

# Foshan Sunnai Electrical Appliance Co., Ltd TEST REPORT

#### **SCOPE OF WORK**

ENERGY EFFICIENCY TESTING - REFRIGERATING APPLIANCE - [MODEL(S) IN PAGE 2]

# REPORT NUMBER

200903090GZU-002

ISSUE DATE 30-Sep-2020 [REVISED DATE] NONE

# PAGES

28

DOCUMENT CONTROL NUMBER REF-EU-TRF\_V2[03-04-2020] © 2020 INTERTEK



Report No. 200903090GZU-002 Intertek Testing Services Shenzhen Ltd. Guangzhou Branch **Testing Laboratory:** Room 02, & 101/E201/E301/E401/E501/E601/E701/E801 of Address: Room 01 1-8/F., No. 7-2. Caipin Road, Science City, GETDD, Guangzhou, Guangdong, China Applicant / Manufacturer: Foshan Sunnai Electrical Appliance Co., Ltd Address: xingtan industrial zone xingtan shunde foshan Manufacturing Site: Foshan Sunnai Electrical Appliance Co., Ltd Address: xingtan industrial zone xingtan shunde foshan **Testing Location:** See test summary on page 7. Address: See test summary on page 7. Product: Wine storage appliance Brand Name: N/A Description: The product covered by this report is a household, indoor use, cord connected household refrigerating appliance. Model(s): SW-51 Model Similarity: N/A Ratings: 220~240V/50Hz, R600a/38g Date of receipt of sample(s): 3-Sep-2020 Date Range of Test: 3-Sep-2020 ~ 22-Sep-2020 Test standard(s) or criteria(s): (EU) 2019/2019 + (EU) 2019/2016; EN 62552-1:2020 (IEC 62552-1:2015, modified); EN 62552-2:2020 (IEC 62552-2:2015, modified); EN 62552-3:2020 (IEC 62552-3:2015, modified); EN 60704-2-14:2013 + A11:2015 + A1:2019; EN 60704-1:2010 + A11:2012 Conclusion: These results are in compliance with the Energy efficiency requirements and the Energy efficiency class is G.

Prepared by: Title:

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Taylor Cai Project Engineer

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Photos

Photo 1 - Front view



Photo 2 - Rear view



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Photo 3 - Front view with open door

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#### Photo 4 - Label of compressor





Photo 5 - Nameplate

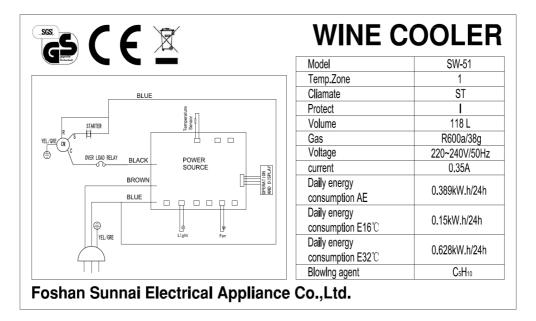
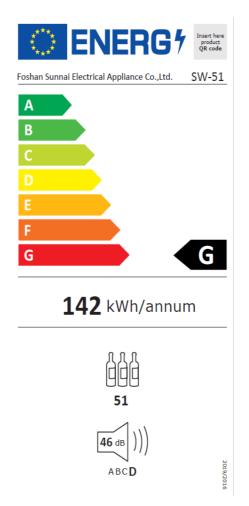


Photo 6 - Energy label



Note: This energy label is only a sample for reference, the QR code will be added when the product placing on market.



#### **Product Details**

Model number of unit under tested	
	SW-51
Serial number	N/A
Condition of sample(s)	Prototype
Product designation	Wine storage appliances with transparent
	doors
Climate Class	ST
Minimum ambient temperature [°C] for which the	16
refrigerating appliance is suitable	
Maximum ambient temperature [°C] for which the	38
refrigerating appliance is suitable	
Refrigerant	R600a
Charge of refrigerant [g]	38
Refrigerating type	Compression-type
Condenser type	Fan forced
Condenser location	Bottom
Design type	Freestanding
Low-noise appliance?	No
Wine storage appliance?	Yes
Other refrigerating appliance?	No
Number of external doors or compartments, whichever	1
is lowest	
Winter setting?	No
Fast freezer facility?	No
Anti-condensation heater type	None
Dedicated appliances ?	Yes
Refrigerating appliances with only frozen	No
compartments?	
Combi appliances with 3-or 4-star compartments ?	No
Other combi appliances?	No
Cooling system	Fan forced
Defrosting type	Cyclic defrost
Defrosting controller	N/A
Overall dimensions (H*W*D)[mm]	815*595*585
Overall space required in use (H*W*D)[mm]	815*1145*1133
The number of standard bottles that can be	51
accommodated (for Wine storage appliance)	



