

EUROPEAN COMMISSION

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ANNEXES 1 to 9

## ANNEXES

to the

**Commission Delegated Regulation** 

supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of household dishwashers

repealing Regulation (EU) No 1059/2010 with regard to energy labelling of household dishwashers

## ANNEX I

#### **Definitions applicable for the Annexes**

- (1) 'programme' means a series of operations that are pre-defined and are declared as suitable by the supplier for specified levels of soil or type of load, or both, and together form a complete cycle;
- (2) 'cycle' means a complete cleaning, rinsing, and drying process, as defined for the selected programme;
- (3) 'place settings' means a defined set of crockery, glass and cutlery for use by one person;
- (4) 'rated capacity' means the maximum number of place settings together with the serving pieces, as stated by the supplier, which can be treated in a household dishwasher on the programme selected, when loaded in accordance with the supplier's instructions;
- (5) 'programme duration' means the time that elapses from the initiation of the programme until the completion of the programme, excluding any end-user-programmed delay start;
- (6) 'ECO programme or cycle' means the programme or cycle declared by the supplier as suitable to clean normally soiled tableware, and to which the information in the label and the product information sheet relates;
- (7) 'Off-mode' means a condition in which the equipment is connected to the mains power source and is not providing any function; the following shall also be considered as off mode:
  - (a) conditions providing only an indication of off-mode;
  - (b) conditions providing only functionalities intended to ensure electromagnetic compatibility pursuant to Directive 2004/108/EC;
- (8) 'Standby mode' means a condition where the equipment is connected to the mains power source and provides only the following functions, which may persist for an indefinite time:
  - (a) reactivation function, or reactivation function and only an indication of enabled reaction function, and/or
  - (b) information or status display, and/or
  - (c) safety function;
- (9) 'Interaction mode' means a condition in which the equipment is connected to the mains power source and provides functionalities intended for interaction with the user such as programme set-up, delay start set-up, or information to the user;
- (10) 'Delay start' means a condition in which the equipment automatically starts its main function at a later time as programmed by the user;
- (11) 'Active mode' means a condition in which the equipment is connected to the mains power source and at least one of the main function(s) providing the intended service of the equipment has been activated;
- (12) 'Main function(s)' means the main service(s) for which a product is designed for, and that correspond to the intended use of the product;

- (13) 'Network standby' is defined as in Regulation (EU) No 1275/2008;
- (14) 'Equivalent model' means a model with the same relevant technical and performance characteristics but placed on the market under a different model identifier; 'end-user' means a consumer buying or expected to buy a household dishwasher;
- (15) 'display mechanism' means any screen, including tactile screen, or other visual technology used for displaying internet content to users;
- (16) 'nested display' means any 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;
- (17) 'tactile screen' means a screen responding to touch, such as that of a tablet computer, slate computer or a smartphone;
- (18) '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.

#### ANNEX II

#### A. Energy efficiency classes

The energy efficiency class of a household dishwasher 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 dishwasher shall be calculated in accordance with Annex III.

Energy efficiency class	Energy Efficiency Index
A (most efficient)	EEI < 34
В	$34 \le \text{EEI} < 39$
С	$39 \le \text{EEI} < 44$
D	$44 \le \text{EEI} < 50$
Е	$50 \le \text{EEI} < 56$
F	$56 \le \text{EEI} \le 63$
G (least efficient)	$EEI \ge 63$

Table 1Energy efficiency classes

#### **B.** Acoustic airborne noise emission classes

The acoustic airborne noise emission class of a household dishwasher shall be determined on the basis of the acoustic airborne noise emissions as set out in Table 2.

Table 2		
Acoustic airborne noise emission classes		

Acoustic airborne noise emission class	Icons on the label	Noise (dB(A)
Night		n < 41
Whisper	<b>&lt;</b> )))	$41 \le n < 47$
Normal	<)))	$47 \le n$

#### ANNEX III Method for calculating the Energy Efficiency Index

For the calculation of the Energy Efficiency Index (EEI) of a household dishwasher model, the Eco programme energy consumption (EPEC) of the household dishwasher is compared to its standard programme energy consumption (SPEC).

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

$$EEI = (EPEC / SPEC) \times 100$$

where:

EPEC = Eco programme energy consumption of the household dishwasher;

SPEC = standard programme energy consumption of the household dishwasher.

