

## **DELEGATED REGULATION (EU) 392/2012 of 1 March 2012 supplementing Directive 2010/30/EU with regard to energy labelling of household tumble driers**

Incorporated and adapted by Ministerial Council Decision 2014/02/MC-EnC of 23 September 2014 adapting certain Delegated Regulations on energy related products, and amended by Ministerial Council Decision 2018/03/MC-EnC of 29 November 2018 adapting and implementing Regulation (EU) 2017/1369 of the European Parliament and of the Council setting a framework for energy labelling, and certain Delegated Regulations on energy-related products.

*The adaptations made by Ministerial Council Decisions 2014/02/MC-EnC and 2018/03/MC-EnC are highlighted in **bold and blue**.*

Whereas:

(1) Directive 2010/30/EU requires the Commission to adopt delegated acts for the labelling of energy-related products representing significant potential for energy savings and presenting a wide disparity in performance levels with equivalent functionality.

(2) Provisions for the energy labelling of household tumble driers were established by Commission Directive 95/13/EC of 23 May 1995 implementing Council Directive 92/75/EEC with regard to energy labelling of household electric tumble driers.

(3) The energy used by household tumble driers accounts for a significant part of total household energy demand in the Union. In addition to the energy efficiency improvements already achieved, the scope for further reducing the energy consumption of household tumble driers is substantial.

(4) Directive 95/13/EC should be repealed and new provisions should be laid down by this Regulation in order to ensure that the energy label provides dynamic incentives for suppliers to further improve the energy efficiency of household tumble driers and to accelerate market transformation towards energy-efficient technologies.

(5) Household combined washer-driers are addressed in Commission Directive 96/60/EC of 19 September 1996 implementing Council Directive 92/75/EEC with regard to energy labelling of household combined washer-driers. They have particular characteristics and should therefore be exempted from the scope of this Regulation.

(6) The information provided on the label should be obtained through reliable, accurate and reproducible measurement procedures which take into account the recognised state-of-the-art measurement methods, including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations.

(7) This Regulation should specify a uniform design and content for the label for household tumble driers, including gas-fired driers.

(8) In addition, this Regulation should specify requirements as to the 'technical documentation' and the 'product fiche' for household tumble driers.

(9) Moreover, this Regulation should specify requirements as to the information to be provided for any

form of distance selling and advertisement of household tumble driers and any form of technical promotional material for such appliances.

(10) It is appropriate to provide for a review of this Regulation in order to take into account technological progress.

(11) In order to facilitate the transition from Directive 95/13/EC to this Regulation, household tumble driers labelled in accordance with this Regulation should be considered as compliant with Directive 95/13/EC.

(12) Directive 95/13/EC should therefore be repealed,

## ***Article 1***

### **Subject matter and scope**

1. This Regulation establishes requirements for the labelling of and the provision of supplementary product information on electric mains-operated and gas-fired household tumble driers and built-in household tumble driers, including those sold for non-household use.

2. This Regulation shall not apply to household combined washer-driers and household spin-extractors.

## ***Article 2***

### **Definitions**

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

(1) 'household tumble drier' means an appliance in which textiles are dried by tumbling in a rotating drum, through which heated air is passed and which is designed to be used principally for non-professional purposes;

(2) 'built-in household tumble drier' means a household tumble drier intended to be installed in a cabinet, a prepared recess in a wall or a similar location, requiring furniture finishing;

(3) 'household combined washer-drier' means a household washing machine which includes both a spin extraction function and also a means for drying the textiles, usually by heating and tumbling;

(4) 'household spin-extractor', also known commercially as 'spin-drier', means an appliance in which water is removed from the textiles by centrifugal action in a rotating drum and drained through an automatic pump and which is designed to be used principally for non-professional purposes;

(5) 'air-vented tumble drier' means a tumble drier that draws in fresh air, passes it over the textiles and vents the resulting moist air into the room or outside;

(6) 'condenser tumble drier' means a tumble drier which includes a device (either using condensation or any other means) for removing moisture from the air used for the drying process;

(7) 'automatic tumble drier' means a tumble drier which switches off the drying process when a certain moisture content of the load is detected, for example through conductivity or temperature sensing;

(8) 'non-automatic tumble drier' means a tumble drier which switches off the drying process after a

predefined period, usually controlled by a timer, but which may also be manually switched off;

(9) 'programme' means a series of operations that are predefined and which are declared by the supplier as suitable for drying certain types of textile;

(10) 'cycle' means a complete drying process, as defined for the selected programme;

(11) 'programme time' means the time that elapses from the initiation of the programme until the completion of the programme, excluding any end-user programmed delay;

(12) 'rated capacity' means the maximum mass in kilograms, indicated by the supplier in 0,5 kilogram increments of dry textiles of a particular type, which can be treated in a household tumble drier with the selected programme, when loaded in accordance with the supplier's instructions;

(13) 'partial load' means half of the rated capacity of a household tumble drier for a given programme;

(14) 'condensation efficiency' means the ratio between the mass of moisture condensed by a condenser tumble drier and the mass of moisture removed from the load at the end of a cycle;

(15) 'off-mode' means a condition where the household tumble drier is switched off using appliance controls or switches accessible to and intended for operation by the end-user during normal use to attain the lowest power consumption that may persist for an indefinite time while the household tumble drier is connected to a power source and used in accordance with the supplier's instructions; where there is no control or switch accessible to the end-user, 'off-mode' means the condition reached after the household tumble drier reverts to a steady-state power consumption on its own;

(16) 'left-on mode' means the lowest power consumption mode that may persist for an indefinite time after completion of the programme without any further intervention by the end-user besides unloading of the household tumble drier;

(17) 'equivalent household tumble drier' means a model of household tumble drier placed on the market with the same rated capacity, technical and performance characteristics, energy consumption, condensation efficiency where relevant, standard cotton programme time and airborne acoustical noise emissions during drying as another model of household tumble drier placed on the market under a different commercial code number by the same supplier;

(18) 'end-user' means a consumer buying or expected to buy a household tumble drier;

(19) 'point of sale' means a location where household tumble driers are displayed or offered for sale, hire or hire-purchase.

(20) 'standard cotton programme' means the cycle which dries cotton laundry with an initial moisture content of the load of 60 % up to a remaining moisture content of the load of 0 %.