**Total Quality. Assured.** 

#### **Test summary**

1. Noise test was conducted at location Intertek Testing Services (Guangzhou) Ltd. (No. 3-1, Xinhai Xinyi Road, Huangge Town, Nansha District, Guangzhou City, China ). Tests except noise test were conducted at location Intertek Testing Services Shenzhen Ltd. Guangzhou Branch (Room 02, & 101/E201/E301/E401/E501/E601/E701/E801 of Room 01 1-8/F., No. 7-2. Caipin Road, Science City, GETDD, Guangzhou, Guangdong, China).

# **Critical Components**

	Manufacturer / trademark	Type / model	Technical data
Compressor	LG	CMA062NHEM	220-240V~50Hz 1PH, R600a



Clause	Ecodesign requirements	Result - Remark	Verdict
1	Energy efficiency requirements:	•	
(a)	From 1 March 2021, the energy efficiency index (EEI) of refrigerating appliances shall not be above the values as set out in Table 1.	EEI = 147.1	Pass
(b)	From 1 March 2024, the EEI of refrigerating appliances shall not be above the values set out in Table 2.	EEI = 147.1	Pass
2	Functional requirements: From 1 March 2021, refrigerating appliances shall mee requirements:	et the following	
(a)	Any fast freeze facility, or any similar function achieved through modification of the temperature settings in freezer compartments, shall, once activated by the end-user according to the manufacturer's, the importer's or authorised representative's instructions, automatically revert to the previous normal storage conditions after no more than 72 hours.		N/A
(b)	Winter settings shall be automatically activated or de-activated according to the need to maintain the frozen compartment(s) at the correct temperature.		N/A
	Until 1 March 2024, the requirements laid down in points 2(a) and (b) shall not apply to combi appliances with one electromechanical thermostat and one compressor which are not equipped with an electronic control board.		N/A
(c)	Each compartment shall be marked with the appropriate identification symbol. For the frozen compartments this shall be the number of stars of the compartment. For the chill and unfrozen compartments, this shall be an indication, chosen by the manufacturer, the importer or authorised representative, of the type of food that should be stored in the compartment.		Pass
(d)	If the refrigerating appliance contains vacuum insulation panels, the refrigerating appliance shall be labelled with the letters 'VIP' in a clearly visible and readable way.		N/A
(e)	For 2-star sub-compartments or 2-star sections:		
	<ul> <li>a 2-star sub-compartment or 2-star section is separated from the 3-star or 4-star volume by a partition, container, or similar construction;</li> </ul>		N/A



Clause	Ecodesign requirements R	esult - Remark	Verdict
	<ul> <li>the volume of the 2-star sub-compartment or 2- star section does not exceed 20 % of the total volume of the containing compartment.</li> </ul>		N/A
(f)	For 4-star compartments, the specific freezing capacity shall be such that the freezing time to bring the temperature of the light load (3,5 kg/100 l) from +25 to - 18 °C at an ambient temperature of 25 °C, is smaller than or equal to 18,5 h.		N/A
3	Resource efficiency requirements: From 1 March 2021, refrigerating appliances shall meet requirements:	the following	
(a)	Availability of spare parts:		
(1)	manufacturers, importers or authorised representatives of refrigerating appliances shall make available to professional repairers at least the following spare parts: thermostats, temperature sensors, printed circuit boards and light sources, for a minimum period of seven years after placing the last unit of the model on the market;		Not check
(2)	manufacturers, importers or authorised representatives of refrigerating appliances shall make available to professional repairers and end-users at least the following spare parts: door handles, door hinges, trays and baskets for a minimum period of seven years and door gaskets for a minimum period of 10 year, after placing the last unit of the model on the market;		Not check
(3)	manufacturers shall ensure that these spare parts can be replaced with the use of commonly available tools and without permanent damage to the appliance;		Not check
(4)	the list of spare parts concerned by point (1) 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;		Not check