- (b) The standard programme energy consumption (SPEC) is calculated in kWh/cycle as follows:
  - (1) for household dishwashers with rated capacity  $ps \ge 10$  and width > 50 cm:

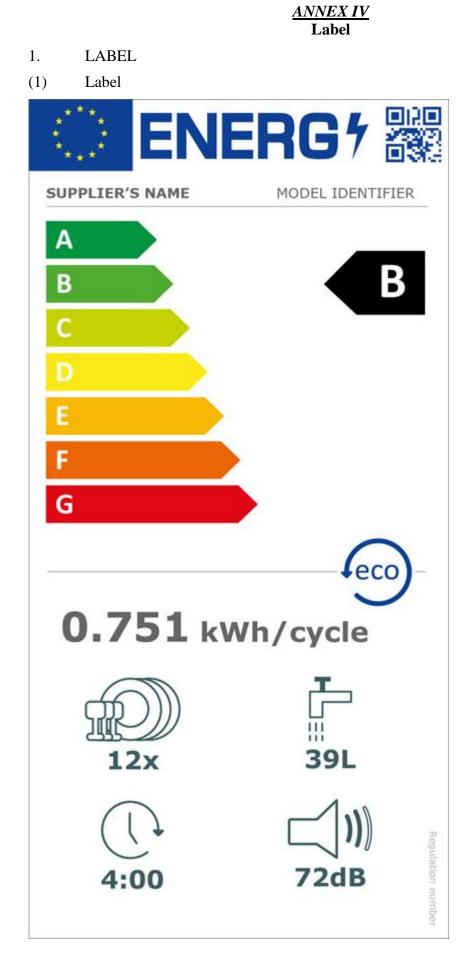
$$SPEC = 0.025 \text{ x ps} + 1.350$$

(2) for household dishwashers with rated capacity  $ps \le 9$  or household dishwashers with a width  $\le 50$  cm:

$$SPEC = 0.090 \text{ x ps} + 0.450$$

where:

ps = number of place settings.



- (2) The following information shall be included in the label:
  - I supplier's name or trade mark;
  - II supplier's model identifier, where 'model identifier' means the code, usually alphanumeric, which distinguishes a specific household dishwasher model from other models with the same trade mark or supplier's name;
  - III the energy efficiency class determined in accordance with point A of Annex II; the head of the arrow containing the energy efficiency class of the household dishwasher shall be placed at the same height as the head of the arrow of the relevant energy efficiency class;
  - IV eco programme energy consumption (EPEC) in kWh per cycle, rounded to three decimal places;
  - V QR code linking to the model information in the product database defined in Article 12 of Regulation (EU) 2017/1369;
  - VI rated capacity in standard place settings, for the eco programme;
  - VII eco programme water consumption (EPWC) in litres per cycle, rounded to one decimal place;
  - VIII the duration of the eco programme in hh:mm rounded to the nearest minute;
  - IX airborne acoustic noise emissions expressed in dB(A) with respect to 1 pW and rounded to the nearest integer;
  - X the airborne noise emission class, determined in accordance with point B of Annex II.
- 2. LABEL DESIGN

The design of the label will be added later.

#### ANNEX V

#### **Product information sheet**

- 1. The product information sheet of household dishwashers shall include the following information in the indicated order :
  - (a) supplier's name or trade mark;
  - (b) supplier's model identifier, meaning the code, usually alphanumeric, which distinguishes a specific household dishwasher model from other models with the same trade mark or supplier's name;
  - (c) rated capacity, in standard place settings, for the eco programme;
  - (d) energy efficiency class of the eco programme, in accordance with Annex II point A;
  - (e) eco programme energy consumption (EPEC) in kWh per cycle, rounded to three decimal places. It shall be described as follows: 'Energy consumption "W.XYZ" kWh per cycle, based on the eco programme using cold water fill. Actual energy consumption will depend on how the appliance is used';
  - (f) eco programme water consumption (EPWC), in litres per cycle, rounded to one decimal place. It shall be described as follows: 'Water consumption "X.Y" litres per cycle, based on the eco programme. Actual water consumption will depend on how the appliance is used and on the hardness of the water';
  - (g) indication that the 'eco programme' is the standard cleaning cycle to which the information in the label and the product information sheet relates, that this programme is suitable to clean normally soiled tableware, and that it is the most efficient programme in terms of combined energy and water consumption;
  - (h) programme duration for the eco programme, in hh:mm and rounded to the nearest minute;
  - (i) airborne acoustic noise emissions expressed in dB(A) with respect to 1 pW and rounded to the nearest integer;
  - (j) airborne acoustic noise emission class of the eco programme, in accordance with Annex II point B;
  - (k) if the household dishwasher is intended to be built-in, an indication to this effect.