### **Article 3**

#### **Responsibilities of suppliers**

Suppliers shall ensure that:

(a) each household tumble drier is supplied with a printed label in the format and containing the information set out in Annex I;

(b) a product fiche, as set out in Annex II, is made available;

(c) technical documentation as set out in Annex III is made available on request to the authorities of the **Contracting Parties** and to the Commission;

(d) any advertisement for a specific model of household tumble drier contains the energy efficiency class, if the advertisement discloses energy-related or price information;

(e) any technical promotional material concerning a specific model of household tumble drier which describes its specific technical parameters includes the energy efficiency class of that model;

**(f) an electronic label in the format and containing the information set out in Annex I is made available to dealers for each household tumble drier model placed on the market from 1 January 2020 with a new model identifier. It may also be made available to dealers for other household tumble drier models;**

**(g) an electronic product fiche as set out in Annex II is made available to dealers for each household tumble drier model placed on the market from 1 January 2020 with a new model identifier. It may also be made available to dealers for other household tumble drier models.<sup>1</sup>**

#### **Article 4**

##### **Responsibilities of dealers**

Dealers shall ensure that:

(a) each household tumble drier, at the point of sale, bears the label provided by suppliers in accordance with Article 3(a) on the outside of the front or top of the household tumble drier, in such a way as to be clearly visible;

**(b) household tumble driers offered for sale, hire or hire-purchase where the end-user cannot be expected to see the product displayed, as specified in Article 7 of Directive 2010/30/EU, as incorporated and adapted by the Ministerial Council Decision 2010/02/MC-EnC, are marketed with the information provided by suppliers in accordance with Annex IV to this Regulation. Where the offer is made through the internet and an electronic label and an electronic product fiche have been made available in accordance with Article 3(f) and 3(g) the provisions of Annex VIII shall apply instead;<sup>2</sup>**

(c) any advertisement for a specific model of household tumble drier contains a reference to the energy efficiency class, if the advertisement discloses energy-related or price information;

(d) any technical promotional material concerning a specific model of household tumble drier which describes its specific technical parameters includes a reference to the energy efficiency class of that model.

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<sup>1</sup> Article 3, points (f) and (g) are added in accordance with Article 6(1) of Delegated Regulation (EU) 518/2014, as incorporated and adapted by Ministerial Council Decision 2018/03/MC-EnC

<sup>2</sup> Article 4, point (b) is replaced in accordance with Article 6(2) of Delegated Regulation (EU) 518/2014, as incorporated and adapted by Ministerial Council Decision 2018/03/MC-EnC

## **Article 5**

### **Measurement methods**

The information to be provided under Articles 3 and 4 shall be obtained by reliable, accurate and reproducible measurement procedures, which take into account the recognised state-of-the-art measurement methods.

## **Article 6**

### **Verification procedure for market surveillance purposes**

**Contracting Parties** shall apply the procedure set out in Annex V for assessing the conformity of the declared energy efficiency class, the energy consumption per cycle, the condensation efficiency class where applicable, the rated capacity, the power consumption in off-mode and left-on mode, the duration of the left-on mode, the programme time and airborne acoustical noise emissions.

## **Article 7**

### **Revision**

<...><sup>3</sup>

## **Article 8**

### **Repeal**

<...><sup>4</sup>

## **Article 9**

### **Transitional provisions**

1. Article 3(d) and (e) and Article 4(b), (c) and (d) shall not apply to printed advertisements and printed technical promotional material published before **30 April 2016**.
2. Household tumble driers placed on the market before **1 January 2016** shall comply with the provisions of Directive 95/13/EC.
3. Household tumble driers which comply with the provisions of this Regulation and which are placed on the market or offered for sale, hire or hire-purchase before **1 January 2016** shall be regarded as complying with the requirements of Directive 95/13/EC.

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<sup>3</sup> Not applicable

<sup>4</sup> Not applicable

## **Article 10**

### **Entry into force and application**

1. **This Decision (2014/02/MC-EnC) enters into force upon its adoption (23 September 2014) and it is addressed to the Contracting Parties<sup>5</sup>.**

2. It shall apply from **1 January 2016**. However, Article 3(d) and (e) and Article 4(b), (c) and (d) shall apply from **30 April 2016**.

**The Secretariat shall monitor and review the implementation of the Delegated Regulations referred to in Article 1 in the Contracting Parties. Contracting Parties shall communicate to the Energy Community Secretariat the text of the main provisions of national law which they adopt in the field covered by these Delegated Regulations, in the next year of the deadline for the overall implementation<sup>6</sup>.**

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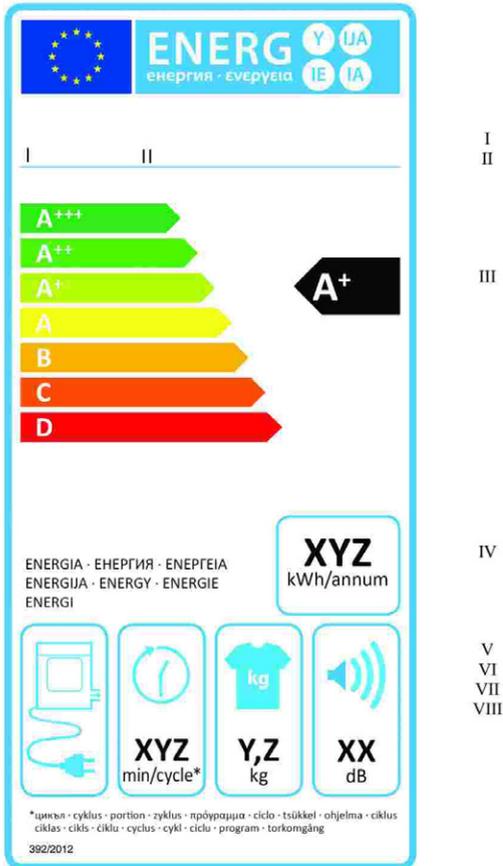
5 The text displayed here corresponds to Article 3(1) of Decision 2014/02/MC-EnC

6 The text displayed here corresponds to Article 2(3) of Decision 2014/02/MC-EnC

## ANNEX I

### Label

#### 1. LABEL FOR AIR-VENTED HOUSEHOLD TUMBLE DRIER



1.1. The following information shall be included in the label for air vented household tumble driers:

- I. supplier's name or trade mark;
- II. supplier's model identifier, meaning the code, usually alphanumeric, which distinguishes a specific household tumble drier model from other models with the same trade mark or supplier's name;
- III. the energy efficiency class as defined in point 1 of Annex VI; the head of the arrow containing the energy efficiency class of the household tumble drier shall be placed at the same height as the head of the arrow of the relevant energy efficiency class;
- IV. weighted annual energy consumption ( $AE_c$ ) in kWh/year, rounded up to the nearest integer and calculated in accordance with Annex VII;

V. information on the type of household tumble drier;

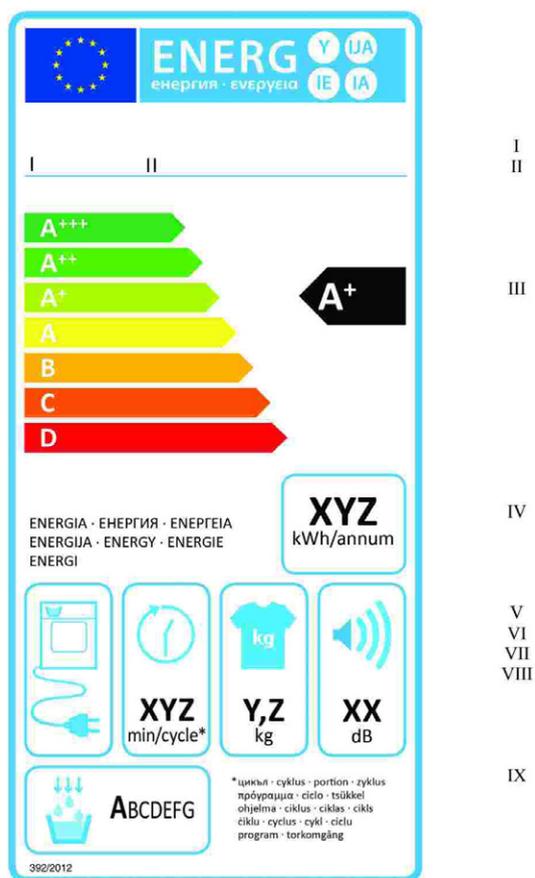
VI. cycle time corresponding to the standard cotton programme at full load in minutes and rounded to the nearest minute;

VII. rated capacity, in kg, for the standard cotton programme at full load;

VIII. the sound power level (weighted average value —  $L_{WA}$ ), during the drying phase, for the standard cotton programme at full load, expressed in dB, rounded to the nearest integer.

