



COMMISSION DELEGATED REGULATION (EU) No 2019/2014 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of household washing machines and household washer-dryers COMMISSION REGULATION (EU) No 2019/2023 laying down ecodesign requirements for household washing machines and household washer-dryers pursuant to Directive 2009/125/EC	
Report Reference No.	GZES201002958331
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Approved by (name + signature)	Sky Lin / Reviewer <i>Sky Lin</i>
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Testing Laboratory	SGS-CSTC Standards Technical Services Co., Ltd. Shunde Branch
Address	Building 1, European Industrial Park, No.1, Shunhe South Road, Wusha, Daliang, Shunde District, Foshan, Guangdong, China
Applicant's name	Zhongshan Galanz Consumer Electric Appliances Co., Ltd.
Address	No.3 Xingpu Avenue East, Huangpu Town, Zhongshan City, 528429 Guangdong, China
Manufacturer's name	Same as applicant
Address	Same as applicant
Test specification:	
Standard	(EU) No 2019/2014; (EU) No 2019/2023 <input checked="" type="checkbox"/> EN 60456:2016 + FprAA:2020 <input type="checkbox"/> prEN IEC 62512:2020 + FprAA:2020
Test procedure	SGS-CSTC
Non-standard test method	None
Test Report Form No.	2019/2014&2019/2023_A
Test Report Form(s) Originator	SGS-CSTC
Master TRF	2020-04
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Test item description	Front Load Drum-type Washing Machine (Drum Washing Machine)
Trade Mark	GALANZ
Factory	Same as applicant
Model/Type reference.....	XQG70-U112E
Ratings.....	220 - 240 V~; 50 Hz; 2100 W; 7,0 kg

Summary of testing:

Tests performed (name of test and test clause):

- (EU) No 2019/2014
- (EU) No 2019/2023
- EN 60456:2016 + FprAA:2020
- EN 60704-2-4: 2012
- prEN IEC 62512:2020 + FprAA:2020


CLC /Fpr TS 50677 is considered.



Testing location:

See page 1

Copy of marking plate and/or label:

Galanz



WASHING MACHINE MODEL: XQG70-U112E Read the instructions

PROTECTION CLASS	I	RATED POWER	2100W
WATERPROOF CLASS	IPX4	RATED VOLTAGE	220-240V~
NORMAL LOAD	7.0kg	RATED FREQUENCY	50Hz
PRESSURE	0.02-0.8MPa	DATE & SERIAL NO.	

Zhongshan Galanz Consumer Electric Appliances Co.,Ltd.

ADDRESS: No.3 Xingpu Avenue East,Huangpu Town,Zhongshan City,
528429,Guangdong,China

Remark: the above marking plate is only a draft artwork to show the product ratings and model no.

Test item particulars		Front Load Drum-type Washing Machine		
Brand.....		GALANZ		
Model		XQG70-U112E		
Country of manufacture.....		China		
Machine type		<input checked="" type="checkbox"/> Drum type <input type="checkbox"/> Other than drum type		
Give details if other than drum type		N/A		
Axis.....		<input type="checkbox"/> Vertical <input checked="" type="checkbox"/> Horizontal		
Loading		<input checked="" type="checkbox"/> Front <input type="checkbox"/> Top		
Type of mounting.....		<input type="checkbox"/> Build-in <input checked="" type="checkbox"/> Independent		
Heating element assembled.....		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Water connection.....		<input type="checkbox"/> Hot <input checked="" type="checkbox"/> Cold <input type="checkbox"/> Hot & cold		
For Washer dryer.....		N/A		
Air vented.....		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Automatic (sensor-controlled)		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Timer controlled		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Condenser		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Cold water connections		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Duct connected		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Multi-drum		<input type="checkbox"/> Yes <input type="checkbox"/> No		
Washing rated capacity (cotton)	kg	7,0		
Drying rated capacity (cotton)	kg	—		
Rated voltage	V	220-240 V		
Rated frequency	Hz	50 Hz		
Declared drum volume	l	—		
Measured drum volume	l	—		
Measured appliance dimension	mm	Wide	Depth	Height
		595	410	845

<p>Possible test case verdicts:</p> <ul style="list-style-type: none"> - test case does not apply to the test object: N/A - test object does meet the requirement: P (Pass) - test object does not meet the requirement: F (Fail)
<p>Testing :</p> <p>Date of receipt of test item : 2020-10-19</p> <p>Date (s) of performance of tests : 2020-10-19 to 2020-12-11</p>
<p>General remarks:</p> <p>The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report.</p> <p>Throughout this report a comma is used as the decimal separator.</p> <p>This document is issued by the Company subject to its General Conditions of Service, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.</p> <p>Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.</p> <p>Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only. This document cannot be reproduced except in full, without prior approval of the company.</p>
<p>General product information:</p> <p>The appliance is for household and indoor use only. Horizontal axis drum washing machine is fitted with motor UWM55-60-1 (Zhejiang Weikang Motor Co., Ltd.) and heating element GA-08 (Zhongshan Galanz Household Appliances Co., Ltd.).</p>

Product information sheet

1. For washing machine

Parameter	Value		Parameter	Value	
Rated capacity (kg)	7,0		Dimensions in cm	Height	845
				Width	595
				Depth	410
EEL _w ^(a)	90,8		Energy efficiency class ^(a)	E ^(c)	
Washing efficiency index ^(a)	1,04		Rinsing effectiveness (g/kg) ^(a)	4,9	
Energy consumption in kWh per cycle, based on the eco 40-60 programme. Actual energy consumption will depend on how the appliance is used.	0,783		Water consumption in litre per cycle, based on the eco 40-60 programme. Actual water consumption will depend on how the appliance is used and on the hardness of the water.	44	
Maximum temperature inside the treated textile ^(a) (°C)	Rated capacity	43	Remaining moisture content ^(a) (%)	Rated capacity	51
	Half	41		Half	53
	Quarter	36		Quarter	55
Spin speed ^(a) (rpm)	Rated capacity	1200	Spin-drying efficiency class ^(a)	B ^(c)	
	Half	1200			
	Quarter	1200			
Programme duration ^(a) (h:min)	Rated capacity	3:05	Type	free-standing	
	Half	2:30			
	Quarter	2:30			
Airborne acoustical noise emissions in the spinning phase ^(a) (dB(A) re 1 pW)	76		Airborne acoustical noise emission class ^(a) (spinning phase)	B (c)	
Off-mode (W)	0,5		Standby mode (W)	0,5	
Delay start (W) (if applicable)	2,1		Networked standby (W) (if applicable)	—	
Minimum duration of the guarantee offered by the supplier ^(b) :	—		—		
This product has been designed to release silver ions during the washing cycle	—		No		
Additional information:	—		—		
^(a) for the eco 40-60 programme. ^(b) changes to these items shall not be considered relevant for the purposes of paragraph 4 of Article 4 of Regulation (EU) 2017/1369. ^(c) if the product database automatically generates the definitive content of this cell the supplier shall not enter these data.					

