the drying cycle;
- (24) 'guarantee' means any undertaking by the dealer or supplier to the consumer to either reimburse the price paid, or replace, repair or handle the household tumble dryer in any way if it does not meet the specifications set out in the guarantee statement or in the relevant advertising;
- (25) 'declared values' means the values provided by the supplier for the stated, calculated or measured technical parameters in accordance with Article 3, for the verification of compliance by the Member State authorities.
- (26) 'conversion coefficient' (CC) means the default coefficient for primary energy per kWh electricity referred to in Directive 2012/27/EU ⁽²⁾ of the European Parliament and of the Council. The value of the conversion coefficient is CC = 1,9.

⁽²⁾ Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1).

ANNEX II

Energy efficiency class, acoustic airborne noise emission class and condensation efficiency class**1. ENERGY EFFICIENCY CLASS**

The energy efficiency class of a household tumble dryer shall be determined on the basis of its energy efficiency index ('EEI') as set out in Table 1. The EEI shall be determined in accordance with Section 1 of Annex IV.

Table 1

Energy efficiency class

Energy efficiency class	Energy Efficiency Index
A (most efficient)	$EEI \leq 43$
B	$43 < EEI \leq 50$
C	$50 < EEI \leq 60$
D	$60 < EEI \leq 70$
E	$70 < EEI \leq 85$
F	$85 < EEI \leq 100$
G (least efficient)	$EEI > 100$

2. ACOUSTIC AIRBORNE NOISE EMISSION CLASS

The acoustic airborne noise emission of a household tumble dryer shall be determined as the weighted average value (L_{WA}) of the sound power in the eco programme at full load during the drying cycle expressed in dB(A) and rounded to the nearest integer.

The acoustic airborne noise emission class shall be determined on the basis of the L_{WA} as set out in Table 2.

Table 2

Acoustic airborne noise emission class

Acoustic airborne noise emission class	Noise (dB(A))
A	$L_{WA} \leq 60$
B	$60 < L_{WA} \leq 64$
C	$64 < L_{WA} \leq 68$
D	$L_{WA} > 68$

3. CONDENSATION EFFICIENCY CLASS

The condensation efficiency class shall be determined on the basis of the weighted condensation efficiency as set out in Table 3.

Table 3

Condensation efficiency class

Condensation efficiency class	Weighted condensation efficiency
A	$Ct \geq 94$
B	$88 \leq Ct < 94$
C	$82 \leq Ct < 88$
D	$Ct < 82$