1.2. The design of the label for air vented household tumble driers shall be in accordance with point 4 of this Annex. Where a model has been granted an 'EU Ecolabel' under Regulation (EC) No 66/2010 of the European Parliament and of the Council, a copy of the EU Ecolabel may be added.

## 2. LABEL FOR CONDENSER HOUSEHOLD TUMBLE DRIER

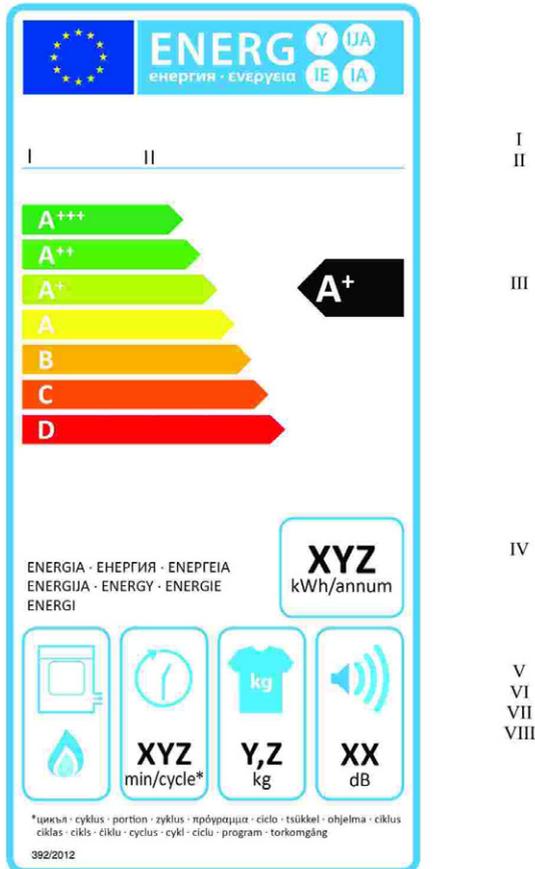


2.1. In addition to the information listed in point 1.1, the label for condenser household tumble driers shall include:

IX. the condensation efficiency class in accordance with point 2 of Annex VI.

2.2. The design of the label for condenser household tumble driers shall be in accordance with point 4 of this Annex. Where a model has been awarded an 'EU Ecolabel' under Regulation (EC) No 66/2010, a copy of the EU Ecolabel may be added.

### 3. LABEL FOR GAS-FIRED HOUSEHOLD TUMBLE DRIER

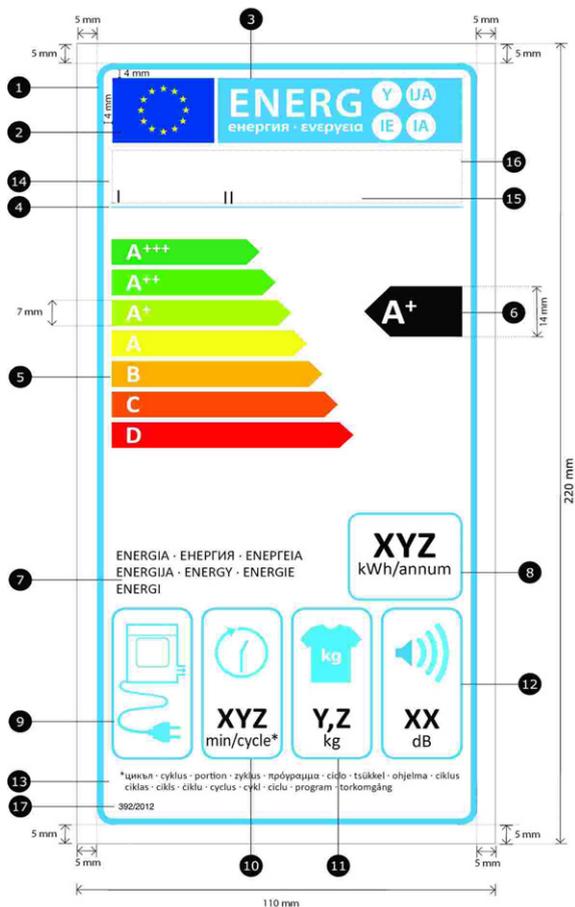


3.1. The information listed in point 1.1 shall be included in the label for gas fired household tumble driers.

3.2. The design of the label for gas fired household tumble driers shall be in accordance with point 4 of this Annex. Where a model has been awarded an 'EU Ecolabel' under Regulation (EC) No 66/2010, a copy of the EU Ecolabel may be added.

#### 4. LABEL DESIGN

4.1. For air vented household tumble driers, the design of the label shall be as in the figure below.



Whereby

(a) The label must be at least 110 mm wide and 220 mm high. Where the label is printed in a larger format, its content must nevertheless remain proportionate to the specifications above.

(b) The background shall be white.

(c) Colours shall be CMYK — cyan, magenta, yellow and black following this example: 00-70-X-00: 0 % cyan, 70 % magenta, 100 % yellow, 0 % black.

(d) The label shall fulfil all of the following requirements (numbers refer to the figure above).

**1** **Eu label border stroke:** 5 pt — colour: Cyan 100 % — round corners: 3,5 mm.

**2** **EU logo** — colours: X-80-00-00 and 00-00-X-00.

**3** **Energy label:** colour: X-00-00-00. Pictogram as depicted; EU logo and energy logo (combined):

width: 92 mm, height: 17 mm.

4 **Sub-logos border:** 1 pt — colour: Cyan 100 % — length: 92,5 mm.

5 **A-G scale**

— **Arrow:** height: 7 mm, gap: 0,75 mm – colours:

— Highest class: X-00-X-00,

— Second class: 70-00-X-00,

— Third class: 30-00-X-00,

— Fourth class: 00-00-X-00,

— Fifth class: 00-30-X-00,

— Sixth class: 00-70-X-00,

— Last class: 00-X-X-00.

— **Text:** Calibri bold 18 pt, capitals and white; '+' symbols: Calibri bold 12 pt, white aligned on a single row.

6 **Energy efficiency class**

— **Arrow:** width: 26 mm, height: 14 mm, 100 % black;

— **Text:** Calibri bold 29 pt, capitals and white; '+' symbols: Calibri bold 18 pt, white aligned on a single row.