2. For household Washer-dryer

Parameter	Value		Parameter	Value	
	Rated capacity (kg)	Rated capacity (b)		—	Dimensions in cm
	Rated washing capacity (b)	—	Width	—	
			Depth	—	
Energy Efficiency Index	EEI _w (a)	—	Energy efficiency class (a)	EEI _w (a)	[A/B/C/D/E/F/G] (d)
	EEI _{WD} (b)	—		EEI _{WD} (b)	[A/B/C/D/E/F/G] (d)
Washing efficiency index	I _w (a)	—	Rinsing effectiveness (g/kg dry textile)	I _R (a)	—
	J _w (b)	—		J _R (b)	—
Energy consumption in kWh per kg per cycle, for the washing cycle of the household washer-dryer, using the eco 40-60 programme at a combination of full and partial loads. Actual energy consumption will depend on how the appliance is used	—		Energy consumption in kWh per kg per cycle, for the wash and dry cycle of the household washer-dryer at a combination of full and half loads. Actual energy consumption will depend on how the appliance is used	—	
Water consumption in litre per cycle, for the eco 40-60 programme at a combination of full and partial loads. Actual water consumption will depend on how the appliance is used and on the hardness of the water	—		Water consumption in litre per cycle, for the wash and dry cycle of the household washer-dryer at a combination of full and half loads. Actual water consumption will depend on how the appliance is used and on the hardness of the water	—	
Maximum temperature inside the treated textile (a) (°C)	Rated capacity	—	Remaining moisture content (a) (%)	Rated capacity	—
	Half	—		Half	—
	Quarter	—		Quarter	—
Spin speed (a) (rpm)	Rated washing capacity	—	Spin-drying efficiency class (a)	[A/B/C/D/E/F/G] (d)	
	Half	—			
	Quarter	—			
Eco 40-60 Programme duration (h:min)	Rated washing capacity	—	Wash and dry cycle duration (h:min)	Rated capacity	—
	Half	—		Half	—
	Quarter	—			
Airborne acoustical noise emissions during the spinning phase for the eco 40-60 washing cycle at rated washing capacity (dB(A) re 1 pW)	—		Airborne acoustical noise emission class for the spinning phase for the eco 40-60 programme at rated washing capacity	[A/B/C/D] (d)	
Type	[built-in/free-standing]				
Off-mode (W)	—		Standby mode (W)	—	

Delay start (W) (if applicable)	—	Networked standby (W) (if applicable)	—
Minimum duration of the guarantee offered by the supplier (c):	—		
This product has been designed to release silver ions during the washing cycle	NO		
Additional information:	—		
<p>(a) for the eco 40-60 programme (b) for the wash and dry cycle (c) changes to these items shall not be considered relevant for the purposes of paragraph 4 of Article 4 of Regulation (EU) 2017/1369. (d) if the product database automatically generates the definitive content of this cell the supplier shall not enter these data.</p>			

COMMISSION DELEGATED REGULATION (EU) No 2019/2023			
Cl.	Requirement-Test	Result-Remark	Verdict
1	Program requirements		—
	From 1 March 2021, household washing machines and household washer-dryers shall meet the following requirements:		—
(1)	household washing machines and household washer-dryers shall provide:		P
(a)	a washing cycle called 'eco 40-60', which is able to clean normally soiled cotton laundry declared to be wash-able at 40 °C or 60 °C, together in the same cycle;		P
(b)	a washing cycle called '20 °C', which is able to clean lightly soiled cotton laundry, at a nominal temperature of 20 °C;		P
	these cycles shall be clearly identifiable on the programme selection, on the display and through the network connection, depending on the functionalities provided by the household washing machine or household washer-dryer;		P
(2)	for the requirements set out in points 3(1), 3(3), 4(1), 4(2), 4(5), 5 and 6(1), the 'eco 40-60' programme shall be used;		P
(3)	the eco 40-60 programme shall be named 'eco 40-60' on the programme selection, on the display and through the network connection, depending on the functionalities provided by the household washing machine or the household washer-dryer;		P
	the name 'eco 40-60' shall be used exclusively for this programme. The formatting of 'eco 40-60' is not restricted in terms of font, font size, case sensitivity or colour. No other programme may have in its name the term 'eco';		P
	the eco 40-60 programme shall be set as the default programme for automatic programme selection or any function maintaining the selection of a programme, or, if there is no automatic programme selection, shall be available for direct selection without the need for any other selection such as a specific temperature or load;		P
	the indications 'normal', 'daily', 'regular' and 'standard', and their translations in all EU official languages, shall not be used in programme names for household washing machines or household washer-dryers, either alone or in combination with other information.		P
2	WASH AND DRY CYCLE		—
	From 1 March 2021, household washer-dryers shall meet the following requirements:		—

COMMISSION DELEGATED REGULATION (EU) No 2019/2023			
Cl.	Requirement-Test	Result-Remark	Verdict
(1)	household washer-dryers shall provide a complete cycle for cotton laundry, named 'wash and dry': — which is continuous if the household washer-dryer provides a continuous cycle; — where the washing cycle is an eco 40-60 programme as defined in point 1; and — where the drying cycle achieves cupboard dry status;		N/A
(2)	the wash and dry cycle shall be clearly identifiable in the user instructions referred to in point 9 of this Annex		N/A
(3)	if the household washer-dryer provides a continuous cycle, the rated capacity of the wash and dry cycle shall be the rated capacity for this cycle;		N/A
(4)	if the household washer-dryer does not provide a continuous cycle, the rated capacity of the wash and dry cycle shall be the lower value of the rated washing capacity of the eco 40-60 programme and the rated drying capacity of the drying cycle achieving cupboard dry status;		N/A
(5)	for the requirements set out in points 3(2), 3(4), 4(3), 4(4), 4(6) and 6(2), the wash and dry cycle shall be used.		N/A
3	ENERGY EFFICIENCY REQUIREMENTS		—
	From 1 March 2021, household washing machines and household washer-dryers shall meet the following requirements:		—
(1)	the Energy Efficiency Index (EEI _w) for household washing machines and the washing cycle of household washer-dryers shall be lower than 105;		P
(2)	the Energy Efficiency Index (EEI _{wd}) for the wash and dry cycle of household washer-dryers shall be lower than 105.		N/A
	From 1 March 2024, household washing machines with a rated capacity higher than 3 kg and household washer-dryer with a rated washing capacity higher than 3 kg shall meet the following requirements:		—
(3)	the EEI _w for household washing machines and the washing cycle of household washer-dryers shall be lower than 91.		P
(4)	the EEI _{wd} for the wash and dry cycle of household washer-dryers shall be lower than 88.		N/A
	The EEIW and EEIWD shall be calculated in accordance with Annex III.		P
4	FUNCTIONAL REQUIREMENTS		—
	From 1 March 2021, household washing machines and household washer-dryers shall meet the following requirements:		—