Clause	Ecodesign requirements	Result - Remark	Verdict
(5)	the list of spare parts concerned by point (2) and the procedure for ordering them and the repair instructions shall be publicly available on the manufacturer's, the importer's or authorised representative's free access website, at the moment of 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.		Not check
<u>(b)</u>	Access to repair and maintenance information: After a period of two years after the placing on the ma of a model or of an equivalent model, and until the en mentioned under (a), the manufacturer, importer or a representative shall provide access to the appliance re information to professional repairers in the following	d of the period uthorised pair and maintenance	
(1)	the manufacturer's, importer's or authorised represer indicate the process for professional repairers to regis information; to accept such a request, manufacturers, authorised representative may require the profession demonstrate that:	ter for access to importers or	
(i)	the professional repairer has the technical competence to repair refrigerating appliances 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;		Not check
(ii)	the professional repairer is covered by insurance covering liabilities resulting from its activity, regardless of whether this is required by the Member State;		Not check
(2)	the manufacturers, importers or authorised representatives shall accept or refuse the registration within 5 working days from the date of request by the professional repairer;		Not check
(3)	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;		Not check



Clause	Ecodesign requirements	Result - Remark	Verdict	
	Once registered, a professional repairer shall have acc working day after requesting it, to the requested repa information. The available repair and maintenance inf include:	ir and maintenance		
	— the unequivocal appliance identification;		Not check	
	<ul> <li>a disassembly map or exploded view;</li> </ul>		Not check	
	<ul> <li>list of necessary repair and test equipment;</li> </ul>		Not check	
	<ul> <li>component and diagnosis information (such as minimum and maximum theoretical values for measurements);</li> </ul>		Not check	
	<ul> <li>— wiring and connection diagrams;</li> </ul>		Not check	
	<ul> <li>diagnostic fault and error codes (including manufacturer-specific codes, where applicable); and</li> </ul>		Not check	
	<ul> <li>data records of reported failure incidents stored on the refrigerating appliance (where applicable).</li> </ul>		Not check	
(c)	Maximum delivery time of spare parts:			
(1)	during the period mentioned under point 3(a)(1) and point 3(a)(2), the manufacturer, importer or authorised representatives shall ensure the delivery of the spare parts for refrigerating appliances within 15 working days after having received the order;		Not check	
(2)	in the case of spare parts available only to professional repairers this availability may be limited to professional repairers registered in accordance with point b.		Not check	
(d)	Requirements for dismantling for material recovery an avoiding pollution:	nd recycling while		
(1)	manufacturers, importers or authorised representatives shall ensure that refrigerating appliances 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;		Not check	
(2)	manufacturers, importers and authorised representatives shall fulfil the obligations laid down in Point 1 of Article 15 of Directive 2012/19/EU.		Not check	
4	Information requirements:			
	From 1 March 2021, instruction manuals for installers and end-users, and free access website of manufacturers, importers or authorised representatives shall include the following information:			



Clause	Ecodesign requirements	Result - Remark	Verdict		
(a)	the combination of drawers, baskets and shelves that result in the most efficient use of energy for the refrigerating appliance;		Pass		
(b)	clear guidance about where and how to store foodstuffs in a refrigerating appliance for best preservation over the longest period, to avoid food waste;				
(c)	the recommended setting of temperatures in each compartment for optimum food preservation. These settings shall not contradict the storage conditions set out in Annex III, Table 3;		Pass		
(d)	an estimation of the impact of temperature settings on food waste;		Pass		
(e)	a description of the effects of special modes and features, and in particular how temperatures are affected in each compartment and for how long;		N/A		
(f)	for wine storage appliances: 'this appliance is intended to be used exclusively for the storage of wine'. This shall not apply to refrigerating appliances that are not specifically designed for wine storage but may be used for this purpose, or to refrigerating appliances that have a wine storage compartment combined with any other compartment type;		Pass		
(g)	instructions for the correct installation and end-user maintenance, including cleaning, of the refrigerating appliance;		Pass		
(h)	for a freestanding appliance: 'this refrigerating appliance is not intended to be used as a built-in appliance';		Pass		
(i)	for appliances without a 4-star compartment: 'this refrigerating appliance is not suitable for freezing foodstuffs';		Pass		
(j)	access to professional repair, such as internet webpages, addresses, contact details;		Not check		
(k)	relevant information for ordering spare parts, directly or through other channels provided by the manufacturer, importer or authorised representative;		Not check		