7 **Energy**

— **Text:** Calibri regular 11 pt, capitals, 100 % black.

8 **Weighted annual energy consumption:**

— **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.

— **Value:** Calibri bold 30 pt, 100 % black.

— **Second line:** Calibri regular 14 pt, 100 % black.

9 **Type of household tumble drier:**

— **Pictogram** as depicted

— **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.

10 **Cycle time:**

— **Pictogram** as depicted

— **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.

— **Value:** Calibri bold 24 pt, 100 % black; and Calibri regular 16 pt, 100 % black.

11 **Rated capacity:**

— **Pictogram** as depicted

— **Border:** 2 pt — colour: Cyan 100% — round corners: 3,5 mm.

— **Value:** Calibri bold 24 pt, 100 % black; and Calibri regular 16 pt, 100 % black.

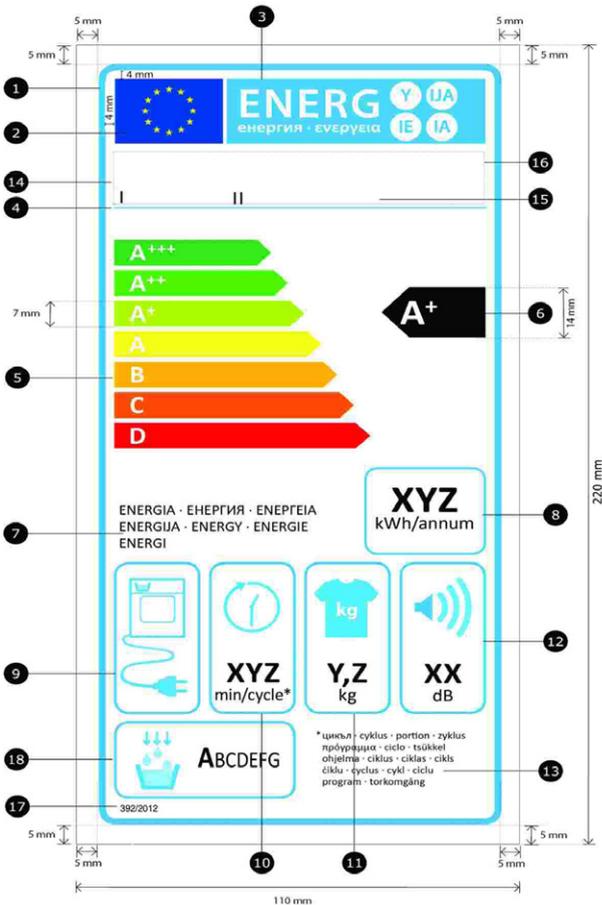
12 **Sound power level:**

— **Pictogram** as depicted

- **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.
- **Value:** Calibri bold 24 pt, 100 % black; and Calibri regular 16 pt, 100 % black.

- 13 **Asterisk:** Calibri regular 6 pt, 100 % black.
- 14 **Supplier's name or trade mark**
- 15 **Supplier's model identifier**
- 16 The supplier's name or trademark and model identifier should fit in a space of 92 × 15 mm.
- 17 **Numbering of the Regulation:** Calibri bold 9 pt, 100 % black.

4.2. For condenser household tumble driers, the design of the label shall be as in the figure below.



Whereby

(a) The label must be at least 110 mm wide and 220 mm high. Where the label is printed in a larger format, its content must nevertheless remain proportionate to the specifications above.

(b) The background shall be white.

(c) Colours shall be CMYK — cyan, magenta, yellow and black following this example: 00-70-X-00: 0 % cyan, 70 % magenta, 100 % yellow, 0 % black.

(d) The label shall fulfil all of the following requirements (numbers refer to the figure above).

- 1 **Eu label border stroke:** 5 pt — colour: Cyan 100 % — round corners: 3,5 mm.
- 2 **EU logo** — colours: X-80-00-00 and 00-00-X-00.
- 3 **Energy label:** colour: X-00-00-00. Pictogram as depicted; EU logo and energy logo (combined): width: 92 mm, height: 17 mm.
- 4 **Sub-logos border:** 1 pt — colour: Cyan 100 % — length: 92,5 mm.
- 5 **A-G scale**
  - **Arrow:** height: 7 mm, gap: 0,75 mm — colours:
    - Highest class: X-00-X-00,
    - Second class: 70-00-X-00,
    - Third class: 30-00-X-00,
    - Fourth class: 00-00-X-00,
    - Fifth class: 00-30-X-00,
    - Sixth class: 00-70-X-00,
    - Last class: 00-X-X-00.
  - **Text:** Calibri bold 18 pt, capitals and white; '+' symbols: Calibri bold 12 pt, white aligned on a single row.
- 6 **Energy efficiency class**
  - **Arrow:** width: 26 mm, height: 14 mm, 100 % black;
  - **Text:** Calibri bold 29 pt, capitals and white; '+' symbols: Calibri bold 18 pt, white aligned on a single row.
- 7 **Energy**
  - **Text:** Calibri regular 11 pt, capitals, 100 % black.
- 8 **Weighted annual energy consumption:**
  - **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.
  - **Value:** Calibri bold 30 pt, 100 % black.
  - **Second line:** Calibri regular 14 pt, 100 % black.
- 9 **Type of household tumble drier:**
  - **Pictogram** as depicted
  - **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.
- 10 **Cycle time:**
  - **Pictogram** as depicted
  - **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.

— **Value:** Calibri bold 24 pt, 100 % black; and Calibri regular 16 pt, 100 % black.

**11 Rated capacity:**

— **Pictogram** as depicted

— **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.

— **Value:** Calibri bold 24 pt, 100 % black; and Calibri regular 16 pt, 100 % black.

**12 Sound power level:**

— **Pictogram** as depicted

— **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.

— **Value:** Calibri bold 24 pt, 100 % black; and Calibri regular 16 pt, 100 % black.

**13 Asterisk:** Calibri regular 6 pt, 100 % black.

**14 Supplier's name or trade mark**

**15 Supplier's model identifier**

**16** The supplier's name or trademark and model identifier should fit in a space of 92 × 15 mm.

**17 Numbering of the Regulation:** Calibri bold 9 pt, 100 % black.

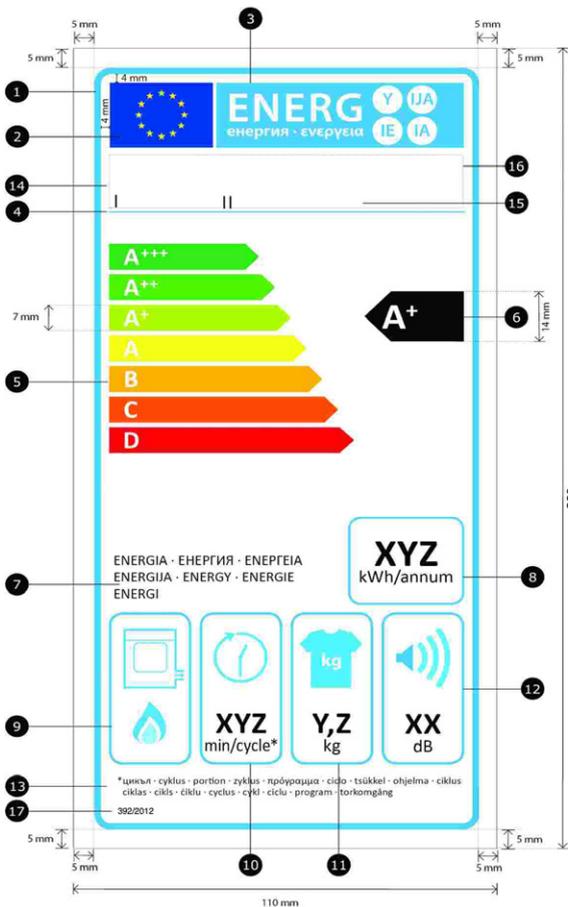
**18 Condensation efficiency class:**

— **Pictogram** as depicted

— **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.