COMMISSION DELEGATED REGULATION (EU) No 2019/2023			
Cl.	Requirement-Test	Result-Remark	Verdict
(1)	for household washing machines with a rated capacity higher than 3 kg and for the washing cycle of household washer-dryers with a rated capacity higher than 3 kg, the Washing Efficiency Index (Iw) of the eco 40-60 programme shall be greater than 1,03 for each of the following loading sizes: rated washing capacity, half of the rated washing capacity and a quarter of the rated washing capacity;		P
(2)	for household washing machines with a rated capacity lower than or equal to 3 kg and for the washing cycle of household washer-dryers with a rated capacity lower than or equal to 3 kg, the Washing Efficiency Index (Iw) of the eco 40-60 programme shall be greater than 1,00 at rated washing capacity;		N/A
(3)	for household washer-dryers with a rated capacity higher than 3 kg, the Washing Efficiency Index (Jw) of the wash and dry cycle shall be greater than 1,03 at rated capacity and at half of the rated capacity;		N/A
(4)	for household washer-dryers with a rated capacity lower than or equal to 3 kg, the Washing Efficiency Index (Jw) of the wash and dry cycle shall be greater than 1,00 at rated capacity;		N/A
(5)	for household washing machines with a rated capacity higher than 3 kg and for the washing cycle of household washer-dryers with a rated capacity higher than 3 kg, the Rinsing Effectiveness (IR) of the eco 40-60 programme shall be smaller than or equal to 5,0 g/kg for each of the following loading sizes: rated washing capacity, half of the rated washing capacity and a quarter of the rated washing capacity		P
(6)	for household washer-dryers with a rated capacity higher than 3 kg, the Rinsing Effectiveness (JR) of the wash and dry cycle shall be smaller than or equal to 5,0 g/kg at rated capacity and at half of the rated capacity.		N/A
	The Iw, Jw, IR and JR shall be calculated in accordance with Annex III.		P
5	REQUIREMENTS ON DURATION		—
	From 1 March 2021, household washing machines and household washer-dryers shall meet the following requirements:		—
	the duration of the eco 40-60 programme (tW), expressed in hours and minutes and rounded to the nearest minute, shall be lower than or equal to the time limit tcap, which depends on the rated capacity as follows:		P
(1)	for the rated washing capacity, the time limit is given by the following equation: $t_{cap}(\text{in min}) = 137 + c \times 10,2,$ with a maximum of 240 minutes;		P

COMMISSION DELEGATED REGULATION (EU) No 2019/2023			
Cl.	Requirement-Test	Result-Remark	Verdict
(2)	for half of the rated washing capacity and a quarter of the rated washing capacity, the time limit is given by the following equation: $t_{cap}(\text{in min}) = 120 + c \times 6$ with a maximum of 180 minutes;		P
	where c is the rated capacity of the household washing machine or the rated washing capacity of the household washer-dryer for the eco 40-60 programme.		P
6	WEIGHTED WATER CONSUMPTION REQUIREMENT		—
	From 1 March 2021, household washing machines and household washer-dryers shall meet the following requirements:		—
(1)	for household washing machines and the washing cycle of household washer-dryers, the weighted water consumption (W_w , in litres/cycle) for the eco 40-60 programme shall be: $W_w \leq 2,25 \times c + 30$ where c is the rated capacity of the household washing machine or the rated washing capacity of the household washer-dryer for the eco 40-60 programme;		P
(2)	for household washer-dryers, the weighted water consumption (W_{WD} , in litres/cycle) for the wash and dry cycle shall be: $W_{WD} \leq 10 \times d + 30$ where d is the rated capacity of the household washer-dryer for the wash and dry cycle.		N/A
	The W_w and W_{WD} shall be calculated in accordance with Annex III.		P
7	LOW POWER MODES		—
	From 1 March 2021, household washing machines and household washer-dryers shall meet the following requirements:		—
(1)	household washing machines and household washer-dryers shall have an off-mode or a stand-by mode or both. The power consumption of these modes shall not exceed 0,50 W;		P
(2)	if the stand-by mode includes the display of information or status, the power consumption of this mode shall not exceed 1,00 W;		N/A
(3)	if the stand-by mode provides for a connection to a network and provides networked standby as defined in Commission Regulation (EU) No 801/2013 (1), the power consumption of this mode shall not exceed 2,00 W;		N/A

COMMISSION DELEGATED REGULATION (EU) No 2019/2023			
Cl.	Requirement-Test	Result-Remark	Verdict
(4)	at the latest 15 minutes after the household washing machine and household washer-dryer have been switched on or after the end of any programme and associated activities or after interruption of the wrinkle guard function or after any other interaction with the household washing machine and household washer-dryer, if no other mode, including emergency measures, is triggered, the household washing machine and household washer-dryer shall switch automatically to off-mode or standby mode;		P
(5)	if the household washing machine and household washer-dryer provide for a delay start, the power consumption of this condition, including any standby mode, shall not exceed 4,00 W. The delay start shall not be programmable by the user for more than 24 h;		P
(6)	any household washing machine and any household washer-dryer that can be connected to a network shall provide the possibility to activate and deactivate the network connection(s). The network connection(s) shall be deactivated by default.		N/A
8	RESOURCE EFFICIENCY REQUIREMENTS		—
	From 1 March 2021, household washing machines and household washer-dryers shall meet the following requirements:		—
(1)	availability of spare parts:		P
(a)	<p>manufacturers, importers or authorised representatives of household washing machines and household washer-dryers shall make available to professional repairers at least the following spare parts, for a minimum period of 10 years after placing the last unit of the model on the market:</p> <ul style="list-style-type: none"> — motor and motor brushes; — transmission between motor and drum; — pumps; — shock absorbers and springs; — washing drum, drum spider and related ball bearings (separately or bundled); — heaters and heating elements, including heat pumps (separately or bundled); — piping and related equipment including all hoses, valves, filters and aquastops (separately or bundled); — printed circuit boards; — electronic displays; — pressure switches; — thermostats and sensors; — software and firmware including reset software; 		P

COMMISSION DELEGATED REGULATION (EU) No 2019/2023			
Cl.	Requirement-Test	Result-Remark	Verdict
(b)	manufacturers, importers or authorised representatives of household washing machines and household washer-dryers shall make available to professional repairers and end-users at least the following spare parts: door, door hinge and seals, other seals, door locking assembly and plastic peripherals such as detergent dispensers, for a minimum period of 10 years after placing the last unit of the model on the market;		P
(c)	manufacturers, importers or authorised representatives of household washing machines and household washer-dryers shall ensure that the spare parts mentioned in points (a) and (b) can be replaced with the use of commonly available tools and without permanent damage to the household washing machine or household washer-dryer;		P
(d)	the list of spare parts concerned by point (a) and the procedure for ordering them shall be publicly available on the free access website of the manufacturer, importer or authorised representative, at the latest two years after the placing on the market of the first unit of a model and until the end of the period of availability of these spare parts;		P
(e)	the list of spare parts concerned by point (b) and the procedure for ordering them and the repair instructions shall be publicly available on the free access website of the manufacturer, importer or authorised representative, when placing the first unit of a model on the market and until the end of the period of availability of these spare parts;		P
(2)	maximum delivery time of spare parts		P
	during the period mentioned under (1), the manufacturer, importer or authorised representative shall ensure the delivery of the spare parts within 15 working days after having received the order;		P
	in the case of spare parts concerned by point (1)(a), the availability of spare parts may be limited to professional repairers registered in accordance with point (3)(a) and (b);		P
(3)	access to Repair and Maintenance Information:		P
	after a period of two years after the placing on the market of the first unit of a model and until the end of the period mentioned under (1), the manufacturer, importer or authorised representative shall provide access to the household washing machine or household washer-dryer repair and maintenance information to professional repairers in the following conditions:		P