#### ANNEX VI Technical documentation

- 1. The technical documentation referred to in Article 3(1)(d) shall include:
  - (a) the name and address of the supplier;
  - (b) a general description of the dishwasher model, sufficient for it to be unequivocally identified;
  - (c) where appropriate, the references of the harmonised standards applied;
  - (d) where appropriate, the other technical standards and specifications used;
  - (e) identification and signature of the person empowered to bind the supplier;
  - (f) technical parameters for measurements as follows:
    - (1) energy consumption of the eco programme;
    - (2) water consumption of the eco programme;
    - (3) programme duration of the eco programme;
    - (4) power consumption in 'off-mode';
    - (5) power consumption in 'standby mode';
    - (6) power consumption in 'network standby';
    - (7) power consumption in 'delay start';
    - (8) duration of the 'interaction mode';
    - (9) airborne acoustic noise emissions;
  - (g) the calculations and the results of calculations performed in accordance with Annex III.
- 2. Where the information included in the technical documentation for a particular household dishwasher model has been obtained:
  - from an equivalent model of the same or a different manufacturer, or
  - by calculation on the basis of design or extrapolation from another model of the same or a different manufacturer, or both.

The technical documentation shall include, as appropriate, a list of the all equivalent household dishwasher models, the details of such calculation, the assessment undertaken by manufacturers to verify the accuracy of the calculation and, where appropriate, the declaration of identity between the models of different manufacturers.

#### ANNEX VII

# Information to be provided in visual advertisements, in 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)(e) and Article 4(1)(c), the energy class and the range of efficiency classes available on the label shall be shown with an arrow matching the letter of the energy class, as indicated in Figure 1.
- 2. In promotional material, for the purposes of ensuring conformity with the requirements laid down in Article 3(1)(f) and Article 4(1)(d), the energy class and the range of efficiency classes available on the label shall be shown with an arrow matching the letter of the energy class, as indicated in Figure 1.
- 3. Any paper based distance selling must show the energy class and the range of efficiency classes available on the label with an arrow matching the letter of the energy class, as indicated in Figure 1.
- 4. Telemarketing based distance selling must specifically inform the customer of the energy class of the product and of the range of energy classes available on the label, and that they can access the full label and the product information sheet through a free access website, or by requesting a printed copy.



### Figure 1: Coloured arrow example, with range of energy classes indicated

5. For all the situations mentioned in points 1 to 4, it must be possible for the customer to access the full label and the product information sheet through a link to the product database website, or to request a printed copy.

### ANNEX VIII

#### Information to be provided in the case of distance selling through the internet

- 1. The appropriate label made available by suppliers in accordance with Article 3(1)(g) shall be shown on the display mechanism in proximity to the price of the product. The size shall be such that the label is clearly visible and legible and shall be proportionate to the size specified in point 2 of Annex IV. 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 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 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:



- 3. In the case of 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;
  - (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 appropriate product information sheet made available by suppliers in accordance with Article 3(1)(h) shall be shown on the display mechanism in proximity to the price 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, in which case the link used for accessing the product information sheet shall clearly and legibly indicate 'Product information sheet'. If 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

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

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

- (1) The Member State 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 3(3) of Regulation (EU) 2017/1369 (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 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 Member State 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 3.
- (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 dishwasher models in the supplier's technical documentation shall be considered not to comply with this Regulation.
- (4) If the result referred to in point 2(c) 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 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 3.
- (6) If the result referred to in point 5 is not achieved, the model and all models that have been listed as equivalent household dishwasher models in the supplier's technical documentation shall be considered not to comply with this Regulation.
- (7) 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 being taken on the non-compliance of the model according to points 3 and 6.

Member States' 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 the *Official Journal of the European Union*. The Member State authorities shall use the measurement and calculation methods set out in Annex III.

The Member State authorities shall only apply the verification tolerances that are set out in Table 3 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.

Parameter	Verification tolerances
Eco programme energy	The determined value shall not exceed the declared value of EPEC
consumption (EPEC)	by more than 5 %. Where three additional units need to be selected,
	the arithmetic mean of the determined values of these three units
	shall not exceed the declared value of EPEC by more than 5 %.
Eco programme water	The determined value shall not exceed the declared value of EPWC
consumption (EPWC)	by more than 5 %. Where three additional units need to be selected,
	the arithmetic mean of the determined values of these three units
	shall not exceed the declared value of EPWC by more than 5 %.
Programme duration	The determined value shall not exceed the declared values $T_t$ by
$(T_t)$	more than 5 %.
Power consumption in	The determined value of power consumption P <sub>off</sub> shall not exceed
off mode (P <sub>off</sub> )	the declared value by more than 10%.
Power consumption in	The determined value of power consumption $P_{sm}$ shall not exceed
standby mode (P <sub>sm</sub> )	the declared value by more than 10%.
Power consumption in	The determined value of power consumption P <sub>ns</sub> shall not exceed
network standby (P <sub>ns</sub> )	the declared value by more than 10%.
Power consumption in	The determined value of power consumption P <sub>ds</sub> shall not exceed
delay start (P <sub>ds</sub> )	the declared value by more than 10%.
Duration of interaction	The determined value of duration T <sub>im</sub> shall not exceed the declared
mode (T <sub>im</sub> )	value by more than 10%.
Airborne acoustic noise	The measured value shall not exceed the declared value.
emissions	

#### Table 3- Verification tolerances