— **Value:** Calibri regular 16 pt, horizontal scale 75 %, 100 % black and Calibri bold 22 pt, horizontal scale 75 %, 100 % black.

4.3. For gas fired household tumble driers, the design of the label shall be as in the figure below.



Whereby

(a) The label must be at least 110 mm wide and 220 mm high. Where the label is printed in a larger format, its content must nevertheless remain proportionate to the specifications above.

(b) The background shall be white.

(c) Colours shall be CMYK — cyan, magenta, yellow and black following this example: 00-70-X-00: 0 % cyan, 70 % magenta, 100 % yellow, 0 % black.

(d) The label shall fulfil all of the following requirements (numbers refer to the figure above).

- 1 **Eu label border stroke:** 5 pt — colour: Cyan 100 % — round corners: 3,5 mm.
- 2 **EU logo** — colours: X-80-00-00 and 00-00-X-00.
- 3 **Energy label:** colour: X-00-00-00. Pictogram as depicted; EU logo and energy logo (combined): width: 92 mm, height: 17 mm.
- 4 **Sub-logos border:** 1 pt — colour: Cyan 100 % — length: 92,5 mm.

**5 A-G scale**

- **Arrow:** height: 7 mm, gap: 0,75 mm — colours:
  - Highest class: X-00-X-00,
  - Second class: 70-00-X-00,
  - Third class: 30-00-X-00,
  - Fourth class: 00-00-X-00,
  - Fifth class: 00-30-X-00,
  - Sixth class: 00-70-X-00,
  - Last class: 00-X-X-00.
- **Text:** Calibri bold 18 pt, capitals and white; ·+· symbols: Calibri bold 12 pt, white aligned on a single row.

**6 Energy efficiency class**

- **Arrow:** width: 26 mm, height: 14 mm, 100 % black;
- **Text:** Calibri bold 29 pt, capitals and white; ·+· symbols: Calibri bold 18 pt, white aligned on a single row.

**7 Energy**

- **Text:** Calibri regular 11 pt, capitals, 100 % black.

**8 Weighted annual energy consumption:**

- **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.
- **Value:** Calibri bold 30 pt, 100 % black.
- **Second line:** Calibri regular 14 pt, 100 % black.

**9 Type of household tumble drier:**

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

**10 Cycle time:**

- **Pictogram** as depicted
- **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.
- **Value:** Calibri bold 24 pt, 100 % black; and Calibri regular 16 pt, 100 % black.

**11 Rated capacity:**

- **Pictogram** as depicted
- **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.
- **Value:** Calibri bold 24 pt, 100 % black; and Calibri regular 16 pt, 100 % black.

**12 Sound power level:**

- **Pictogram** as depicted
- **Border:** 2 pt — colour: Cyan 100 % — round corners: 3,5 mm.
- **Value:** Calibri bold 24 pt, 100 % black; and Calibri regular 16 pt, 100 % black.

- 13 **Asterisk:** Calibri regular 6 pt, 100 % black
- 14 **Supplier's name or trade mark**
- 15 **Supplier's model identifier**
- 16 The supplier's name or trademark and model identifier should fit in a space of 92 × 15 mm.
- 17 **Numbering of the Regulation:** Calibri bold 9 pt, 100 % black.

## ANNEX II

### Product Fiche

1. The information in the product fiche of household tumble driers shall be given in the following order and shall be included in the product brochure or other literature provided with the product:

(a) supplier's name or trade mark;

(b) supplier's model identifier, which means the code, usually alphanumeric, which distinguishes a specific household tumble drier model from other models with the same trade mark or supplier's name;

(c) rated capacity in kg of cotton laundry for the standard cotton programme at full load;

(d) whether the household tumble drier is an air-vented, condenser or gas-fired household tumble drier;

(e) energy efficiency class in accordance with point 1 of Annex VI;

(f) for electric mains-operated household tumble drier:

the weighted Annual Energy Consumption ( $AE_{\zeta}$ ) rounded up to one decimal place; it shall be described as: 'Energy consumption "X" kWh per year, based on 160 drying cycles of the standard cotton programme at full and partial load, and the consumption of the low-power modes. Actual energy consumption per cycle will depend on how the appliance is used.';

for household gas-fired tumble drier:

the weighted Annual Energy Consumption ( $AE_{C(Gas)}$ ) rounded up to one decimal place; it shall be described as: 'Energy consumption "X" kWh-Gas per year, based on 160 drying cycles of the standard cotton programme at full and partial load. Actual energy consumption per cycle will depend on how the appliance is used.';

and

the weighted Annual Energy Consumption ( $AE_{C(Gas)e}$ ) rounded up to one decimal place; it shall be described as: 'Energy consumption "X" kWh per year, based on 160 drying cycles of the standard cotton programme at full and partial load, and the consumption of the low-power modes. Actual energy consumption per cycle will depend on how the appliance is used.';

(g) whether the household tumble drier is an 'automatic tumble drier' or 'non-automatic tumble drier';

(h) where the household tumble drier has been awarded an 'EU Ecolabel award' under Regulation (EC) No 66/2010, this information may be included;

(i) the energy consumption ( $E_{dry}$ ,  $E_{dry/2}$ ,  $Eg_{dry}$ ,  $Eg_{dry/2}$ ,  $Eg_{dry,a}$ ,  $Eg_{dry/2,d}$ ) of the standard cotton programme at full and partial load;

(j) the power consumption of the off-mode ( $P_o$ ) and of the left-on mode ( $P_l$ ) for the standard cotton programme at full load;

(k) if the household tumble drier is equipped with a power management system, the duration of the 'left-on mode';

(l) indication that the 'standard cotton programme' used at full and partial load is the standard drying programme to which the information in the label and the fiche relates, that this programme is suitable for drying normal wet cotton laundry and that it is the most efficient programme in terms of energy consumption for cotton;

(m) the weighted programme time ( $T_{\downarrow}$ ) of the 'standard cotton programme at full and partial load' in minutes and rounded to the nearest minute as well as the programme time of the 'standard cotton programme at full load' ( $T_{dry}$ ) and the programme time of the 'standard cotton programme at partial load' ( $T_{dry/2}$ ) in minutes and rounded to the nearest minute;

(n) if the household tumble drier is a condenser tumble drier, the condensation efficiency class in accordance with point 2 of Annex VI, expressed as 'condensation efficiency class 'X' on a scale from G (least efficient) to A (most efficient)'; this may be expressed by other means provided it is clear that the scale is from G (least efficient) to A (most efficient);

(o) if the household tumble drier is a condenser tumble drier, the average condensation efficiency  $C_{dry}$  and  $C_{dry/2}$  of the standard cotton programme at full load and partial load and the weighted condensation efficiency ( $C_{\downarrow}$ ) for the 'standard cotton programme at full and partial load', as a percentage and rounded to the nearest whole percent;

(p) the sound power level (weighted average value —  $L_{WA}$ ) expressed in dB and rounded to the nearest integer for the standard cotton programme at full load;

(q) if the household tumble drier is intended to be built-in, an indication to this effect.