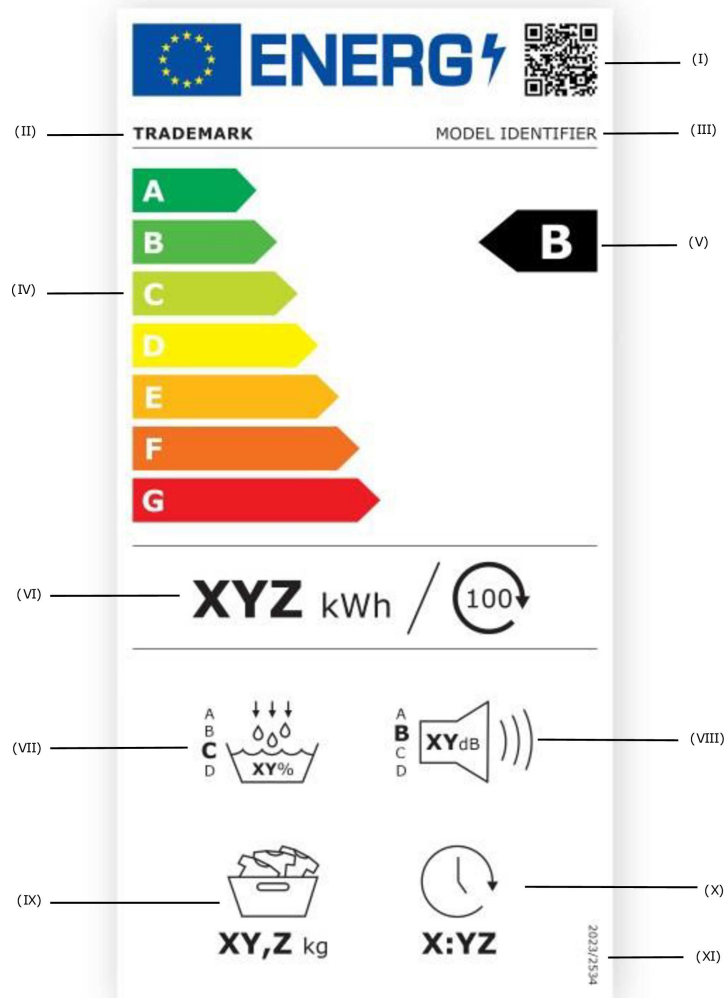
ANNEX III

Label

A. Label for condenser tumble dryers

1. LABEL FOR CONDENSER TUMBLE DRYERS

Figure 1



1.1. The following information shall be included in the label:

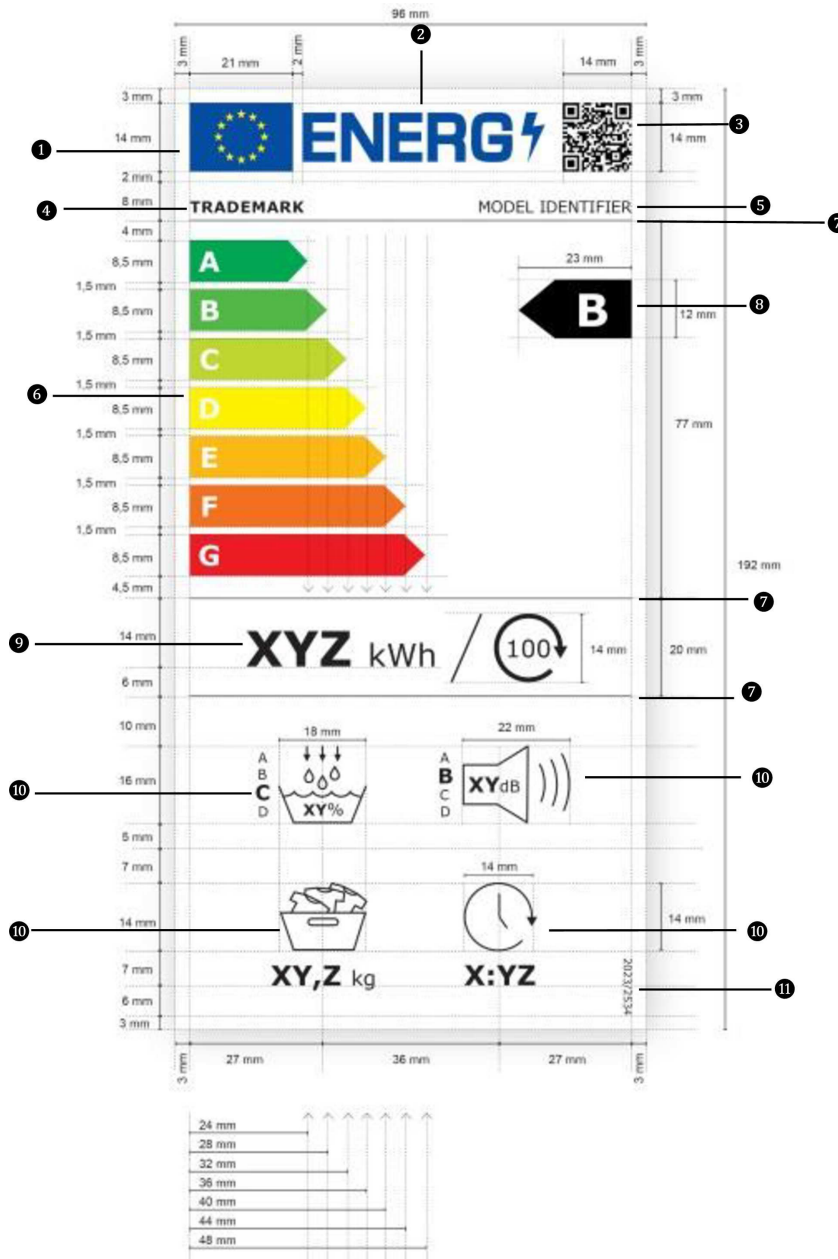
- I QR code;
- II trademark;
- III model identifier;
- IV scale of energy efficiency classes from A to G;
- V the energy efficiency class determined in accordance with Annex II; the head of the arrow containing the energy efficiency class of the tumble dryer shall be placed at the same height as the head of the arrow of the relevant energy efficiency class;
- VI weighted average energy consumption per 100 drying cycles in kWh, rounded to the nearest integer and calculated in accordance with Annex IV; in case of gas-fired tumble dryers, the weighted average energy consumption (gas and electricity) per 100 drying cycles in kWh, rounded to the nearest integer and calculated in accordance with Annex IV;

- VII condensation efficiency class determined in accordance with Annex II, with relevant logo and value rounded to the nearest integer and calculated in accordance with Annex IV;
- VIII acoustic airborne noise emission class of the drying cycle of the eco programme, with relevant logo and value in dB(A), determined in accordance with Section 4 of Annex IV;
- IX rated capacity, in kg, for the eco programme at full load;
- X duration of the eco programme at full load in hours and minutes [h:min] rounded to the nearest minute;
- XI the number of this Regulation, which is '2023/2534'.

1.2. Where a model has been granted an 'EU Ecolabel' pursuant to Regulation (EC) No 66/2010 of the European Parliament and of the Council ⁽¹⁾, a copy of the EU Ecolabel may be added.

2. LABEL DESIGN FOR CONDENSER TUMBLE DRYERS

Figure 2



⁽¹⁾ Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel (OJ L 27, 30.1.2010, p. 1).

Whereby:

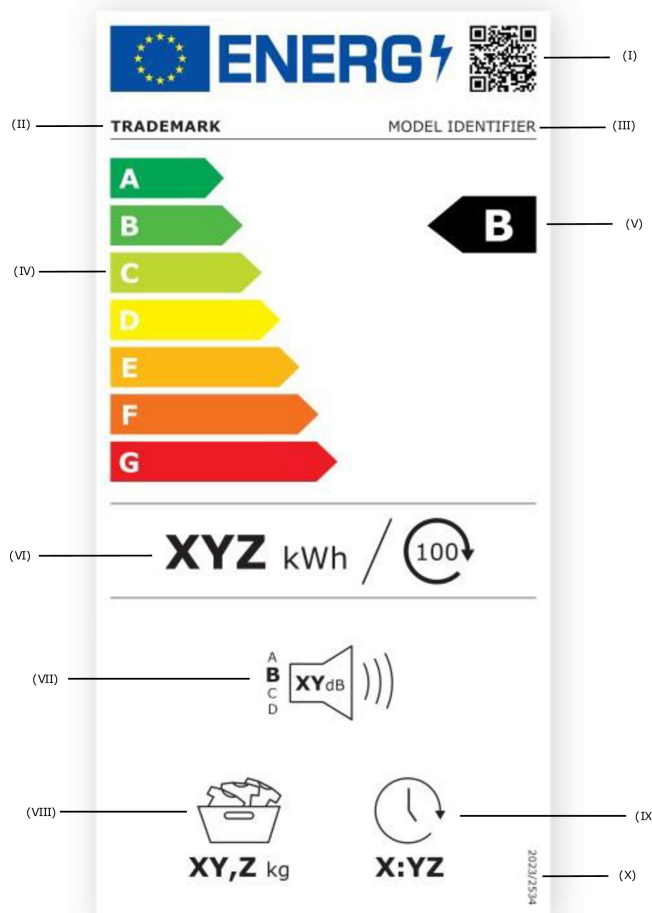
- (a) the label must be at least 96 mm wide and 192 mm high. Where the label is printed in a larger format, its content must nevertheless remain proportionate to the specifications in Figure 2;
- (b) the background shall be 100 % white;
- (c) the typeface shall be Verdana;
- (d) the dimensions and specifications of the elements in the label shall be as indicated in the label designs in this Annex;
- (e) colours shall be CMYK – cyan, magenta, yellow and black following this example: 0,70,100,0: 0 % cyan, 70 % magenta, 100 % yellow, 0 % black;
- (f) the label shall fulfil all of the following requirements (numbers refer to Figure 2).
 - ❶ the colours of the EU logo shall be as follows:
 - the background: 100,80,0,0;
 - the stars: 0,0,100,0;
 - ❷ the colour of the energy logo shall be: 100,80,0,0;
 - ❸ the QR code shall be 100 % black;
 - ❹ the trademark shall be 100 % black and in Bold 9 pt;
 - ❺ the model identifier shall be 100 % black and in Regular 9 pt;
 - ❻ the A to G scale shall be as follows:
 - (a) the letters in the arrows shall be 100 % white and in Bold 16 pt, and shall be centred on an axis at 4,5 mm from the left side of the arrows;
 - (b) the background colours of the arrows shall be as follows:
 - (i) A-class: 100,0,100,0;
 - (ii) B-class: 70,0,100,0;
 - (iii) C-class: 30,0,100,0;
 - (iv) D-class: 0,0,100,0;
 - (v) E-class: 0,30,100,0;
 - (vi) F-class: 0,70,100,0;
 - (vii) G-class: 0,100,100,0;
 - ❼ the internal dividers shall be 80 mm wide and have a weight of 0,5 pt. The colour of the dividers shall be 100 % black;
 - ❽ the energy efficiency class arrow shall be 100 % black. The letter inside the energy efficiency class arrow shall be 100 % white and in Bold 26 pt, and it shall be positioned in the centre of the rectangular part of the arrow. The energy efficiency class arrow and the corresponding arrow in the A to G scale shall be positioned in such a way that their tips are aligned;
 - ❾ the value of the weighted energy consumption per 100 drying cycles shall be in Bold 28 pt; 'kWh/' shall be in Regular 18 pt; the number '100' in the icon representing 100 drying cycles shall be in Regular 14 pt. The text shall be centred in the column and in 100 % black;