COMMISSION DELEGATED REGULATION (EU) No 2019/2023			
Cl.	Requirement-Test	Result-Remark	Verdict
(a)	the manufacturer's, importer's or authorised representative's website shall indicate the process for professional repairers to register for access to information; to accept such a request, the manufacturers, importers or authorised representatives may require the professional repairer to demonstrate that:		P
(i)	the professional repairer has the technical competence to repair household washing machines and household washer-dryers and complies with the applicable regulations for repairers of electrical equipment in the Member States where it operates. Reference to an official registration system as professional repairer, where such system exists in the Member States concerned, shall be accepted as proof of compliance with this point;		P
(ii)	the professional repairer is covered by insurance covering liabilities resulting from its activity regardless of whether this is required by the Member State;		P
(b)	manufacturers, importers or authorised representatives shall accept or refuse the registration within 5 working days from the date of request		P
(c)	manufacturers, importers or authorised representatives may charge reasonable and proportionate fees for access to the repair and maintenance information or for receiving regular updates. A fee is reasonable if it does not discourage access by failing to take into account the extent to which the professional repairer uses the information;		P
(d)	once registered, a professional repairer shall have access, within one working day after requesting it, to the requested repair and maintenance information. The information may be provided for an equivalent model or model of the same family, if relevant;		P

COMMISSION DELEGATED REGULATION (EU) No 2019/2023			
Cl.	Requirement-Test	Result-Remark	Verdict
(e)	<p>the household washing machine or household washer-dryer repair and maintenance information referred to in (a) shall include:</p> <ul style="list-style-type: none"> — the unequivocal household washing machine or household washer-dryer identification; — a disassembly map or exploded view; — technical manual of instructions for repair; — list of necessary repair and test equipment; — component and diagnosis information (such as minimum and maximum theoretical values for measurements); — wiring and connection diagrams; — diagnostic fault and error codes (including manufacturer-specific codes, where applicable); — instructions for installation of relevant software and firmware including reset software; and — information on how to access data records of reported failure incidents stored on the household washing machine or washer-dryer (where applicable); 		P
(4)	information requirements for refrigerant gases:		N/A
	without prejudice to Regulation (EU) No 517/2014 of the European Parliament and of the Council (2), for household washing machines and household washer-dryers equipped with a heat pump, the chemical name of the refrigerant gas used, or equivalent reference such as a commonly used and understood symbol, label or logo, shall be displayed permanently and in a visible and readable way on the exterior of the household washing machines or household washer-dryers, for example on the back panel. More than one reference can be used for the same chemical name;		N/A
(5)	requirements for dismantling for material recovery and recycling while avoiding pollution:		P
	manufacturers, importers or authorised representatives shall ensure that household washing machines and household washer-dryers are designed in such a way that the materials and components referred to in Annex VII to Directive 2012/19/EU can be removed with the use of commonly available tools		P
	manufacturers, importers or authorised representatives shall fulfil the obligations laid down in point 1 of Article 15 of Directive 2012/19/EU		P
9	INFORMATION REQUIREMENTS		—
	From 1 March 2021, household washing machines and household washer-dryers shall meet the following requirements:		—

COMMISSION DELEGATED REGULATION (EU) No 2019/2023			
Cl.	Requirement-Test	Result-Remark	Verdict
	user and installer instructions shall be provided in the form of a user manual on a free access website of the manufacturer, importer or authorised representative, and shall include:		P
(1)	the following general information:		
(a)	information that the eco 40-60 programme is able to clean normally soiled cotton laundry declared to be washable at 40 °C or 60 °C, together in the same cycle, and that this programme is used to assess the compliance with the EU eco-design legislation;		P
(b)	information that the most efficient programmes in terms of energy consumption are generally those that perform at lower temperatures and longer duration;		P
(c)	for household washer-dryers: information that the wash and dry cycle is able to clean normally soiled cotton laundry declared to be washable at 40 °C or 60 °C, together in the same cycle, and to dry it in such a way that it can be immediately stored in a cupboard, and that this programme is used to assess the compliance with the EU eco-design legislation;		P
(d)	information that loading the household washing machine or the household washer-dryer up to the capacity indicated by the manufacturer for the respective programmes will contribute to energy and water savings;		P
(e)	recommendations on the type of detergents suitable for the various washing temperatures and washing programmes;		P
(f)	information that noise and remaining moisture content are influenced by the spinning speed: the higher the spinning speed in the spinning phase, the higher the noise and the lower the remaining moisture content;		P
(g)	information on how to activate and deactivate the network connection (if applicable) and impact on energy consumption;		N/A
(h)	instruction on how to find the model information stored in the product database, as defined in Regulation (EU) 2019/2014 by means of a weblink that links to the model information as stored in the product database or a link to the product database and information on how to find the model identifier on the product;		P

COMMISSION DELEGATED REGULATION (EU) No 2019/2023			
Cl.	Requirement-Test	Result-Remark	Verdict
(2)	<p>values for the following parameters:</p> <p>(a) rated capacity in kg;</p> <p>(b) programme duration, expressed in hours and minutes;</p> <p>(c) energy consumption, expressed in kWh/cycle;</p> <p>(d) water consumption, expressed in litres/cycle;</p> <p>(e) maximum temperature reached for minimum 5 minutes inside the laundry being treated in the washing cycle, expressed in degrees centigrade; and</p> <p>(f) remaining moisture content after the washing cycle, expressed in percentage of water content, and spinning speed at which this was achieved;</p> <p>for each of the following programmes (at least):</p> <p>(i) the eco 40-60 programme at the rated capacity, half of the rated capacity and a quarter of the rated capacity;</p> <p>(ii) the 20 °C programme at the rated capacity for this programme;</p> <p>(iii) one cotton programme at nominal temperature higher than or equal to 60 °C (if present) at the rated capacity for this programme;</p> <p>(iv) one programme for other textiles than cotton or a mix of textiles (if present) at the rated capacity for this programme;</p> <p>(v) one programme for the quick washing of lightly soiled laundry (if present) at the rated capacity for this programme;</p> <p>(vi) one programme for heavily soiled textiles (if present) at the rated capacity for this programme;</p> <p>(vii) for household washer-dryers: the wash and dry cycle at the rated capacity and at half of the rated capacity; and</p>		P
	<p>the information that the values given for programmes other than the eco 40-60 programme and the wash and dry cycle are indicative only;</p>		P