2. One product fiche may cover a number of household tumble drier models supplied by the same supplier.

3. The information contained in the fiche may be given in the form of a copy of the label, either in colour or in black and white. Where this is the case, the information listed in point 1 not already displayed on the label shall also be provided.

## ANNEX III

### Technical documentation

1. The technical documentation referred to in Article 3(c) shall include:

- (a) the name and address of the supplier;
- (b) a general description of the household tumble drier model, sufficient for it to be unequivocally and easily identified;
- (c) where appropriate, the references of the harmonised standards applied;
- (d) where appropriate, the other technical standards and specifications used;
- (e) the identification and signature of the person empowered to bind the supplier;
- (f) technical parameters for measurements as follows:

(i) for electric mains-operated household tumble drier:

the energy consumption ( $E_{dry}$ ,  $E_{dry/2}$ ,  $Eg_{dry}$ ,  $Eg_{dry/2}$ ,  $Eg_{dry,a}$ ,  $Eg_{dry/2,d}$ ) of the standard cotton programme at full and partial load,

for household gas-fired tumble drier:

the weighted Annual Energy Consumption ( $AE_{C(Gas)}$ ) rounded up to one decimal place; it shall be described as: 'Energy consumption "X" kWh-Gas per year, based on 160 drying cycles of the standard cotton programme at full and partial load. Actual energy consumption per cycle will depend on how the appliance is used';

and

the weighted Annual Energy Consumption ( $AE_{C(Gas)l}$ ) rounded up to one decimal place; it shall be described as: 'Energy consumption "X" kWh per year, based on 160 drying cycles of the standard cotton programme at full and partial load, and the consumption of the low-power modes. Actual energy consumption per cycle will depend on how the appliance is used.';

(ii) power consumption in 'off-mode' and the power consumption in 'left-on mode';

(iii) the programme time of the 'standard cotton programme at full load' ( $T_{dry}$ ) and the programme time of the 'standard cotton programme at partial load' ( $T_{dry/2}$ ), in minutes and rounded to the nearest minute;

(iv) if the household tumble drier is equipped with a power management system, the duration of the 'left-on mode';

(v) if the household tumble drier is a condenser tumble drier, the average condensation efficiency  $C_{dry}$  of the standard cotton programme at full load and the average condensation efficiency of the standard cotton programme at partial load  $C_{dry/2}$ ;

(vi) the sound power level;

(g) the results of calculations performed in accordance with Annex VII.

2. Where the information included in the technical documentation for a particular household tumble drier model has been obtained by calculation on the basis of design or by extrapolation from other equivalent household tumble driers, or both, the documentation shall include details of such calculations

or extrapolations, or both, and of tests undertaken by suppliers to verify the accuracy of the calculations undertaken. The information shall also include a list of all other equivalent household tumble drier models where the information was obtained in the same way.

## ANNEX IV

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

1. The information referred to in Article 4(b) shall be provided in the following order:

- (a) the rated capacity in kg of cotton, for the standard cotton programme at full load;
- (b) whether the household tumble drier is an air-vented, condenser or gas-fired household tumble drier;
- (c) the energy efficiency class as defined in point 1 of Annex VI;
- (d) for electric mains-operated household tumble drier:

the weighted Annual Energy Consumption ( $AE_e$ ) rounded up to the nearest integer, to be described as: 'Energy consumption "X" kWh per year, based on 160 drying cycles of the standard cotton programmes at full and partial load, and the consumption of the low-power modes. Actual energy consumption per cycle will depend on how the appliance is used.';

for household gas-fired tumble drier:

the weighted Annual Energy Consumption ( $AE_{C(Gas)}$ ) rounded up to one decimal place; it shall be described as: 'Energy consumption "X" kWh-Gas per year, based on 160 drying cycles of the standard cotton programme at full and partial load. Actual energy consumption per cycle will depend on how the appliance is used';

and

the weighted Annual Energy Consumption ( $AE_{C(Gas)el}$ ) rounded up to one decimal place; it shall be described as: 'Energy consumption "X" kWh per year, based on 160 drying cycles of the standard cotton programme at full and partial load, and the consumption of the low-power modes. Actual energy consumption per cycle will depend on how the appliance is used.';

- (e) whether the household tumble drier is an 'automatic tumble drier' or 'non-automatic tumble drier';
  - (f) the energy consumption ( $E_{dry}$ ,  $E_{dry/2}$ ,  $Eg_{dry}$ ,  $Eg_{dry/2}$ ,  $Eg_{dry,a}$ ,  $Eg_{dry/2,d}$ ) of the standard cotton programme at full and partial load, rounded up to two decimal places and calculated in accordance with Annex VII;
  - (g) the power consumption of the off-mode ( $P_o$ ) and the left-on mode ( $P$ ) for the standard cotton programme at full load;
  - (h) the programme time of the 'standard cotton programme at full load' ( $T_{dry}$ ) and the programme time of the 'standard cotton programme at partial load' ( $T_{dry/2}$ ), in minutes and rounded to the nearest minute, calculated in accordance with Annex VII;
  - (i) if the household tumble drier is a condenser tumble drier, the condensation efficiency class in accordance with point 2 of Annex VI;
  - (j) the sound power level (weighted average value —  $L_{WA}$ ) for the standard cotton programme at full load, expressed in dB and rounded to the nearest integer;
  - (k) if the household tumble drier is intended to be built-in, an indication to this effect.
2. Where other information contained in the product fiche is also provided, it shall be in the form and order specified in Annex II.
3. The size and font in which all the information referred in this Annex is printed or shown shall be legible.