- 10 the pictograms shall be as shown in the label design and as follows:
 - (a) the lines of the pictograms shall have a weight of 1,2 pt and they and the texts (numbers and units) shall be 100 % black;
 - (b) the A to D scales of the condensation efficiency pictogram and of the acoustic airborne noise emission pictogram shall be aligned on a vertical axis on the left side of the icon, with the letter of the applicable class in Bold 12 pt and the other letters of the rest of the classes in Regular 8 pt;
 - (c) the number of the condensation efficiency pictogram shall be in Bold 9 pt and the unit in Regular 9 pt, with the number and the unit next to each other and centred inside the pictogram;
 - (d) the number of the acoustic airborne noise emission pictogram shall be in Bold 12 pt and the unit in Regular 9 pt, with the number and the unit next to each other and centred inside the pictogram;
 - (e) the number of the rated capacity pictogram shall be in Bold 16 pt and the unit in Regular 12 pt, with the number and the unit next to each other and centred under the pictogram;
 - (f) the number of the duration of the eco programme pictogram shall be in Bold 16 pt and it shall be centred under the pictogram;
- 11 the number of the Regulation shall be 100 % black and in Regular 6 pt.

B. Label for non-condenser tumble dryers

1. LABEL FOR NON-CONDENSER TUMBLE DRYERS

Figure 3



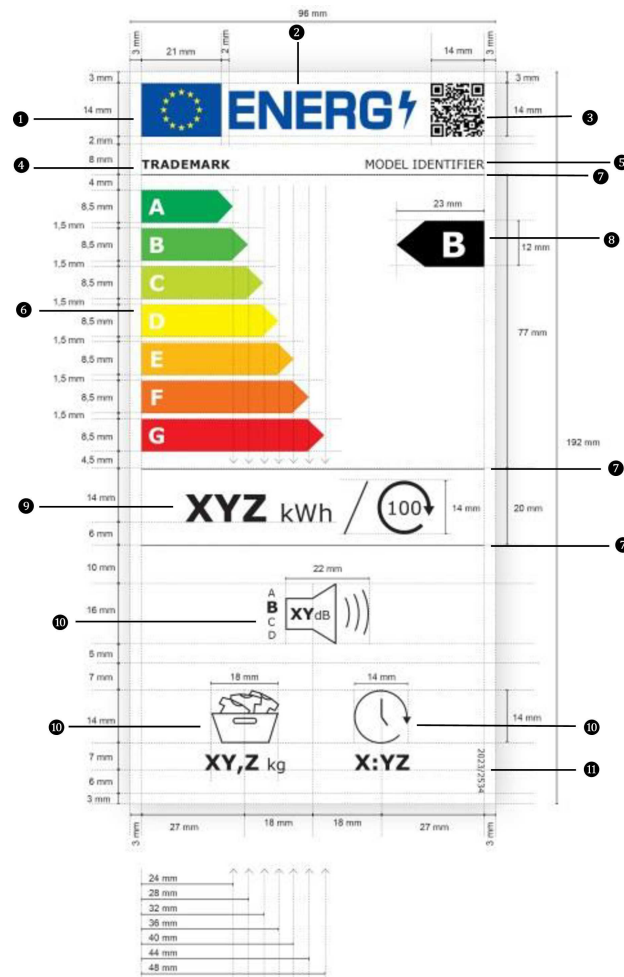
1.1. The following information shall be included in the label:

- I QR code;
- II trademark;
- III model identifier;
- IV scale of energy efficiency classes from A to G;
- V the energy efficiency class determined in accordance with Annex II; the head of the arrow containing the energy efficiency class of the tumble dryer shall be placed at the same height as the head of the arrow of the relevant energy efficiency class;
- VI weighted average energy consumption per 100 drying cycles in kWh, rounded to the nearest integer and calculated in accordance with Annex IV; in case of gas-fired tumble dryers, the weighted average energy consumption (gas and electricity) per 100 drying cycles in kWh, rounded to the nearest integer and calculated in accordance with Annex IV;
- VII acoustic airborne noise emission class of the drying cycle of the eco programme, with relevant logo and value in dB(A), determined in accordance with Section 4 of Annex IV;
- VIII rated capacity, in kg, for the eco programme at full load;
- IX duration of the eco programme at full load in hours and minutes [h:min] rounded to the nearest minute;
- X the number of this Regulation, which is '2023/2534'.

1.2. Where a model has been granted an 'EU Ecolabel' pursuant to Regulation (EC) No 66/2010, a copy of the EU Ecolabel may be added.