COMMISSION DELEGATED REGULATION (EU) No 2019/2023			
Cl.	Requirement-Test	Result-Remark	Verdict
(3)	<p>the user instructions shall also include instructions for the user to perform maintenance operations. Such instructions shall as a minimum include instructions for:</p> <p>(a) correct installation (including level positioning, connection to mains, connection to water inlets, cold and/or hot if appropriate);</p> <p>(b) correct use of detergent, softeners and other additives, and main consequences of incorrect dosage;</p> <p>(c) foreign object removal from the household washing machine or household washer-dryer;</p> <p>(d) periodic cleaning, including optimal frequency, and limescale prevention and procedure;</p> <p>(e) door opening between cycles, if appropriate;</p> <p>(f) periodic checks of filters, including optimal frequency, and procedure;</p> <p>(g) identification of errors, the meaning of the errors, and the action required, including identification of errors requiring professional assistance;</p> <p>(h) how to access professional repair (internet webpages, addresses, contact details);such instructions shall also include information on:</p> <p>(i) any implications of self-repair or non-professional repair for the safety of the end-user and for the guarantee;</p> <p>(j) the minimum period during which the spare parts for the household washing machine or the household washer-dryer are available.</p>		P

Table 1-1: Test condition 'Eco 40-60'			P
Items	Unit	Requirement	Measured
Test voltage	V	230±1%	230 V~
Test frequency	Hz	50±1%	50
Water hardness	mmol/l	2,5±0,2	2,50
Hot water temperature	°C	<input type="checkbox"/> 60±2 <input type="checkbox"/> other:	—
Cold water temperature	°C	<input checked="" type="checkbox"/> 15±2 <input type="checkbox"/> 20±2	15,0
Water pressure	kPa	240±50	240
Ambient temperature	°C	23,0±2	23,0
Ambient temperature for conditioning of base load items	°C	20,0±2	20,0
Ambient humidity for conditioning of base load items	%	65,0±5	65%
Detergent	Full (g)		124,0
	Half (g)		82,0
	Quarter (g)		64,0
Textiles	Full (kg)		6861 2 sheets, 12 pillowcases, 23 towels
	Half A (kg)		3,455 1 sheets, 6 pillowcases, 12 towels
	Half B (kg)		3,406 1 sheets, 6 pillowcases, 11 towels
	Quarter (kg)		1,957 -- sheets, 4 pillowcases, 9 towels
Supplier	WFK		
Test strips	Batch number	108-199	
	supplier	Swissatest	
	Number of strips full load	7	
	Number of strips 1/2 load	4	
	Number of strips 1/4 load	2	
Deadline of use	2021-01-30		
Test programme	<input checked="" type="checkbox"/> Eco 40-60		
Method of condition of base load item:	<input checked="" type="checkbox"/> An ambient controlled room/chamber <input type="checkbox"/> Bone dry method		

Table 1-2: Test condition 'WASH AND DRY'			N/A
Items	Unit	Requirement	Measured
Test voltage	V	230±1%	—
Test frequency	Hz	50±1%	—
Water hardness	mmol/l	2,5±0,2	—
Hot water temperature	°C	<input type="checkbox"/> 60±2 <input type="checkbox"/> other:	—
Cold water temperature	°C	<input checked="" type="checkbox"/> 15±2 <input type="checkbox"/> 20±2	—
Water pressure	kPa	240±50	—
Ambient temperature	°C	23,0±2	—
Ambient temperature for conditioning of base load items	°C	20,0±2	—
Ambient humidity for conditioning of base load items	%	65,0±5	—
Detergent	Full (g)		—
	Half (g)		—
Textiles	Full (kg)		—
	Half A (kg)		—
	Half B (kg)		—
Supplier	WFK		
Test strips	Batch number		—
	supplier		—
	Number of strips full load		—
	Number of strips 1/2 load		—
Test programme	<input checked="" type="checkbox"/> —		
	Method of condition of base load item:		
		<input type="checkbox"/> An ambient controlled room/chamber	
		<input type="checkbox"/> Bone dry method	

Table 2-1: Test data for reference machine 'Eco 40-60'									P
Test run				1	2	3	4	5	Average
Items	Symbol	Unit	Accuracy						
Date of test run		yr.m.d		2020 /11/27	2020 /11/28	2020 /11/29	2020 /11/30	2020 /12/01	
Mass of conditioned base load (without test strips)	M	g	1	4902	4902	4902	4902	4902	4902
Mass of base load before each test run (without test strips)	Mdry	g	1	4902	4900	4901	4897	4895	4899
Mass of detergent	Mdet	g	0,01	110,00	110,00	110,00	110,00	110,00	
Cold water consumption during main wash	V _{cm}	l	0,1	25,1	25,3	25,2	25,2	25,1	
Hot water consumption during main wash	V _{hm}	l	0,1	—	—	—	—	—	
Water consumption during main wash	V _m	l	0,1	25,1	25,3	25,2	25,2	25,1	
Total cold water consumption	V _{ct}	l	0,1	97,4	97,3	97,3	97,3	98,0	
Total hot water consumption	V _{ht}	l	0,1	—	—	—	—	—	
Total water consumption	V _t	l	0,1	97,4	97,3	97,3	97,3	98,0	
Electrical energy metered during the test	W _{et}	kWh	0,01	1,71	1,72	1,70	1,72	1,72	
Cold water energy correction determined during the test	W _{ct}	kWh	0,01	0,00	0,00	0,00	0,00	0,00	
Hot water energy correction determined during the test	W _{ht}	kWh	0,01	—	—	—	—	—	
Total energy	W _{et}	kWh	0,01	1,71	1,72	1,70	1,72	1,72	
Program time	t _t	min	1	75	75	75	74	75	
Spin speed	S	rpm	1	503	506	505	505	505	
Mass of base load after spin extraction	M _r	g	1	8832	8828	8830	8834	8836	
Remain moisture content	D	%	0,1	80,2	80,1	80,1	80,2	80,3	
Rinsing Effectiveness	I _R	k/kg	0,01	3,56	3,48	3,50	3,49	3,61	
Reflectance after wash: Sebum	xi		0,01	67,93	66,7	67,14	66,83	67,03	
Reflectance after wash: Carbon black/Oil	xi		0,01	45,07	44,65	44,4	41,19	40,55	
Reflectance after wash: Blood	xi		0,01	81,2	82,1	80	82,27	83,1	
Reflectance after wash: Cocoa	xi		0,01	62,54	64,01	62,71	64,8	65,94	
Reflectance after wash: Red Wine	xi		0,01	73,61	74,36	74,48	74,4	73,72	
Reflectance after wash: Sum	Ck		0,01	330,35	331,82	328,73	329,49	330,34	330,15