Clause	Ecodesign requirements	Result - Remark	Verdict
(I)	the minimum period during which spare parts, necessary for the repair of the appliance, are available;		Not check
(m)	the minimum duration of the guarantee of the refrigerating appliance offered by the manufacturer, importer or authorised representative;		Not check
(n)	for refrigerating appliances with climate class:		
	<ul> <li>extended temperate: 'this refrigerating appliance is intended to be used at ambient temperatures ranging from 10 °C to 32 °C';</li> </ul>		N/A
	<ul> <li>temperate: 'this refrigerating appliance is intended to be used at ambient temperatures ranging from 16 °C to 32 °C';</li> </ul>		N/A
	<ul> <li>subtropical: 'this refrigerating appliance is intended to be used at ambient temperatures ranging from 16 °C to 38 °C';</li> </ul>		Pass
	<ul> <li>tropical: 'this refrigerating appliance is intended to be used at ambient temperatures ranging from 16 °C to 43 °C';</li> </ul>		N/A
(0)	instruction on how to find the model information in the product database, as defined in Regulation (EU) 2019/2016 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.		Not check

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#### Storage test

Item	Data
Function selected for each multi-use type compartment	N/A
Position of each user-adjustable baffle	N/A
Setting of each user-adjustable temperature control	See test table(s)
Setting of each other switch or user-adjustable control	N/A
Test voltage [V]	230
Test frequency [Hz]	50
Test room ambient settings (as applicable) [°C]	See test table(s)
Test room ambient relative humidity settings (as applicable) [%]	60
Appliance complies with storage temperature requirements?	Pass

Item	Cumphiel	Symbol Unit	16°C Storage Temperature Test		
	Symbol		Value	Limit	Verdict
Thermostat setting	-	-	11	-	-
	t <sub>w1 max</sub>	°C	11.5	-	-
	t <sub>w1 min</sub>	°C	11.1	-	-
	amplitude	°C	0.4	≤ 0.5K	Pass
	t <sub>w1m</sub>	°C	11.4	5 ≤T <sub>w1m</sub> ≤20	Pass
	t <sub>w2 max</sub>	°C	11.9	-	-
	t <sub>w2 min</sub>	°C	11.6	-	-
	amplitude	°C	0.3	≤ 0.5K	Pass
Wine	t <sub>w2m</sub>	°C	11.8	5 ≤T <sub>w2m</sub> ≤20	Pass
	t <sub>w3 max</sub>	°C	11.6	-	-
	t <sub>w3 min</sub>	°C	11.3	-	-
	amplitude	°C	0.3	≤ 0.5K	Pass
	t <sub>w3m</sub>	°C	11.5	5 ≤T <sub>w3m</sub> ≤20	Pass
	t <sub>wma</sub>	°C	11.6	≤12	Pass
	t <sub>wma-df</sub>	°C	N/A	≤13.1	-



#### Storage test

Item	Symbol	ymbol Unit -	25°C Storage Temperature Test		
			Value	Limit	Verdict
Thermostat setting	-	-	11	-	-
	$t_{w1max}$	°C	11.2	-	-
	t <sub>w1 min</sub>	°C	11.0	-	-
	amplitude	°C	0.2	≤ 0.5K	Pass
	t <sub>w1m</sub>	°C	11.1	5 ≤T <sub>w1m</sub> ≤20	Pass
	t <sub>w2 max</sub>	°C	12.6	-	-
	t <sub>w2 min</sub>	°C	12.2	-	-
NA/:	amplitude	°C	0.4	≤ 0.5K	Pass
Wine	t <sub>w2m</sub>	°C	12.5	5 ≤T <sub>w2m</sub> ≤20	Pass
	t <sub>w3 max</sub>	°C	11.3	-	-
	t <sub>w3 min</sub>	°C	11.2	-	-
	amplitude	°C	0.1	≤ 0.5K	Pass
	t <sub>w3m</sub>	°C	11.2	5 ≤T <sub>w3m</sub> ≤20	Pass
	t <sub>wma</sub>	°C	11.6	≤12	Pass
	t <sub>wma-df</sub>	°C	N/A	≤13.1	-

Item	Sumbol	Unit	38°C Storage Temperature Test		
	Symbol	Unit	Value	Limit	Verdict
Thermostat setting	-	-	10	-	-
	$t_{w1max}$	°C	10.5	-	-
	t <sub>w1 min</sub>	°C	10.3	-	-
	amplitude	°C	0.2	≤ 0.5K	Pass
	t <sub>w1m</sub>	°C	10.4	5 ≤T <sub>w1m</sub> ≤20	Pass
	t <sub>w2 max</sub>	°C	12.8	-	-
	t <sub>w2 min</sub>	°C	12.6	-	-
NA/:	amplitude	°C	0.2	≤ 0.5K	Pass
Wine	t <sub>w2m</sub>	°C	12.7	5 ≤T <sub>w2m</sub> ≤20	Pass
	t <sub>w3 max</sub>	°C	10.5	-	-
	t <sub>w3 min</sub>	°C	10.3	-	-
	amplitude	°C	0.2	≤ 0.5K	Pass
	t <sub>w3m</sub>	°C	10.4	5 ≤T <sub>w3m</sub> ≤20	Pass
	t <sub>wma</sub>	°C	11.2	≤12	Pass
	t <sub>wma-df</sub>	°C	N/A	≤12.7	-