2. LABEL DESIGN FOR NON-CONDENSER TUMBLE DRYERS

Figure 4



Whereby:

- (a) the label must be at least 96 mm wide and 192 mm high. Where the label is printed in a larger format, its content must nevertheless remain proportionate to the specifications in Figure 4;
- (b) the background shall be 100 % white;
- (c) the typeface shall be Verdana;
- (d) the dimensions and specifications of the elements in the label shall be as indicated in the label designs in this Annex;
- (e) colours shall be CMYK – cyan, magenta, yellow and black following this example: 0,70,100,0: 0 % cyan, 70 % magenta, 100 % yellow, 0 % black;
- (f) the label shall fulfil all of the following requirements (numbers refer to Figure 4).
 - ❶ the colours of the EU logo shall be as follows:
 - the background: 100,80,0,0;
 - the stars: 0,0,100,0;
 - ❷ the colour of the energy logo shall be: 100,80,0,0;
 - ❸ the QR code shall be 100 % black;
 - ❹ the trademark shall be 100 % black and in Bold 9 pt;
 - ❺ the model identifier shall be 100 % black and in Regular 9 pt;
 - ❻ the A to G scale shall be as follows:
 - (a) the letters in the arrows shall be 100 % white and in Bold 16 pt, and shall be centred on an axis at 4,5 mm from the left side of the arrows;
 - (b) the background colours of the arrows shall be as follows:
 - (i) A-class: 100,0,100,0;
 - (ii) B-class: 70,0,100,0;
 - (iii) C-class: 30,0,100,0;
 - (iv) D-class: 0,0,100,0;
 - (v) E-class: 0,30,100,0;
 - (vi) F-class: 0,70,100,0;
 - (vii) G-class: 0,100,100,0;
 - ❼ the internal dividers shall be 80 mm wide and have a weight of 0,5 pt. The colour of the dividers shall be 100 % black;
 - ❽ the energy efficiency class arrow shall be 100 % black. The letter inside the energy efficiency class arrow shall be 100 % white and in Bold 26 pt, and it shall be positioned in the centre of the rectangular part of the arrow. The energy efficiency class arrow and the corresponding arrow in the A to G scale shall be positioned in such a way that their tips are aligned;
 - ❾ the value of the weighted energy consumption per 100 drying cycles shall be in Bold 28 pt; 'kWh/' shall be in Regular 18 pt; the number '100' in the icon representing 100 drying cycles shall be in Regular 14 pt. The text shall be centred in the column and in 100 % black;

- 10 the pictograms shall be as shown in the label design and as follows:
- (a) the lines of the pictograms shall have a weight of 1,2 pt and they and the texts (numbers and units) shall be 100 % black;
 - (b) the A to D scale of the acoustic airborne noise emission pictogram shall be aligned on a vertical axis on the left side of the icon, with the letter of the applicable class in Bold 12 pt and the other letters of the rest of the classes in Regular 8 pt;
 - (c) the number of the acoustic airborne noise emission pictogram shall be in Bold 12 pt and the unit in Regular 9 pt, with the number and the unit next to each other and centred inside the pictogram;
 - (d) the number of the rated capacity pictogram shall be in Bold 16 pt and the unit in Regular 12 pt, with the number and the unit next to each other and centred under the pictogram;
 - (e) the number of the duration of the eco programme pictogram shall be in Bold 16 pt and it shall be centred under the pictogram;
- 11 the number of the Regulation shall be 100 % black and in Regular 6 pt.
-

ANNEX IV

Measurement and calculation methods

For the purposes of verification of compliance with the requirements of this Regulation, measurements and calculations shall be made using harmonised standards whose reference numbers are published for that purpose in the *Official Journal of the European Union*, or any other reliable, accurate and reproducible methods, which take into account the generally recognised state-of-the-art and are in conformity with the provisions of this Annex.

Where a parameter is declared pursuant to Article 3(3) of Regulation (EU) 2017/1369 and in accordance with Table 5 of Annex VI, its declared value shall be used by the supplier for the calculations in this Annex.

The eco programme as identifiable on the programme selection, on the display and through the network connection, depending on the functionalities provided by the household tumble dryer, and with no further modification of the final moisture content setting, shall be used for the measurement and calculation of the EEI, the condensation efficiency, the programme duration, the final moisture content and the airborne acoustic noise emissions. The energy consumption, condensation efficiency, programme duration and final moisture content shall also be measured concurrently.

The calculation of the weighted energy consumption, the weighted programme duration, the final moisture content and the condensation efficiency shall be done on the basis of three drying cycles at full load and four drying cycles at partial load.

The stated rated capacity for the eco programme shall not be lower than the highest declared rated capacity among all the cotton programmes of the household tumble dryer.

1. ENERGY EFFICIENCY INDEX

For the calculation of the EEI of a household tumble dryer model, the weighted energy consumption per drying cycle for the eco programme at full and partial load is compared to the standard energy consumption per drying cycle.

(a) The EEI is calculated as follows and rounded to one decimal place:

$$EEI = \frac{E_{tC}}{SE_C} \times 100$$

where:

E_{tC} = weighted energy consumption per drying cycle,
 SE_C = standard energy consumption per drying cycle.

(b) SE_C is calculated in kWh as follows and rounded to two decimal places:

(i) for household tumble dryers other than air-vented tumble dryers:

$$SE_C = 0,46 \times c^{0,63}$$

(ii) for air-vented tumble dryers:

$$SE_C = 0,46 \times c^{0,63} \times \left(1 - \frac{T_t}{60} \times 0,083\right)$$

where

c is the rated capacity of the household tumble dryer for the eco programme,
 T_t is the weighted programme duration for the eco programme.

(c) E_{tC} is calculated in kWh as follows and rounded to two decimal places:

$$E_{tC} = 0,24 \times E_{dry} + 0,76 \times E_{dry/2}$$

where

E_{dry} = energy consumption of the eco programme at full load, in kWh and rounded to two decimal places,

$E_{dry^{1/2}}$ = energy consumption of the eco programme at partial load, in kWh and rounded to two decimal places.

(d) For gas-fired tumble dryers, E_{dry} and $E_{dry^{1/2}}$ are calculated as follows

$$E_{dry} = \frac{E_{g_{dry}}}{CC} + E_{g_{dry,a}}$$

$$E_{dry^{1/2}} = \frac{E_{g_{dry^{1/2}}}}{CC} + E_{g_{dry^{1/2},a}}$$

where

$E_{g_{dry}}$ = gas consumption of the eco programme at full load, in kWh and rounded to two decimal places,

$E_{g_{dry^{1/2}}}$ = gas consumption of the eco programme at partial load, in kWh and rounded to two decimal places,

$E_{g_{dry,a}}$ = auxiliary electricity consumption of the eco programme at full load, in kWh and rounded to two decimal places,

$E_{g_{dry^{1/2},a}}$ = auxiliary electricity consumption of the eco programme at partial load, in kWh and rounded to two decimal places,

CC (Conversion coefficient) = 1,9.