Table 2-2: Test data for reference machine 'WASH AND DRY'									N/A
Test run				1	2	3	4	5	Average
Items	Symbol	Unit	Accuracy						
Date of test run		yr.m.d		—	—	—	—	—	
Mass of conditioned base load (without test strips)	M	g	1	—	—	—	—	—	—
Mass of base load before each test run (without test strips)	Mdry	g	1	—	—	—	—	—	—
Mass of detergent	Mdet	g	0,01	—	—	—	—	—	
Cold water consumption during main wash	V _{cm}	l	0,1	—	—	—	—	—	
Hot water consumption during main wash	V _{hm}	l	0,1	—	—	—	—	—	
Water consumption during main wash	V _m	l	0,1	—	—	—	—	—	
Total cold water consumption	V _{ct}	l	0,1	—	—	—	—	—	
Total hot water consumption	V _{ht}	l	0,1	—	—	—	—	—	
Total water consumption	V _t	l	0,1	—	—	—	—	—	
Electrical energy metered during the test	W _{et}	kWh	0,01	—	—	—	—	—	
Cold water energy correction determined during the test	W _{ct}	kWh	0,01	—	—	—	—	—	
Hot water energy correction determined during the test	W _{ht}	kWh	0,01	—	—	—	—	—	
Total energy	W _{et}	kWh	0,01	—	—	—	—	—	
Program time	t _t	min	1	—	—	—	—	—	
Spin speed	S	rpm	1	—	—	—	—	—	
Mass of base load after spin extraction	M _r	g	1	—	—	—	—	—	
Remain moisture content	D	%	0,1	—	—	—	—	—	
Rinsing Effectiveness	I _R	k/kg	0,01	—	—	—	—	—	
Reflectance after wash: Sebum	xi		0,01	—	—	—	—	—	
Reflectance after wash: Carbon black/Oil	xi		0,01	—	—	—	—	—	
Reflectance after wash: Blood	xi		0,01	—	—	—	—	—	
Reflectance after wash: Cocoa	xi		0,01	—	—	—	—	—	
Reflectance after wash: Red Wine	xi		0,01	—	—	—	—	—	
Reflectance after wash: Sum	Ck		0,01	—	—	—	—	—	—

Table 3: Test data for test washing machine 'Eco 40-60'													P
Treatment	Symbol	Unit	Accuracy	Eco 40-60									
Test runs				1	2	3	4	5	6	7	8	9	10
Load type				Half A	Half B	Half A	Half B	Full	Full	Full	Quarter	Quarter	Quarter
Date of test run		yr.m.d		2020 /11/27	2020 /11/28	2020 /11/27	2020 /11/28	2020 /11/29	2020 /11/30	2020 /12/01	2020 /11/29	2020 /11/30	2020 /12/01
Mass of conditioned base load (without test strips)	M	g	1	3455	3406	3455	3406	6861	6861	6861	1957	1957	1957
Mass of base load before each test run (without test strips)	M _{dry}	g	1	3455	3406	3455	3406	6861	6861	6861	1957	1957	1957
Mass of detergent	M _{det}	g	0,01	82,00	82,02	82,01	81,99	124,01	124,00	124,02	64,00	64,01	64,00
Ambient temperature	t _a	°C	0,1	23,0	23,1	23,0	23,0	23,0	23,1	23,0	23,1	23,0	23,0
Laboratory supply cold water inlet temperature	t _c	°C	0,1	15,0	15,1	15,1	15,1	15,0	15,0	15,1	15,0	15,1	15,1
Laboratory supply hot water inlet temperature	t _h	°C	0,1	—	—	—	—	—	—	—	—	—	—
Laboratory supply cold pressure water	p _c	kPa	10	241	241	241	241	240	240	240	240	241	240
Laboratory supply hot pressure water	p _h	kPa	10	—	—	—	—	—	—	—	—	—	—
Laboratory supply cold hardness water		mmol/l	0,01	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50	2,50
Laboratory supply hot hardness water		mmol/l	0,01	—	—	—	—	—	—	—	—	—	—
Date of water preparation cold		yr.m.d		2020 /11/27	2020 /11/28	2020 /11/27	2020 /11/28	2020 /11/29	2020 /11/30	2020 /12/01	2020 /11/29	2020 /11/30	2020 /12/01
Date of water preparation hot		yr.m.d		—	—	—	—	—	—	—	—	—	—
Cold water consumption during main wash	V _{cm}	l	0,1	10,2	10,2	10,5	10,0	19,7	18,7	18,4	8,9	8,3	8,3
Hot water consumption during main wash	V _{hm}	l	0,1	—	—	—	—	—	—	—	—	—	—
Water consumption during main wash	V _m	l	0,1	10,2	10,2	10,5	10,0	19,7	18,7	18,4	8,9	8,3	8,3

Table 3: Test data for test washing machine 'Eco 40-60'													P
Treatment	Symbol	Unit	Accuracy	Eco 40-60									
Test runs				1	2	3	4	5	6	7	8	9	10
Load type				Half A	Half B	Half A	Half B	Full	Full	Full	Quarter	Quarter	Quarter
Total cold water consumption	V _{ct}	l	0,1	35,4	36,3	36,7	35,6	50,8	50,7	49,5	32,4	32,6	31,1
Total hot water consumption	V _{ht}	l	0,1	—	—	—	—	—	—	—	—	—	—
Total water consumption	V _t	l	0,1	35,4	36,3	36,7	35,6	50,8	50,7	49,5	32,4	32,6	31,1
Total electrical energy metered during the test	W _{et}	kWh	0,01	0,62	0,62	0,62	0,61	1,07	1,07	1,06	0,48	0,44	0,45
Total cold water energy correction determined during the test	W _{ct}	kWh	0,01	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Total hot water energy correction determined during the test	W _{ht}	kWh	0,01	—	—	—	—	—	—	—	—	—	—
Total energy	W _{total}	kWh	0,01	0,62	0,62	0,62	0,61	1,07	1,07	1,06	0,48	0,44	0,45
Temperature reached for minimum 5 min inside the load	T _{wash}	°C	0,1	40,5	40,2	40,0	41,1	41,2	42,7	41,9	34,8	35,3	35,5
Main wash duration	t _m	min	1	127	127	127	127	172	172	173	127	126	127
Programme time	t _t	min	1	150	150	152	150	196	196	197	150	149	149
Spin speed	S	rpm	1	1208	1208	1203	1203	1207	1205	1208	1203	1205	1204
Mass of base load after spin extraction	M _r	g	1	5247	5221	5255	5212	10341	10325	10366	3031	3041	3036
Remain moisture content	D	%	1	52	53	52	53	51	50	51	55	55	55
Rinsing Effectiveness	I _R	k/kg	0,01	4,55	4,24	4,66	4,36	4,88	4,94	4,92	3,63	3,53	3,44
Reflectance after wash: Sebum	X _i		0,01	67,40	68,03	63,97	66,24	69,12	68,42	71,53	67,40	68,03	63,97
Reflectance after wash: Carbon black/Oil	X _i		0,01	46,02	43,66	45,93	47,05	42,48	43,16	45,65	46,02	43,66	45,93
Reflectance after wash: Blood	X _i		0,01	84,70	85,46	84,19	84,81	83,73	85,46	77,65	84,70	85,46	84,19
Reflectance after wash: Cocoa	X _i		0,01	62,17	64,26	66,96	64,53	62,61	63,32	61,29	62,17	64,26	66,96
Reflectance after wash: Red Wine	X _i		0,01	80,62	80,95	81,63	81,45	84,07	83,37	84,75	80,62	80,95	81,63