# Wine storage humidity test

Item	Unit	Value
Thermostat setting	-	11
Test voltage	V	230
Test frequency	Hz	50
Test room ambient settings (as applicable)	°C	25
Test room ambient relative humidity settings (as applicable)	%	60
Tested internal relative humidity	%	63.0

#### **Volume Measurement**

Item	Unit	Value
The volume of the wine storage compartment	L	128.2
Total volume	L	128.2



#### **Noise Test**

Test Condition	
Item	Value
Barometric pressure [kPa]	101.3
Ambient temperature [°C]	23.1
Humidity [%[	60.0
Test voltage /frenquency [V/Hz]	230/50
Average temperature in wine storage compartment (°C)	11.8
Measurement method	Comparison method
Basic ISO standards used	ISO 3741:2010
Test room	Special reverberation test room
Room inner dimensions [m <sup>3</sup> ]	250

#### **Test Method**

Description

The comparison method is used to measure the sound power level, as described in ISO 3741:2010.

With this method, the sound power level is determined by comparing the averaged values (on a mean-square basis) of the sound pressure levels produced by the source in the test room to the averaged values of the sound pressure levels produced in the same room by a calibrated reference sound source (RSS) of known sound power output, complying with the requirements of ISO 6926. The difference in sound pressure levels is equal to the difference in sound power levels when conditions are the same for both sets of measurements;

This method yields results expressed in octave-band sound power levels, and the A-weighted sound power level is calculated from the octave-band sound power levels;

Before measurements the refrigerator was stabilized for more than 16 hours outside the reverberation room. Then a stabilization period in the reverberation room was awaited before the actual measurements. The reference sound power source was measured before and after the measurements of the refrigerator;

The A-weighted time averaged sound pressure level is measured from 1 min after the start of a running period to the end of this running period;

For each running period, time-averaged sound pressure levels from the noise source under test for each one-third-octave band in the frequency range of interest, L'pi(ST), are measured at each of 6 microphone positions; three consecutive measurements are carried out. The final result will be the logarithmic mean of these three measurements.

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# **Noise Test**

Sample 1 - Firs	st period meas	surement				
Frequencies	Lp (B) avg	Lp (ST) avg	LpA (ST) avg	Lp (RSS) avg	LW [dB]	LWA [dB]
[Hz]	[dB]	[dB]	[dB]	[dB]	LVV [UB]	LVVA [UD]
100	17.65	19.77	0.63	54.21	43.41	24.26
125	9.8	19.77	3.59	56.92	39.7	23.51
160	7.71	29.54	16.3	60.86	45.93	32.68
200	5.6	34.24	23.39	62.49	49.2	38.35
250	11.79	31.44	22.77	64.83	43.76	35.09
315	3.45	33.68	27.04	67.4	43.33	36.69
400	0.91	30.55	25.78	69.99	37.71	32.93
500	2.53	32.23	28.98	71.75	38.03	34.78
630	1.89	31.28	29.37	73.3	35.82	33.91
800	3.49	31.9	31.11	75.56	35.69	34.9
1000	3.04	27.82	27.82	77.48	30.79	30.79
1250	3.93	27.78	28.36	80.03	29.8	30.38
1600	4.87	28.88	29.87	80.35	31.08	32.07
2000	5.66	29.05	30.25	80.36	31.34	32.54
2500	6.41	27.61	28.88	78.51	29.95	31.22
3150	7.07	23.74	24.95	76.96	27.04	28.24
4000	7.52	22.29	23.25	75.85	26.59	27.55
5000	7.71	20.91	21.46	73.53	26.72	27.28
6300	7.73	17.9	17.79	70.93	25.32	25.2
8000	7.42	16.23	15.08	67.11	25.77	24.62
10000	7.07	12.22	9.73	62.86	23.91	21.42
		-	-		Total:	45.7