(e) T_t for the eco programme is calculated in minutes, rounded to the nearest minute, as follows:

$$T_t = 0,24 \times T_{dry} + 0,76 \times T_{dry^{1/2}}$$

where

T_{dry} = programme duration for the eco programme at full load, in minutes and rounded to the nearest minute,

$T_{dry^{1/2}}$ = programme duration for the eco programme at partial load, in minutes and rounded to the nearest minute.

(f) The weighted average energy consumption per 100 drying cycles of the electric mains-operated household tumble dryer is calculated as follows and rounded to the nearest integer:

$$E_{tc} \times 100$$

The weighted average energy consumption per 100 drying cycles of the gas-fired tumble dryer is calculated as follows and rounded to the nearest integer:

$$\left(0,24 \times (E_{g_{dry}} + E_{g_{dry,a}}) + 0,76 \times (E_{g_{dry^{1/2}}} + E_{g_{dry^{1/2},a}}) \right) \times 100$$

where

$E_{g_{dry}}$ = gas consumption of the eco programme at full load, in kWh and rounded to two decimal places,

$E_{g_{dry^{1/2}}}$ = gas consumption of the eco programme at partial load, in kWh and rounded to two decimal places,

$E_{g_{dry,a}}$ = auxiliary electricity consumption of the eco programme at full load, in kWh and rounded to two decimal places,

$E_{g_{dry^{1/2},a}}$ = auxiliary electricity consumption of the eco programme at partial load, in kWh and rounded to two decimal places.

- (g) The average final moisture content μ_i for the eco programme is calculated in percent, rounded to one decimal places, as follows:

$$\mu_i = \frac{(3 \times \mu_{dry} + 4 \times \mu_{dry1/2})}{7}$$

where

- μ_{dry} = final moisture content for the eco programme at full load, in percent and rounded to one decimal place.
 $\mu_{dry1/2}$ = final moisture content for the eco programme at partial load, in percent and rounded to one decimal place.

2. CONDENSATION EFFICIENCY

The condensation efficiency of a programme (C_t) is the ratio between the mass of moisture condensed and collected in the container of a condenser tumble dryer and the mass of moisture removed from the load by the programme, the latter being the difference between the mass of the wet test load before drying and the mass of the test load after drying.

C_t is calculated as a percentage and rounded to the nearest whole percent as follows:

$$C_t = 0,24 \times C_{dry} + 0,76 \times C_{dry1/2}$$

where

- C_{dry} = average condensation efficiency of the eco programme at full load,
 $C_{dry1/2}$ = average condensation efficiency of the eco programme at partial load.

3. LOW POWER MODES

The power consumption of the off mode (P_o), standby mode (P_{sm}), and where applicable delay start (P_{ds}) are measured. The measured values are expressed in W and rounded to two decimal places.

During measurements of the power consumption in low power modes, the following functions shall be checked and recorded:

- (a) the display or not of information;
- (b) the activation or not of a network connection.

If the standby mode includes the display of information or status, this function shall also be provided when the networked standby is provided.

If the household tumble dryer provides for a wrinkle guard function, such function shall be interrupted by opening the door of the household tumble dryer, or any other appropriate intervention 15 minutes before the measurement of power consumption.

4. ACOUSTIC AIRBORNE NOISE EMISSION

The acoustic airborne noise emission of the drying cycle of a household tumble dryer shall be calculated for the eco programme at full load, using harmonised standards whose reference numbers have been published for this purpose in the *Official Journal of the European Union*, or using other reliable, accurate and reproducible methods, which take into account the generally recognised state-of-the-art.

Acoustic airborne noise emissions shall be measured in dB(A) with respect to 1 pW and shall be rounded to the nearest integer.

ANNEX V

Product information sheet

Pursuant to point Article 3(1), point (b), the supplier shall enter the information into the product database as set out in Table 4.

The user manual or other literature provided with the product shall clearly indicate the link to the model in the product database as a human-readable Uniform Resource Locator (URL) or as a QR code or by providing the product registration number.

Table 4

Content, order and format of the product information sheet

Supplier's name or trade mark ^(a) ^(c) :				
Supplier's address ^(a) ^(c) :				
Model identifier ^(a) :				
Technology of tumble dryer	[electric air-vented, electric condenser, gas-fired]			
General product parameters:				
Parameter	Value	Parameter	Value	
Rated capacity ^(b) (kg)	x,x	Dimensions ^(b) ^(c) in cm	Height	x
			Width	x
			Depth	x
Energy Efficiency Index (EEI) ^(b)	x,x	Energy efficiency class ^(b)	[A/B/C/D/E/F/G] ^(d)	
Condensation efficiency (%) ^(b) (if applicable)	xx	Condensation efficiency class (if applicable) ^(b)	[A/B/C/D] ^(d)	
Weighted energy consumption in kWh per drying cycle ^(b) . Actual energy consumption will depend on how the appliance is used.	x,xx			
Programme duration ^(b) (hours:minutes)	Rated capacity	x:xx	Type	[built-in/free-standing]
	Half	x:xx		
Acoustic airborne noise emission ^(b) (dB(A) re 1 pW)	x	Acoustic airborne noise emission class ^(b)	[A/B/C/D] ^(d)	
Off-mode (if applicable) (W)	x,xx	Standby mode (if applicable) (W)	x,xx	
Delay start (W) (if applicable)	x,xx	Networked standby (W) (if applicable)	x,xx	
For household tumble dryers equipped with a heat pump, the chemical name or the accepted industry designation of the refrigerant gas used, without prejudice to Regulation (EU) No 517/2014 on fluorinated greenhouse gases ⁽¹⁾ ^(a) ^(c) .				