Table 3: Test data for test washing machine 'Eco 40-60'													P
Treatment	Symbol	Unit	Accuracy	Eco 40-60									
Test runs				1	2	3	4	5	6	7	8	9	10
Load type				Half A	Half B	Half A	Half B	Full	Full	Full	Quarter	Quarter	Quarter
Reflectance after wash: Sum	C _k		0,01	340,91	342,36	342,68	344,08	342,01	343,73	340,87	340,91	342,36	342,68
Washing Efficiency Index	I _w		0,001	1,033	1,037	1,038	1,042	1,036	1,041	1,032	1,033	1,037	1,038
Measured time for post programme phase LU	t _{mLU}	min	1	30				30			30		
Energy consumption (left on mode unstable)	W _{LU}	Wh	0,01	0,27				0,27			0,27		
Energy consumption (left on mode stable)	W _{LO}	Wh	0,01	0,07				0,07			0,07		
Energy consumption (off mode)	W _O	Wh	0,001	0,07				0,07			0,07		
Power (left-on mode unstable)	P _{LU}	W	0,01	0,54				0,54			0,54		
Power (left-on stable)	P _{LO}	W	0,01	0,42				0,42			0,42		
Power (off mode)	P _O	W	0,01	0,42				0,42			0,42		
Left on mode duration	t _L	min	1	10				10			10		

Table 4: Test data for test washing machine 'WASH AND DRY'										N/A
Treatment	Symbol	Unit	Accuracy	Half load		Half load		Full load		
Test runs				1	2	3	4	5	6	7
Load type				Partial A	Partial B	Partial A	Partial B	Full load	Full load	Full load
Date of test run		yr.m.d		—	—	—	—	—	—	—
Mass of conditioned base load (without test strips)	M	g	1	—	—	—	—	—	—	—
Mass of base load before each test run (without test strips)	M _{dry}	g	1	—	—	—	—	—	—	—
Mass of detergent	M _{det}	g	0,01	—	—	—	—	—	—	—
Mass of test load after drying (without strips)	M _{dry}	g	1	—	—	—	—	—	—	—
Final moisture content	uf	0,1	1	—	—	—	—	—	—	—
Ambient temperature	t _a	°C	0,1	—	—	—	—	—	—	—
Laboratory supply cold water inlet temperature	t _c	°C	0,1	—	—	—	—	—	—	—
Laboratory supply hot water inlet temperature	t _h	°C	0,1	—	—	—	—	—	—	—
Laboratory supply cold pressure water	p _c	kPa	10	—	—	—	—	—	—	—
Laboratory supply hot pressure water	p _h	kPa	10	—	—	—	—	—	—	—
Laboratory supply cold hardness water		mmol/l	0,01	—	—	—	—	—	—	—
Laboratory supply hot hardness water		mmol/l	0,01	—	—	—	—	—	—	—
Date of water preparation cold		yr.m.d		—	—	—	—	—	—	—
Date of water preparation hot		yr.m.d		—	—	—	—	—	—	—
Cold water consumption during main wash	V _{cm}	l	0,1	—	—	—	—	—	—	—
Hot water consumption during main wash	V _{hm}	l	0,1	—	—	—	—	—	—	—
Water consumption during main wash	V _m	l	0,1	—	—	—	—	—	—	—
Total cold water consumption	V _{ct}	l	0,1	—	—	—	—	—	—	—
Total hot water consumption	V _{ht}	l	0,1	—	—	—	—	—	—	—
Total water consumption	V _t	l	1	—	—	—	—	—	—	—
Total electrical energy metered during the test	W _{et}	kWh	0,01	—	—	—	—	—	—	—
Total cold water energy correction determined during the test	W _{ct}	kWh	0,01	—	—	—	—	—	—	—
Total hot water energy correction determined during the test	W _{ht}	kWh	0,01	—	—	—	—	—	—	—
Corrected energy consumption of the drying	W _D	kWh	0,01	—	—	—	—	—	—	—

Table 4: Test data for test washing machine 'WASH AND DRY'										N/A
Treatment	Symbol	Unit	Accuracy	Half load		Half load		Full load		
Test runs				1	2	3	4	5	6	7
Load type				Partial A	Partial B	Partial A	Partial B	Full load	Full load	Full load
cycle										
Total energy	W_{total}	kWh	0,01	—	—	—	—	—	—	—
Temperature reached for minimum 5 min inside the load	T_{max}	°C	0,1	—	—	—	—	—	—	—
Main wash duration	t_m	min	1	—	—	—	—	—	—	—
Programme time (without cool-down)	t_t	min	1	—	—	—	—	—	—	—
Spin speed	S	rpm	1	—	—	—	—	—	—	—
Rinsing Effectiveness	J_R	k/kg	0,01	—	—	—	—	—	—	—
Reflectance after wash: Sebum	x_i		0,01	—	—	—	—	—	—	—
Reflectance after wash: Carbon black/Oil	x_i		0,01	—	—	—	—	—	—	—
Reflectance after wash: Blood	x_i		0,01	—	—	—	—	—	—	—
Reflectance after wash: Cocoa	x_i		0,01	—	—	—	—	—	—	—
Reflectance after wash: Red Wine	x_i		0,01	—	—	—	—	—	—	—
Reflectance after wash: Sum	C_k		0,01	—	—	—	—	—	—	—
Washing Efficiency Index	lw		0,001	—	—	—	—	—	—	—

Table 5: Summary of test result 'Eco 40-60'				P
Items	Symbol	Unit	Accuracy	Result
Rated capacity	c	kg	0,5	7,0
Weighting Factor	A		0,001	0,418
Weighting Factor	B		0,001	0,282
Weighting Factor	C		0,001	0,300
Energy consumption of the eco 40-60 programme at rated capacity	$E_{w, full}$	kWh/cycle	0,001	1,067
Energy consumption of the eco 40-60 programme at half of rated capacity	$E_{w,1/2}$	kWh/cycle	0,001	0,618
Energy consumption of the eco 40-60 programme at quarter of rated capacity	$E_{w,1/4}$	kWh/cycle	0,001	0,457
Weighted energy consumption	E_w	kWh/cycle	0,001	0,757
Weighted energy consumption per 100 cycles	E_{100}	kWh	1	76
Standard energy consumption	SCE_w	kWh/cycle	0,001	0,862
Energy Efficiency Index	EEl_w		0,1	87,9
Energy Efficiency Class				E
Water consumption of the eco 40-60 programme at rated capacity	$W_w, full$	L/cycle	0,1	50,3
Water consumption of the eco 40-60 programme at half of rated capacity	$W_w,1/2$	L/cycle	0,1	36,0
Water consumption of the eco 40-60 programme at quarter of rated capacity	$W_w,1/4$	L/cycle	0,1	32,0
Weighted water consumption per cycle	W_w	L/cycle	1	41
Washing efficiency index of the eco 40-60 programme at rated capacity	$l_w, full$		0,01	1,04
Washing efficiency index of the eco 40-60 programme at half of rated capacity	$l_w, half$		0,01	1,04
Washing efficiency index of the eco 40-60 programme at quarter of rated capacity	$l_w, quarter$		0,01	1,04
Rinsing effectiveness of the eco 40-60 programme at rated capacity	$l_R, full$	g/kg	0,1	4,9
Rinsing effectiveness of the eco 40-60 programme at half of rated capacity	$l_R, half$	g/kg	0,1	4,5
Rinsing effectiveness of the eco 40-60 programme at quarter of rated capacity	$l_R, quarter$	g/kg	0,1	3,5
Programme duration of the eco 40-60 programme at rated capacity	$t_w, full$	h:min	1	3:16
Programme duration of the eco 40-60 programme at half of rated capacity	$t_w, half$	h:min	1	2:31
Programme duration of the eco 40-60 programme at quarter of rated capacity	$t_w, quarter$	h:min	1	2:29
Temperature reached for minimum 5 min inside the load during eco 40-60 programme at rated capacity	T, full	°C	1	42
Temperature reached for minimum 5 min inside the load during eco 40-60 programme at half of rated capacity	T, half	°C	1	41