## ANNEX V<sup>7</sup>

### Product compliance verification by market surveillance authorities

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

When verifying the compliance of a product model with the requirements laid down in this Delegated Regulation, for the requirements referred to in this Annex, the authorities of the Contracting Parties shall apply the following procedure:

- (1) The Contracting Party authorities shall verify one single unit of the model.
- (2) The model shall be considered to comply with the applicable requirements if:
  - (a) the values given in the technical documentation pursuant to Article 5(b) of Directive 2010/30/EU, as incorporated and adapted by the Ministerial Council Decision 2010/02/MC-EnC (declared values), and, where applicable, the values used to calculate these values, are not more favourable for the supplier than the corresponding values given in the test reports pursuant to point (iii) of the abovementioned Article; and
  - (b) the values published on the label and in the product fiche are not more favourable for the supplier than the declared values, and the indicated energy efficiency class is not more favourable for the supplier than the class determined by the declared values; and
  - (c) when the Contracting Party authorities test the unit of the model, the determined values (the values of the relevant parameters as measured in testing and the values calculated from these measurements) comply with the respective verification tolerances as given in Table 1.
- (3) If the results referred to in points 2(a) or (b) are not achieved, the model and all models that have been listed as equivalent household tumble drier models in the supplier's technical documentation shall be considered not to comply with this Delegated Regulation.
- (4) If the result referred to in point 2(c) is not achieved, the Contracting Party 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 different models that have been listed as equivalent models in the supplier's technical documentation.
- (5) The model shall be considered to comply with the applicable requirements if for these three units, the arithmetical mean of the determined values complies with the respective tolerances given in Table 1.
- (6) If the result referred to in point 5 is not achieved, the model and all models that have been listed as equivalent household tumble drier models in the supplier's technical documentation shall be considered not to comply with this Delegated Regulation.
- (7) The Contracting Party authorities shall provide all relevant information to the authorities of the other Contracting Parties and to the Secretariat without delay after a decision being

<sup>7</sup> Annex V is replaced in accordance with Article 6 and Annex VI of Delegated Regulation (EU) 2017/254, as incorporated and adapted by Ministerial Council Decision 2018/03/MC-EnC

taken on the non-compliance of the model according to points 3 and 6.

Contracting Parties' authorities shall use measurement procedures which take into account the generally recognised, state-of-the-art, reliable, accurate and reproducible measurement methods, including methods set out in documents whose reference numbers have been published for that purpose in a dedicated section of the website of the Energy Community. The Contracting Party authorities shall use the measurement and calculation methods set out in Annex VII.

The Contracting Party authorities shall only apply the verification tolerances that are set out in Table 1 and shall only use the procedure described in points 1 to 7 for the requirements referred to in this Annex. No other tolerances, such as those set out in harmonised standards or in any other measurement method, shall be applied.

**Table 1**  
**Verification tolerances**

Parameters	Verification tolerances
Weighted annual energy consumption ( $AE_c$ )	The determined value shall not exceed the declared value of $AE_c$ by more than 6 %.
Weighted energy consumption ( $E_t$ )	The determined value shall not exceed the declared value of $E_t$ by more than 6 %.
Weighted condensation efficiency ( $C_t$ )	The determined value shall not be less than the declared value of $C_t$ by more than 6 %.
Weighted programme time ( $T_t$ )	The determined value shall not exceed the declared value of $T_t$ by more than 6 %.
Power consumption in off mode and left-on mode ( $P_o$ and $P_l$ )	The determined values of power consumption $P_o$ and $P_l$ of more than 1,00 W shall not exceed the declared values of $P_o$ and $P_l$ by more than 6 %. The determined value of power consumption $P_o$ and $P_l$ of less than or equal to 1,00 W shall not exceed the declared values of $P_o$ and $P_l$ by more than 0,10 W.
Duration of the left-on mode ( $T_l$ )	The determined value shall not exceed the declared value of $T_l$ by more than 6 %.
Sound power level, $L_{WA}$	The determined value shall not exceed the declared value of $L_{WA}$ .

## ANNEX VI

### Energy efficiency classes and condensation efficiency classes

#### 1. ENERGY EFFICIENCY CLASSES

The energy efficiency class of a household tumble drier shall be determined on the basis of its Energy Efficiency Index (*EEI*) as set out in Table 1.

The Energy Efficiency Index (*EEI*) of a household tumble drier shall be determined in accordance with point 1 of Annex VII.

Table 1

#### Energy efficiency classes

Energy efficiency class	Energy Efficiency Index
A+++ (most efficient)	$EEI < 24$
A++	$24 \leq EEI < 32$
A+	$32 \leq EEI < 42$
A	$42 \leq EEI < 65$
B	$65 \leq EEI < 76$
C	$76 \leq EEI < 85$
D (least efficient)	$85 \leq EEI$

#### 2. CONDENSATION EFFICIENCY CLASSES

The condensation efficiency class of a condenser household tumble drier shall be determined on the basis of the weighted condensation efficiency ( $C_t$ ) as set out in Table 2.

The weighted condensation efficiency ( $C_t$ ) of a condenser household tumble drier shall be determined in accordance with point 2 of Annex VII.

Table 2

#### Condensation efficiency classes

Condensation efficiency class	Weighted condensation efficiency
A (most efficient)	$C_t > 90$
B	$80 < C_t \leq 90$
C	$70 < C_t \leq 80$
D	$60 < C_t \leq 70$
E	$50 < C_t \leq 60$
F	$40 < C_t \leq 50$
G (least efficient)	$C_t \leq 40$

## ANNEX VII

### Method for calculating the Energy Efficiency Index and the weighted condensation efficiency

#### 1. CALCULATION OF THE ENERGY EFFICIENCY INDEX

For the calculation of the Energy Efficiency Index (*EEI*) of a household tumble drier model, the weighted Annual Energy Consumption of a household tumble drier for the standard cotton programme at full and partial load is compared to its Standard Annual Energy Consumption.

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

$$EEI = \frac{AE_C}{SAE_C} \times 100$$

where:

$AE_C$  = weighted Annual Energy Consumption of the household tumble drier.

$SAE_C$  = standard Annual Energy Consumption of the household tumble drier.

(b) The Standard Annual Energy Consumption ( $SAE_C$ ) is calculated in kWh/year as follows and rounded to two decimal places:

— for all household tumble driers that are not air-vented:

$$SAE_C = 140 \times c^{0,8}$$

— for air-vented household tumble driers:

$$SAE_C = 140 \times c^{0,8} - \left( 30 \times \frac{T_t}{60} \right)$$

where:

$c$  is the rated capacity of the household tumble drier for the standard cotton programme.

$T_t$  is the weighted programme time for the standard cotton programme.

(c) The weighted Annual Energy Consumption ( $AE_C$ ) is calculated in kWh/year as follows and is rounded to two decimal places:

$$(i) \quad AE_C = E_t \times 160 + \frac{\left[ P_o \times \frac{525\,600 - (T_t \times 160)}{2} + P_l \times \frac{525\,600 - (T_t \times 160)}{2} \right]}{60 \times 1000}$$

where:

$E_t$  = weighted energy consumption, in kWh and rounded to two decimal places.

$P_o$  = power in 'off-mode' for the standard cotton programme at full load, in W and rounded to two decimal places.

$P_l$  = power in 'left-on mode' for the standard cotton programme at full load, in W and rounded to two

decimal places.

$T_t$  = weighted programme time, in minutes and rounded to the nearest minute.