Weblink to information on spare parts availability for professional repairers and end users ^(a) ^(c) ^(e)	https://xxx
Weblink to repair instructions for end-users ^(a) ^(c) ^(f)	https://xxx
Weblink to indicative pre-tax prices ^(a) ^(c) ^(g)	https://xxx
Minimum duration of the guarantee offered by the supplier ^(l) ^(c)	

Additional information ^(l) ^(c)

Link to the supplier's website, where the information in point 6 of Annex II to Commission Regulation (EU) 2023/2533 ^(c) ⁽²⁾ is found:

⁽¹⁾ Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006 (OJ L 150, 20.5.2014, p. 195).

⁽²⁾ Commission Regulation (EU) 2023/2533 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for household tumble dryers, amending Commission Regulation (EU) 2023/826, and repealing Commission Regulation (EU) No 932/2012 (OJ L, 2023/2533, 22.11.2023, ELI: <http://data.europa.eu/eli/reg/2023/2533/oj>).

⁽³⁾ This item shall not be considered relevant for the purpose of Article 2(6) of Regulation (EU) 2017/1369.

^(b) For the eco programme.

^(c) Changes to those items shall not be considered relevant for the purpose of Article 4(4) of Regulation (EU) 2017/1369.

^(d) If the product database automatically generates the definitive content of that cell the supplier shall not enter those data.

^(e) The suppliers' obligation is to include the weblink to the website where the relevant information will be available. Effective access to the website is nevertheless to be granted in accordance with the timeline and provisions laid down in Annex II, point 5(1)(b) of Regulation (EU) 2023/2533.

^(f) The suppliers' obligation is to include the weblink to the website where the relevant information will be available. Effective access to the website is nevertheless to be granted in accordance with the timeline and provisions laid down in Annex II, point 5(1)(d) of Regulation (EU) 2023/2533.

^(g) The suppliers' obligation is to include the weblink to the website where the relevant information will be available. Effective access to the website is nevertheless to be granted in accordance with the timeline and provisions laid down in Annex II, point 5(1)(f) of Commission Regulation (EU) 2023/2533.

^(h) For gas-fired tumble dryers calculated as the weighted average energy consumption per 100 drying cycles according to Annex IV point 1(f), divided by 100.

ANNEX VI

Technical documentation

1. For electric household tumble dryers, the technical documentation referred to in Article 3(1), point (d), shall include the following information:
 - (a) a general description of the model allowing it to be unequivocally and easily identified;
 - (b) references to the harmonised standards applied or other measurement standards used;
 - (c) specific precautions to be taken when the model is assembled, installed, maintained or tested;
 - (d) the details and the results of calculations performed in accordance with Annex IV;
 - (e) testing conditions, where they are not described sufficiently in the references provided pursuant to point (b) of this section;
 - (f) equivalent models, if any, including model identifiers;
 - (g) the values for the technical parameters set out in Table 5, which are considered as the declared values for the purpose of the verification procedure set out in Annex IX.

The information provided pursuant to points (a) to (g) shall constitute the mandatory specific parts of the technical documentation that the supplier is to enter into the database, pursuant to Article 12(5) of Regulation (EU) 2017/1369.

Table 5

Information to be included in the technical documentation for electric household tumble dryers

PARAMETER	UNIT	VALUE
Rated capacity for the eco programme, at 0,5 kg intervals (<i>c</i>)	kg	X,X
Energy consumption of the eco programme at full load (E_{dry})	kWh/drying cycle	X,XX
Energy consumption of the eco programme at partial load ($E_{dry,1/2}$)	kWh/drying cycle	X,XX
Weighted energy consumption of the eco programme (E_{tc})	kWh/drying cycle	X,XX
Standard energy consumption of the eco programme (SE_C)	kWh/drying cycle	X,XX
Energy Efficiency Index (<i>EEL</i>)	-	X,X
Programme duration for the eco programme at full load (T_{dry})	h:min	X:XX
Programme duration for the eco programme at partial load ($T_{dry,1/2}$)	h:min	X:XX
Weighted programme duration for the eco programme (T_t)	h:min	X:XX
Average condensation efficiency of the eco programme at full load (C_{dry}) (if applicable)	%	XX
Average condensation efficiency of the eco programme at partial load ($C_{dry,1/2}$) (if applicable)	%	XX
Weighted condensation efficiency of the eco programme (C_t) (if applicable)	%	XX

Acoustic airborne noise emission during the eco programme	dB(A) with respect to 1 pW	X
Power consumption in off mode (P_o) (if applicable)	W	X,XX
Power consumption in standby mode (P_{sm}) (if applicable)	W	X,XX
Does 'standby mode' include the display of information?	-	Yes/No
Power consumption in 'standby mode' in condition of networked standby (P_{nsm}) (if applicable)	W	X,XX
Power consumption in delay start (P_{ds}) (if applicable)	W	X,XX

2. For gas-fired tumble dryers, the technical documentation referred to Article 3(1), point (d), shall include the information listed in paragraph 1, points (a) to (f) of this Annex, and the information set out in Table 6 for the eco programme. The values in Table 6 are considered as the declared values for the purpose of the verification procedure in Annex IX.

The information provided pursuant to the first subparagraph of this point shall constitute the mandatory specific parts of the technical documentation that the supplier is to enter into the database, pursuant to Article 12(5) of Regulation (EU) 2017/1369.

Table 6

Information to be included in the technical documentation for gas-fired tumble dryers

PARAMETER	UNIT	VALUE
Rated capacity for the eco programme, at 0,5 kg intervals (c)	kg	X,X
Gas consumption of the eco programme at full load (E_{gdry})	kWh/drying cycle	X,XX
Gas consumption of the 'eco' programme at partial load ($E_{gdry,1/2}$)	kWh/drying cycle	X,XX
Auxiliary electricity consumption of the eco programme at full load	kWh/drying cycle	X,XX
Auxiliary electricity consumption of the eco programme at partial load	kWh/drying cycle	X,XX
Weighted energy consumption of the eco programme (E_{IC})	kWh/drying cycle	X,XX
Standard energy consumption of the eco programme (SE_C)	kWh/drying cycle	X,XX
Energy Efficiency Index (EEL)	-	X,X
Programme duration for the eco programme at full load (T_{dry})	h:min	XXX
Programme duration for the eco programme at partial load ($T_{dry,1/2}$)	h:min	XXX
Weighted programme duration for the eco programme (T_i)	h:min	XXX
Acoustic airborne noise emission during the eco programme	dB(A) re 1 pW	X

Power consumption in off mode (P_o) (if applicable)	W	X,XX
Power consumption in standby mode (P_{sm}) (if applicable)	W	X,XX
Does 'standby mode' include the display of information?	-	Yes/No
Power consumption in standby mode in condition of networked standby (P_{nsm}) (if applicable)	W	X,XX
Power consumption in 'delay start' (P_{ds}) (where applicable)	W	X,XX

3. The information included in the technical documentation for a particular household tumble dryer model may be obtained by using any of the following methods:

- (a) from a model that has the same technical characteristics relevant for the technical information to be provided but is produced by a different supplier,
- (b) by calculation on the basis of design or extrapolation from another model of the same or a different supplier,

Where the information referred to in the first subparagraph is obtained using any of the methods set out in points (a) and (b), the technical documentation shall include the details of the calculation, the assessment undertaken by suppliers to verify the accuracy of the calculation and, where appropriate, the declaration of identity between the models of different suppliers.