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# **Noise Test**

Sample 1 - Seo	cond period m	easurement				
Frequencies	Lp (B) avg	Lp (ST) avg	LpA (ST) avg	Lp (RSS) avg	LW [dB]	LWA [dB]
[Hz]	[dB]	[dB]	[dB]	[dB]		LVVA [UB]
100	17.65	19.58	0.44	54.21	43.22	24.07
125	9.8	19.64	3.45	56.92	39.56	23.38
160	7.71	29.49	16.25	60.86	45.88	32.64
200	5.6	34.49	23.65	62.49	49.45	38.61
250	11.79	31.43	22.75	64.83	43.75	35.07
315	3.45	33.84	27.19	67.4	43.49	36.84
400	0.91	30.6	25.82	69.99	37.76	32.98
500	2.53	31.98	28.73	71.75	37.78	34.53
630	1.89	31.18	29.27	73.3	35.72	33.81
800	3.49	31.93	31.13	75.56	35.72	34.92
1000	3.04	27.82	27.82	77.48	30.79	30.79
1250	3.93	27.81	28.39	80.03	29.83	30.41
1600	4.87	28.97	29.96	80.35	31.17	32.16
2000	5.66	29.12	30.32	80.36	31.41	32.61
2500	6.41	27.61	28.88	78.51	29.94	31.21
3150	7.07	23.72	24.93	76.96	27.02	28.22
4000	7.52	22.14	23.11	75.85	26.44	27.41
5000	7.71	21.11	21.67	73.53	26.93	27.48
6300	7.73	17.91	17.8	70.93	25.33	25.21
8000	7.42	16.58	15.43	67.11	26.12	24.97
10000	7.07	12.51	10.02	62.86	24.2	21.71
		-			Total:	45.8

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#### **Noise Test**

Sample 1 -Thi	rd period mea	surement				
Frequencies	Lp (B) avg	Lp (ST) avg	LpA (ST) avg	Lp (RSS) avg	LW [dB]	LWA [dB]
[Hz]	[dB]	[dB]	[dB]	[dB]		LWA [UD]
100	17.65	19.63	0.49	54.21	43.27	24.13
125	9.8	19.75	3.57	56.92	39.68	23.49
160	7.71	29.57	16.33	60.86	45.96	32.72
200	5.6	35.15	24.3	62.49	50.11	39.26
250	11.79	31.03	22.36	64.83	43.35	34.67
315	3.45	34.13	27.49	67.4	43.78	37.14
400	0.91	30.57	25.79	69.99	37.72	32.95
500	2.53	32.16	28.91	71.75	37.96	34.71
630	1.89	31.2	29.29	73.3	35.74	33.84
800	3.49	31.83	31.04	75.56	35.62	34.83
1000	3.04	27.83	27.83	77.48	30.79	30.79
1250	3.93	27.82	28.4	80.03	29.84	30.42
1600	4.87	29	30	80.35	31.2	32.19
2000	5.66	29.08	30.28	80.36	31.37	32.57
2500	6.41	27.58	28.85	78.51	29.92	31.19
3150	7.07	23.81	25.02	76.96	27.11	28.31
4000	7.52	22.25	23.22	75.85	26.55	27.52
5000	7.71	21.14	21.69	73.53	26.95	27.51
6300	7.73	17.79	17.67	70.93	25.2	25.09
8000	7.42	16.54	15.4	67.11	26.08	24.94
10000	7.07	12.53	10.03	62.86	24.21	21.72
					Total:	45.9

### Determination of declaration

Item	Value
A-weighted sound power level L <sub>WA</sub> , dB(A)	45.8



#### **Energy consumption test**

Items		Data
Coldest function selected for each multi-us	se type compartment?	N/A
Disconnections, bridging or modifications appliance?	N/A	
Interpolation method used	Linear	
Where interpolation has been used for on	e or two controls, identify	Wine storage compartment
which controls		
Indicate compartment(s) used for interpol	ation	Wine storage compartment
Test voltage [V]		230
Test frequency [Hz]		50
Test room ambient settings (as applicable)	[°C]	See test table(s)
Test room ambient relative humidity settin	ngs (as applicable) [%]	60
	Ambient 16°C Point 1	11
Satting of other quitches or controls	Ambient 16°C Point 2	13
Setting of other switches or controls	Ambient 32°C Point 1	11
	Ambient 32°C Point 2	12

#### Measured steady-state results at ambient 16°C

Test Deint	Point 1	Point 2	 Target
Test Point	T <sub>ss</sub> ℃	T <sub>ss</sub> ℃	 Temperature
Wine storage	11.3	13.5	 12
Steady-state power W P <sub>ss</sub>	6.2	4.1	