**160** = total number of drying cycles per year.

(ii) When the household tumble drier is equipped with a power management system, with the household tumble drier reverting automatically to 'off-mode' after the end of the programme, the weighted Annual Energy Consumption ( $AE_C$ ) is calculated taking into consideration the effective duration of the 'left-on mode', according to the following formula:

$$AE_C = E_t \times 160 + \frac{\{(P_1 \times T_1 \times 160) + P_o \times [525\,600 - (T_t \times 160) - (T_1 \times 160)]\}}{60 \times 1000}$$

where:

$T_1$  = duration of the 'left-on mode' for the standard cotton programme at full load, in minutes and rounded to the nearest minute.

(d) The weighted programme time ( $T_t$ ) for the standard cotton programme is calculated in minutes as follows and rounded to the nearest minute:

$$T_t = (3 \times T_{dry} + 4 \times T_{dry/2}) / 7$$

where:

$T_{dry}$  = programme time for the standard cotton programme at full load, in minutes and rounded to the nearest minute.

$T_{dry/2}$  = programme time for the standard cotton programme at partial load, in minutes and rounded to the nearest minute.

(e) The weighted energy consumption ( $E_t$ ) is calculated in kWh as follows and rounded to two decimal places:

$$E_t = (3 \times E_{dry} + 4 \times E_{dry/2}) / 7$$

where:

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

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

(f) For gas-fired household tumble driers, the energy consumption for the standard cotton programme at full and partial load is calculated in kWh and rounded to two decimal places, as:

$$E_{dry} = \frac{E_{g,dry}}{f_g} + E_{g,dry,a} \quad E_{dry\hat{A}_i} = \frac{E_{g,dry\hat{A}_i}}{f_g} + E_{g,dry\hat{A}_i,a}$$

where:

$E_{g,dry}$  = gas consumption of the standard cotton programme at full load, in kWh and rounded to two decimal places.

$E_{g,dry/2}$  = gas consumption of the standard cotton programme at partial load, in kWh and rounded to

two decimal places.

$Eg_{dry,a}$  = auxiliary electricity consumption of the standard cotton programme at full load, in kWh and rounded to two decimal places.

$Eg_{dry\frac{1}{2},a}$  = auxiliary electricity consumption of the standard cotton programme at partial load, in kWh and rounded to two decimal places.

$$f_g = 2,5.$$

## 2. CALCULATION FOR THE PRODUCT INFORMATION DESCRIBED IN 'ANNEX II PRODUCT FICHE', 'ANNEX III TECHNICAL DOCUMENTATION' AND 'ANNEX IV INFORMATION TO BE PROVIDED IN CASES WHERE END-USERS CANNOT BE EXPECTED TO SEE THE PRODUCT DISPLAYED'

For gas-fired household tumble driers, the energy consumption on gas for the standard cotton programme at full and partial load for the information in Annex II, III and IV is calculated in kWh<sub>Gas</sub> and rounded to two decimal places, as:

$$AE_{C(Gas)} = 160 \times (3 \times Eg_{dry} + 4 \times Eg_{dry\frac{1}{2}}) / 7$$

For gas-fired household tumble driers, the energy consumption on electricity for the standard cotton programme at full and partial load for the information in Annex II, III and IV is calculated in kWh and rounded to two decimal places, as:

$$AE_{C(Gas)el} = 160 \times (3 \times Eg_{dry,a} + 4 \times Eg_{dry\frac{1}{2},a}) / 7 + ((P_l \times T_l \times 160) + P_o \times [525\,600 - (T_i \times 160) - (T_l \times 160)]) / 60 \times 1\,000$$

## 3. CALCULATION OF THE WEIGHTED CONDENSATION EFFICIENCY

The condensation efficiency of a programme is the ratio between the mass of moisture condensed and collected in the container of a condenser household tumble drier 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. For calculating the weighted condensation efficiency, the average condensation efficiency for the standard cotton programme at both full and partial load is considered.

The weighted condensation efficiency ( $C_t$ ) of a programme is calculated as a percentage and rounded to the nearest whole percent as:

$$C_t = (3 \times C_{dry} + 4 \times C_{dry\frac{1}{2}}) / 7$$

where:

$C_{dry}$  = average condensation efficiency of the standard cotton programme at full load.

$C_{dry\frac{1}{2}}$  = average condensation efficiency of the standard cotton programme at partial load. The average condensation efficiency  $C$  is calculated from the condensation efficiencies of test runs and expressed

$$C = \frac{1}{(n-1)} \sum_{j=2}^n \left( \frac{W_{wj}}{W_i - W_f} \times 100 \right)$$

as a percentage:

where:

$n$  is the number of test runs, comprising at least four valid test runs for the selected programme.

$j$  is the test run number.

$W_{wj}$  is the mass of water collected in the condenser reservoir during test run  $j$ .

$W_i$  is the mass of the wet test load before drying.

$W'_i$  is the mass of the test load after drying.

## ANNEX VIII<sup>8</sup>

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

(1) For the purpose of points 2 to 5 of this Annex the following definitions shall apply:

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

(b) “nested display” means visual interface where an image or data set is accessed by a mouse click, mouse roll-over or tactile screen expansion of another image or data set;

(c) “tactile screen” means a screen responding to touch, such as that of a tablet computer, slate computer or a smartphone;

(d) “alternative text” means text provided as an alternative to a graphic allowing information to be presented in non-graphical form where display devices cannot render the graphic or as an aid to accessibility such as input to voice synthesis applications.

(2) The appropriate label made available by suppliers in accordance with Article 3(f) shall be shown on the display mechanism in proximity to the price of the product. The size shall be such that the label is clearly visible and legible and shall be proportionate to the size specified in point 4 of Annex I. The label may be displayed using a nested display, in which case the image used for accessing the label shall comply with the specifications laid down in point 3 of this Annex. If nested display is applied, the label shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the image.

(3) The image used for accessing the label in the case of nested display shall:

(a) be an arrow in the colour corresponding to the energy efficiency class of the product on the label;

(b) indicate on the arrow the energy efficiency class of the product in white in a font size equivalent to that of the price; and

(c) have one of the following two formats:



(4) In the case of nested display, the sequence of display of the label shall be as follows:

(a) the image referred to in point 3 of this Annex shall be shown on the display mechanism in proximity to the price of the product;

(b) the image shall link to the label;

(c) the label shall be displayed after a mouse click, mouse roll-over or tactile screen expansion on the image;

(d) the label shall be displayed by pop up, new tab, new page or inset screen display;

(e) for magnification of the label on tactile screens, the device conventions for tactile mag-

<sup>8</sup> Annex VIII is added in accordance with Article 6(3) of Delegated Regulation (EU) 518/2014, as incorporated and adapted by Ministerial Council Decision 2018/03/MC-EnC

nification shall apply;

(f) the label shall cease to be displayed by means of a close option or other standard closing mechanism;

(g) the alternative text for the graphic, to be displayed on failure to display the label, shall be the energy efficiency class of the product in a font size equivalent to that of the price.

(5) The appropriate product fiche made available by suppliers in accordance with Article 3(g) shall be shown on the display mechanism in proximity to the price of the product. The size shall be such that the product fiche is clearly visible and legible. The product fiche may be displayed using a nested display, in which case the link used for accessing the fiche shall clearly and legibly indicate "Product fiche". If nested display is used, the product fiche shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the link.