Temperature reached for minimum 5 min inside the load during eco 40-60 programme at quarter of rated capacity	T, quarter	°C	1	35
Spin speed in the spinning phase of the eco 40-60 programme at rated capacity	S, full	rpm	1	1207
Spin speed in the spinning phase of the eco 40-60 programme at half of rated capacity	S, half	rpm	1	1206
Spin speed in the spinning phase of the eco 40-60 programme at quarter of rated capacity	S, quarter	rpm	1	1204
Remaining moisture content of the eco 40-60 programme at rated capacity	D, full	%	0,1	50,7
Remaining moisture content of the eco 40-60 programme at half of rated capacity	D, half	%	0,1	52,5
Remaining moisture content of the eco 40-60 programme at quarter of rated capacity	D, quarter	%	0,1	55,0
Weighted remaining moisture content	D	%	1	53
Spin-drying efficiency class				B
Power consumption in 'off mode'	P _o	W	0,01	0,42
Power consumption in 'standby mode'	P _{sm}	W	0,01	0,42
Does 'standby mode' include the display of information?				No
Time on delay start mode	T _{ds}	h	1	24
Power consumption on delay start mode	P _{ds}	W	0,1	2,1
Power consumption in 'standby mode' in condition of networked standby	P _{sm}	W	0,1	—
Airborne acoustical noise emissions during eco 40-60 programme (spinning phase)		(dB(A) re 1 pW)	1	75
Acoustic airborne noise emission classes				B

Table 6: Summary of test result 'WASH AND DRY'					N/A
Items	Symbol	Unit	Accuracy	Result	Standard deviation
Rated washing capacity	c	kg	0,5	—	
Rated washing-drying capacity	c	kg	0,5	—	
Energy consumption of the wash and dry cycle at rated capacity	E _{WD, full}	kWh	0,001	—	—
Energy consumption of the wash and dry cycle at half of rated capacity	E _{WD, half}	kWh	0,001	—	—
Weighted energy consumption	E _{WD}	kWh	0,001	—	—
Standard energy consumption	SCE _{WD}	kWh	0,001	—	
Energy Efficiency Index	EEl _{WD}		0,1	—	
Energy Efficiency Class				—	
Water consumption of the wash and dry cycle at rated capacity	W _{WD, full}	liter	0,1	—	—
Water consumption of the wash and dry cycle at half of rated capacity	W _{WD, half}	liter	0,1	—	—
Weighted water consumption per cycle	W _{WD}	liter	1	—	—
Washing efficiency index of the wash and dry cycle at rated capacity	J _{W, full}		0,01	—	—
Washing efficiency index of the wash and dry cycle at half of rated capacity	J _{W, half}		0,01	—	—
Rinsing effectiveness of the wash and dry cycle at rated capacity	J _{R, full}	g/kg	0,1	—	—
Rinsing effectiveness of the wash and dry cycle at half of rated capacity	J _{R, half}	g/kg	0,1	—	—
Cycle duration of the wash and dry cycle at rated capacity	t _{cap, full}	min	1	—	—
Cycle duration of the wash and dry cycle at half of rated capacity	t _{cap, half}	min	1	—	—
Temperature reached for minimum 5 min inside the load during wash and dry cycle at rated capacity	T _{MAX, full}	°C	1	—	—
Temperature reached for minimum 5 min inside the load during wash and dry cycle at half of rated capacity	T _{MAX, half}	°C	1	—	—
Spin speed in the spinning phase of the wash and dry cycle at rated capacity	S, full	rpm	1	—	
Spin speed in the spinning phase of the wash and dry cycle at half of rated capacity	S, half	rpm	1	—	
Final moisture content of the wash and dry cycle at rated capacity	uF, full	%	0,1	—	—
Final moisture content of the wash and dry cycle at half of rated capacity	uF, half	%	0,1	—	—
Final moisture content of the wash and dry cycle	uF, max	%	0,1	—	—
Airborne acoustical noise emissions during wash and dry cycle (spinning phase)		(dB(A) re 1 pW)	1	—	

Table 7 List of test equipment used:					
Equipments name	Equipments Model No./ID	Range used	Accuracy	Resolution	Calibration due date
Temp.& Humidity Chamber (Wash machine Chamber)	GZE264-8	Power (0-10 kW)	Measurement uncertainty (0,5 %)	OK	2020/12/12
		Current (0-20 A)	Measurement uncertainty (0,5 %)	OK	2020/12/12
		Frequency (45-65 Hz)	±0,05 Hz	OK	2020/12/12
		Thermocouples (-30 - 200 °C)	±0,5 °C	OK	2020/12/12
		Watt-hour meter	0,0001 kW h	OK	2020/12/12
Flowmeter	GZE264-1	0,1-2m³/h	±0,1%	OK	2021/05/07
Tachometer	GZE265-3	10-99990RPM	0,04%±2dgts±0,06RPM	OK	2021/03/26
Water-Quality Hardmeter	GZE264-4	0,01-0,1;±5%FS	0-10mmol/L	OK	2021/07/16
Electronic scales	GZE223-4	500 g	0,01 g	OK	2021/09/23
Electronic scales	GZE223-7	50 kg	±5 g	OK	2021/06/21
Pressure meter	GZE262-27	400KPa	—	OK	2021/03/16
Temperature and Humidity Instrument	AHE099-01	±0,4 °C (-20~+50 °C)±1digit; ±2% RH(2 to 98% RH); +0,03%RH/K ±1digit	-20 °C ~55 °C; 0~100%RH	OK	2021/06/09

Photo documentation

Details of: Front

View:

- general
- front
- rear
- right
- left
- top
- bottom



Details of: Control panel

View:

- general
- front
- rear
- right
- left
- top
- bottom



Details of: Side view

View:

- general
- front
- rear
- right
- left
- top
- bottom

Details of: Rear view

View:

- general
- front
- rear
- right
- left
- top
- bottom



Details of: Washing motor

View:

- general
- front
- rear
- right
- left
- top
- bottom



--- End of Report ---