#### Measured steady-state results at ambient 32°C

Test Deint	Point 1	Point 2	 Target
Test Point	T <sub>ss</sub> ℃	T <sub>ss</sub> ℃	 Temperature
Wine storage	10.7	12.3	 12
Steady-state power W P <sub>ss</sub>	23.6	22.6	

#### Compartment temperature and daily energy at ambient 16°C

Test Point	Wine storage °C	 	 Daily energy Wh/day
Point 1	11.30	 	 148.80
Point 2	13.50	 	 98.40
Target/Interpolation	12	 	 132.76

#### Compartment temperature and daily energy at ambient 32°C

Test Point	Wine storage °C	 	 Daily energy Wh/day
Point 1	10.70	 	 566.40
Point 2	12.30	 	 542.40
Target/Interpolation	12	 	 546.90

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# Conclusion

Litere	Cumphiel	L los its	Tested	Deel	Verdict
Item	Symbol	Unit		Decl.	
Internal humidity of wine storage appliances		%	63.0	-	Pass
Airborne acoustical noise emissions	-	dB(A)	45.8	46	Pass
Airborne acoustical noise emission class	-	-	D	D	-
The volume of the wine storage compartment	-	L	128.2	118.0	Pass
Total volume	-	L	128.2	118.0	Pass
Daily energy consumption at 16 °C	E <sub>16</sub>	kWh/24h	0.133	0.150	Pass
Incremental defrost and recovery energy consumption at 16 °C	$\Delta E_{d-f16}$	Wh	N/A	N/A	-
Defrost interval at 16 °C	t <sub>d-f16</sub>	h	N/A	N/A	-
Daily energy consumption at 32 °C	E <sub>32</sub>	kWh/24h	0.547	0.628	Pass
Incremental defrost and recovery energy consumption at 32 °C	$\Delta E_{d-f32}$	Wh	N/A	N/A	-
Defrost interval at 32 °C	t <sub>d-f32</sub>	h	N/A	N/A	-
Daily energy consumption	E <sub>daily</sub>	kWh/24h	0.340	0.389	Pass
Auxiliary energy	E <sub>aux</sub>	kWh/a	N/A	N/A	-
Load factor	L	-	1.0	1.0	-
Annual energy consumption	AE	kWh/a	124.10	141.99	Pass
Combi parameter	С	-	1.00	1.00	-
Door heat loss factor	D	-	1.000	1.000	-
Standard annual energy consumption		kWh/a	84.35	83.50	-
Energy Efficiency Index	EEI	%	147.1	170.0	Pass
Energy efficiency class	-	-	G	G	-
Maximum EEI starting from 1 March 2021	EEI	%	190 F		Pass
Maximum EEI starting from 1 March 2024	EEI	%	172 P		Pass



# **Product information sheet**

Supplier's name	Supplier's name or trade mark: N/A					
Supplier's addre	ss ( <sup>b</sup> ):					
Model identifier	: SW-51					
Type of refrigera	ating appliance:	Wine storage	appliance			
Low-noise applia	ince:	No	Design type:		Freestanding	
Wine storage ap	pliance:	Yes	Other refrigerati	ng appliance:	No	
General product	parameters:					
Parameter		Value	Parameter		Value	
Overall	Height	815				
dimensions	Width	595	Total volume (dn	n <sup>3</sup> or l)	118	
(millimetre)	Depth	585				
EEI		170	Energy efficiency	class	G	
Airborne acousti emissions (dB(A)		46	Airborne acoustic emission class	cal noise	D	
Annual energy co (kWh/a)		141.99	Climate class:		subtropical	
Minimum ambient			Maximum ambient			
temperature (°C), for which the		16	temperature (°C)		38	
refrigerating appliance is		refrigerating appli		liance is		
suitable			suitable			
Winter setting	-	No				
Compartment Pa	arameters:					
		Compartment parameters and values				
Compartment ty	t Volume These settings capaci		Freezing capacity (kg/24 h)	Defrosting type (auto-defrost = A, manual defrost = M)		
Pantry	no		Table 3			
Wine storage	yes	118.0	12		А	
Cellar	no	_	—			
Fresh food	no	_	—	—	_	
Chill	no	_	—	_	_	