—

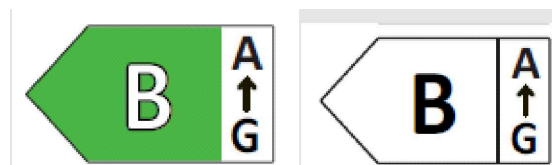
ANNEX VII

Information to be provided in visual advertisements, in technical promotional material and in distance selling, except distance selling on the internet

1. In visual advertisements, for the purposes of ensuring conformity with the requirements laid down in Article 3(1), point (e), and in Article 4, point (c), the energy efficiency class and the range of energy efficiency classes available on the label shall be shown as set out in point 4 of this Annex.
2. In technical promotional material, for the purposes of ensuring conformity with the requirements laid down in Article 3(1), point (f), and in Article 4, point (d), the energy efficiency class and the range of energy efficiency classes available on the label shall be shown as set out in point 4 of this Annex.
3. In the case of paper-based distance selling, the energy efficiency class and the range of energy efficiency classes available on the label shall be shown as set out in point 4 of this Annex.
4. In the cases referred to in points 1, 2 and 3, the energy efficiency class and the range of energy efficiency classes shall be shown, as indicated in Figure 5, in accordance with the following specifications:
 - (i) an arrow shall be used, containing the letter of the energy efficiency class in 100 % white, Calibri Bold and in a font size at least equivalent to that of the price, when the price is shown;
 - (ii) the colour of the arrow shall match the colour of the energy efficiency class;
 - (iii) the range of available energy efficiency classes shall be in 100 % black;
 - (iv) the size shall be such that the arrow is clearly visible and legible. The letter in the energy efficiency class arrow shall be positioned in the centre of the rectangular part of the arrow, with a border of 0,5 pt in 100 % black placed around the arrow and the letter of the energy efficiency class.

By way of derogation, if the visual advertisement, technical promotional material or paper-based distance selling is printed in monochrome, the arrow may be in monochrome in that visual advertisement, technical promotional material or paper-based distance selling.

Figure 5

Coloured/monochrome left arrow, with range of energy efficiency classes indicated

5. Telemarketing-based distance selling shall specifically inform the customer of the energy efficiency class of the product and of the range of energy efficiency classes available on the label, and the customer shall be given the possibility to access the full label and the product information sheet through a free access website, or by requesting a printed copy.
6. For all the situations mentioned in points 1, 2, 3 and 5, it shall be possible for the customer to obtain, on request, a printed copy of the label and the product information sheet.

ANNEX VIII

Information to be provided in the case of distance selling on the internet

1. The appropriate label made available by suppliers in accordance with Article 3(1), point (g), shall be shown on the display mechanism in proximity to the price of the product if the price is shown, and in all other cases in proximity to the name or the picture of the product. The size shall be such that the label is clearly visible and legible and shall be proportionate to the size specified in Annex III. The label may be displayed using a nested display, in which case the image used for accessing the label shall comply with the specifications laid down in point 2 of this Annex. If nested display is applied, the label shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the image.
2. The image used for accessing the label in the case of nested display, as indicated in Figure 6, shall:
 - (i) be an arrow in the colour corresponding to the energy efficiency class of the product on the label;
 - (ii) indicate the energy efficiency class of the product on the arrow in 100 % white, Calibri Bold and in a font size equivalent to that of the price;
 - (iii) have the range of available energy efficiency classes in 100 % black;
 - (iv) have the following format, and its size shall be such that the arrow is clearly visible and legible. The letter in the energy efficiency class arrow shall be positioned in the centre of the rectangular part of the arrow, with a visible border in 100 % black placed around the arrow and the letter of the energy efficiency class:

Figure 6

Coloured left arrow, with range of energy efficiency classes indicated

3. In the case of a nested display, the sequence of display of the label shall be as follows:
 - (a) the image referred to in point 2 of this Annex shall be shown on the display mechanism in proximity to the price of the product;
 - (b) the image shall link to the label set out in Annex III;
 - (c) the label shall be displayed after a mouse click, mouse roll-over or tactile screen expansion on the image;
 - (d) the label shall be displayed by pop up, new tab, new page or inset screen display;
 - (e) for magnification of the label on tactile screens, the device conventions for tactile magnification shall apply;
 - (f) the label shall cease to be displayed by means of a close option or other standard closing mechanism;
 - (g) the alternative text for the graphic, to be displayed on failure to display the label, shall be the energy efficiency class of the product in a font size equivalent to that of the price.

4. The electronic product information sheet made available by the supplier in accordance with Article 3(1), point (h) shall be shown on the display mechanism in proximity to the price of the product if the price is shown, and in all other cases in proximity to the name or the picture of the product. The size shall be such that the product information sheet is clearly visible and legible. The product information sheet may be displayed using a nested display or by referring to the product database, in which case the link used for accessing the product information sheet shall clearly and legibly indicate 'Product information sheet'. If a nested display is used, the product information sheet shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the link.
-

ANNEX IX

Verification procedure for market surveillance purposes

1. The verification tolerances set out in this Annex relate only to the verification of the declared values of parameters by Member State authorities and shall not be used by the supplier as an allowed tolerance to establish the values in the technical documentation or in interpreting these values with a view to achieving a compliance or to communicate better performance by any means.
2. The values and classes published on the label or in the product information sheet shall not be more favourable for the supplier than the values reported in the technical documentation.
3. Where a model has been designed in such a way that it is able to detect that it is being tested (for example by recognising the test conditions or test drying cycle), and to react specifically by automatically altering its performance during the test with the objective of reaching a more favourable level for any of the parameters specified in this Regulation or included in the technical documentation or included in any of the documentation provided, the model and all equivalent models shall be considered not compliant.
4. As part of verifying the compliance of a product model with the requirements laid down in this Regulation, the authorities of Member States shall apply the following procedure:
 - (a) the Member State authorities shall verify one single unit of the model;
 - (b) the model shall be considered to comply with the applicable requirements where it meets all the following conditions:
 - (i) the declared values given in the technical documentation pursuant to Article 3(3) of Regulation (EU) 2017/1369, and, where applicable, the values used to calculate such declared values, are not more favourable for the supplier than the corresponding values given in the test reports;
 - (ii) the values published on the label and in the product information sheet are not more favourable for the supplier than the declared values, and the indicated energy efficiency class, the condensation efficiency class and the acoustic airborne noise emission class are not more favourable for the supplier than the class determined by the declared values;
 - (iii) the determined values, that is to say the values of the relevant parameters as measured in testing and the values calculated from these measurements comply with:
 - (a) the validity criteria set out in Table 7;
 - (b) the respective verification tolerances set out in Table 7.
5. Where the results referred to in paragraph 4(b), points (i) or (ii) are not achieved, the model and all equivalent models shall be considered not in compliance with this Regulation.
6. Where the result referred to in paragraph 4(b), point (iii) is not achieved, the Member State authorities shall select three additional units of the same model for testing. As an alternative, the three additional units selected may be of one or more equivalent models.
7. The model and all equivalent models shall be considered not to comply with this Regulation if the determined value for the average final moisture content for the eco programme does not comply with the validity criteria as given in Table 7 for one of the three additional units referred to in point 6. In this case, the other units not yet tested do not need to be tested. The model shall be considered to comply if the determined value for the final moisture content complies with the validity criteria as given in Table 7 for each of the three additional units.

8. The model shall be considered to comply with the applicable requirements where for the three units referred to in point 6, the arithmetical mean of the determined values complies with the respective verification tolerances set out in Table 7.
9. Where the result referred to in point 8 is not achieved, the model and all equivalent models shall be considered not in compliance with this Regulation.
10. The Member State authorities shall provide all relevant information to the authorities of the other Member States and to the Commission without delay after a decision is taken on the non-compliance of the model pursuant paragraphs 2, 3, 5, 7 or 9.
11. The Member State authorities shall use the measurement and calculation methods set out in Annex IV.
12. The Member State authorities shall only apply the validity criteria and the verification tolerances that are set out in Table 7 and shall only use the procedure described in points 1 to 9 for the requirements referred to in this Annex. For the parameters set out in Table 7 no other validity criteria or verification tolerances, such as those set out in harmonised standards or in any other measurement method, shall be applied.

Table 7

Verification tolerances and validity criteria

Parameter	Validity criteria
Average final moisture content of the eco programme μ_t	The determined value shall be measured and calculated and be lower than 1,5 %.
Parameter	Verification tolerances
E_{dry} and $E_{dry/2}$	The determined value* shall not exceed the declared value of E_{dry} and $E_{dry/2}$ by more than 6 %.
Eg_{dry} and $Eg_{dry/2}$	The determined value* shall not exceed the declared value of Eg_{dry} and $Eg_{dry/2}$ by more than 6 %.
$Eg_{dry,a}$ and $Eg_{dry/2,a}$	The determined value* shall not exceed the declared value of $Eg_{dry,a}$ and $Eg_{dry/2,a}$ by more than 6 %.
C_t	The determined value* shall not be less than the declared value of C_t by more than 6 %.
T_{dry} and $T_{dry/2}$	The determined value* shall not exceed the declared value of T_{dry} and $T_{dry/2}$ by more than 6 %.
P_o	The determined value* of power consumption P_o shall not exceed the declared value by more than 0,10 W.
P_{sm}	The determined value* of power consumption P_{sm} shall not exceed the declared value by more than 10 % if the declared value is higher than 1,00 W, or by more than 0,10 W if the declared value is lower than or equal to 1,00 W.
P_{ds}	The determined value* of power consumption P_{ds} shall not exceed the declared value by more than 10 % if the declared value is higher than 1,00 W, or by more than 0,10 W if the declared value is lower than or equal to 1,00 W.
Acoustic airborne noise emissions	The determined value* shall not exceed the declared value by more than 2 dB re 1 pW.

* Where three additional units are tested in accordance with point 6, the determined value means the arithmetical mean of the values determined for those three additional units.

ANNEX X

Multi-drum household tumble dryers

The provisions of Annexes II and III, following the measurement and calculation methods set out in Annex IV, shall apply to each drum. The provisions of Annexes II and III shall apply to each of the drums independently, except when the drums are built in the same casing and can, in the eco programme, only operate simultaneously. In the latter case, these provisions shall apply to the multi-drum household tumble dryer as a whole, as follows:

- (a) the rated capacity of the multi-drum household tumble dryer as a whole shall be the sum of the rated capacities of each drum;
- (b) the energy consumption of the multi-drum household tumble dryer as a whole shall be the sum of the energy consumption of each drum;
- (c) the Energy Efficiency Index (EEI) of the multi-drum household tumble dryer as a whole shall be calculated using the rated capacity and the energy consumption of points (a) and (b) above. The energy efficiency class applies to the whole multi-drum household tumble dryer;
- (d) the programme duration of the multi-drum household tumble dryer as a whole shall be the duration of the longest eco programme operating in each drum;
- (e) the final moisture content of the eco programme shall be measured individually for each drum of the household multi-drum tumble dryer;
- (f) the low power modes, the acoustic airborne noise emissions and the acoustic airborne noise emissions class shall apply to the whole multi-drum household tumble dryer.

The product information sheet and the technical documentation shall include and present jointly the information required under Annex V and Annex VI, respectively, for all the drums to which the provisions of this annex apply.

The provisions of Annexes VII and VIII shall apply to each of the drums to which the provisions of this annex apply.

The verification procedure set out in Annex IX shall apply to the multi-drum household tumble dryers as a whole, with the validity criteria and verification tolerances applying to each of the parameters determined in application of this Annex.