# **Product information sheet**

0-star or ice- making	no	_	_	_	_
1-star	no	—	—	_	—
2-star	no	—	—	—	—
3-star	no	—	—	—	—
4-star	no	—	—	—	—
2-star section	no	—	—		—
Variable					
temperature	no	—	—	—	—
compartment					
For 4-star compa	artments				
Fast freeze facility No					
Light source parameters ( <sup>a</sup> ) ( <sup>b</sup> ):					
Type of light source LED					
Energy efficiency class E					
Minimum duration of the guarantee offered by the manufacturer ( <sup>b</sup> ):					
Additional information:					
Weblink to the manufacturer's website, where the information in point 4(a) Annex of Commission Regulation (EU) 2019/2019 (1) (b) is found:					
<ul> <li>(a) as determined in accordance with Commission Delegated Regulation (EU) 2019/2015 (2).</li> <li>(b) changes to these items shall not be considered relevant for the purposes of point 4 of Article 4 of Regulation (EU) 2017/1369.</li> </ul>					
(c) if the product database automatically generates the definitive content of this cell the supplier					

shall not enter these data.



#### Additional information to be included in the technical documentation

A general description of the refrigerating model, sufficient for it to be unequivocally and easily identified:

# Product specifications:

General product specifications:					
Parameter	Value	Parameter	Value		
Annual energy consumption	142	Auxiliary energy (kWh/a)	_		
Standard annual energy consumption (kWh/a)	83.50	EEI (%)	170		
Temperature rise time (h)	0.00	Combi parameter	1.00		
Door heat loss factor	1.000	Load factor	1.0		
Anti-condensation heater type	None				

Additional product specifications for refrigerating appliances, except for low noise refrigerating appliances:

Parameter	Value	Parameter	Value
Daily energy consumption at 16 °C (kWh/24h)	0.150	Daily energy consumption at 32 °C (kWh/24h)	0.628
Incremental defrost and recovery energy consumption ( <sup>a</sup> ) at 16 °C (Wh)	_	incremental defrost and recovery energy consumption ( <sup>a</sup> ) at 32 °C (Wh)	_
Defrost interval ( <sup>ª</sup> ) at 16 °C (h)	_	Defrost interval ( <sup>ª</sup> ) at 32 °C (h)	_

#### Additional product specifications for low noise refrigerating appliances:

		0 0 11	
Parameter	Value	Parameter	Value
Daily energy consumption at 25 °C (kWh/24h)	—	Defrost interval (ª) at 25 °C (h)	_

(<sup>a</sup>) only for products with one or more auto-defrost systems



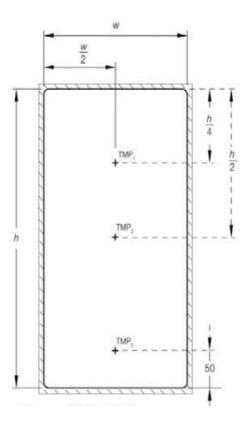
# Additional information to be included in the technical documentation

#### **Compartment specifications**

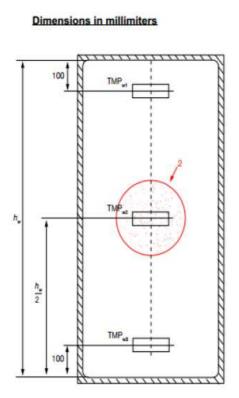
	Compartment parameters and values					
Compartment type	Target temperature (°C)	Thermodyn amic parameter (r <sub>c</sub> )	Nc	Мс	Defrost factor (Ac)	Built-in factor (Bc)
Pantry	_	_	_		—	—
Wine storage	12	0.60	75	0.12	1.00	1.00
Cellar	—	_	_	-	—	—
Fresh food	—	_	_	_	_	_
Chill	—	_	_	_	_	_
0-star	—	_	_	_	_	_
Ice making	—	_	_	_	_	_
1-star	—	_	_	_	_	_
2-star	—	_	_	_	_	_
3-star	—	_	_	_	_	_
4-star	—	_	_	_	_	_
2-star section	—	_	_	—	_	_
Variable temperature compartment	_	_	_	_	_	_

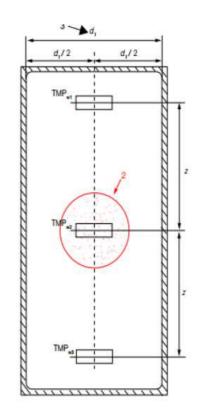


### Air temperature measurement - Energy consumption test



# M-package temperature-sensing points - Storage temperature test







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#### **Revision Summary**

Date/	Project Handler/		
	Reviewer	Item	Description of Change
Proj # Site ID	Reviewei		
			None
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--THE END--