

Prüfbericht-Nr.: <i>Test Report No.:</i>	NN20W1SU 001	Auftrags-Nr.: <i>Order No.:</i>	180192538	Seite 1 von 25 Page 1 of 25
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	11.09.2020	
Auftraggeber: <i>Client:</i>	Zhejiang Oulun Electric Co., Ltd. No. 17, Tangmei Road, Economic Development Zone, Yuhang District, Hangzhou, 311100 Zhejiang, P. R. China			
Prüfgegenstand: <i>Test item:</i>	Local Air Conditioner			
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	OL-BKYR26-A011A2, OL-BKY26-A011A2, OL-BKYR26-A011C2, OL-BKY26-A011C2, OL-BKYR26-A011D1, OL-BKY26-A011D1, OL-BKYR26-A011D2, OL-BKY26-A011D2, OL-BKYR26-A011E, OL-BKY26-A011E, OL-BKYR26-A011F, OL-BKY26-A011F			
Auftrags-Inhalt: <i>Order content:</i>	Type examination			
Prüfgrundlage: <i>Test specification:</i>	COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Wareneingangsdatum: <i>Date of receipt:</i>	11.09.2020			
Prüfmuster-Nr.: <i>Test sample No.:</i>	A000970191-002			
Prüfzeitraum: <i>Testing period:</i>	11.09.2020 to 30.09.2020			
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland /CCIC (Ningbo) Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland /CCIC (Ningbo) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von / tested by:		kontrolliert von / reviewed by:		
26.10.2020	Kael Huang /PE		26.10.2020	Clyde Chen /Reviewer
Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>
				
Sonstiges / Other: This report is for cooling and heating capacity test, standby mode power consumption test.				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

Testing results summary

The tested EER and COP meets the requirement for single duct air conditioner of COMMISSION REGULATION (EU) 206/2012 .

According to COMMISSION DELEGATED REGULATION (EU) No 626/2011 with regard to the energy labelling of single duct air conditioner, the test result which covering all models was classed as A for cooling, A for heating.

Summary of testing

1. The appliance was evaluated cooling and heating capacity test according to EN 14511-2:2018, EN 14511-3:2018 and standby mode power consumption test according to EN 50564:2011.
2. The appliance was evaluated sound power level test according to EN 12102-1:2017.
3. All tests were performed on the model OL-BKYR26-A011A2.

Test sample particulars

Classification of installation and use: Stationary appliance

Type of the appliance: Local air conditioner

Function of the appliance: Cooling and Heating

Possible test case verdicts:

- 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)

Testing

Date of receipt of test item.....: See cover page

Date (s) of performance of tests: See cover page

General product information

1. The appliances are mobile air conditioners, single duct type, air to air unit, local air conditioner are intended for household use.
2. The appliances do not incorporate with the off mode.
Standby mode:
plug in, after operation, put the power button on the touch panel or remote control panel to standby position, only power lamp on.
3. The main power is supplied with a single-phase and 3-pole power supply cord.
4. The BKYR series had both cooling and heating function while the BKY series only had cooling function.
5. According to the request of client, the test was carried out with indoor air enthalpy test method.

Model description:

The information of compressor and fan motor are listed as below.

Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
Motor-compressor	Guangdong Meizhi Compressor Ltd.	DSM155V13U CZH	AC220-240V, 50Hz, R290	EN 60335-1 EN 60335-2-34 with Annex AA	TUV R 50252512
Fan motor	Zhejiang Oulun Electric Co., Ltd.	YDK-65-4	AC220-240V, 50Hz, 65W, Class130(B)	EN 60335-1 EN 60335-2-40	Test with appliance

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 206/2012																								
Cl.	Requirement-Test		Result-Remark		Verdict																			
ANNEX I	Ecodesign requirements				—																			
1	DEFINITIONS APPLICABLE FOR THE PURPOSES OF THE ANNEXES				P																			
2	REQUIREMENTS FOR MINIMUM ENERGY EFFICIENCY, MAXIMUM POWER CONSUMPTION IN OFF-MODE AND STANDBY MODE AND FOR MAXIMUM SOUND POWER LEVEL				P																			
	(a) From 1 January 2013, single duct and double duct air conditioners shall correspond to requirements as indicated in Tables 1, 2 and 3 below, calculated in accordance with Annex II. Single duct and double duct air conditioners and comfort fans shall fulfil the requirements on standby and off mode as indicated in Table 2 below. The requirements on minimum energy efficiency and maximum sound power shall relate to the standard rating conditions specified in Annex II, Table 2.		GWP of refrigerant ≤ 150		P																			
	<div>Table 1</div> <div>Requirements for minimum energy efficiency</div> <table><tr><th rowspan="2"></th><th colspan="2">Double duct air conditioners</th><th colspan="2">Single duct air conditioners</th></tr><tr><th>EER_{rated}</th><th>COP_{rated}</th><th>EER_{rated}</th><th>COP_{rated}</th></tr><tr><td>If GWP of refrigerant > 150</td><td>2,40</td><td>2,36</td><td>2,40</td><td>1,80</td></tr><tr><td>If GWP of refrigerant ≤ 150</td><td>2,16</td><td>2,12</td><td>2,16</td><td>1,62</td></tr></table>					Double duct air conditioners		Single duct air conditioners		EER _{rated}	COP _{rated}	EER _{rated}	COP _{rated}	If GWP of refrigerant > 150	2,40	2,36	2,40	1,80	If GWP of refrigerant ≤ 150	2,16	2,12	2,16	1,62	—
	Double duct air conditioners		Single duct air conditioners																					
	EER _{rated}	COP _{rated}	EER _{rated}	COP _{rated}																				
If GWP of refrigerant > 150	2,40	2,36	2,40	1,80																				
If GWP of refrigerant ≤ 150	2,16	2,12	2,16	1,62																				
	<div>Table 2</div> <div>Requirements for maximum power consumption in off-mode and standby mode for single duct and double duct air conditioners and comfort fans</div> <table><tr><td>Off mode</td><td>Power consumption of equipment in any off-mode condition shall not exceed 1,00 W.</td></tr><tr><td rowspan="2">Standby mode</td><td>The power consumption of equipment in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 1,00 W.</td></tr><tr><td>The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display, shall not exceed 2,00 W.</td></tr><tr><td>Availability of standby and/or off mode</td><td>Equipment shall, except where this is inappropriate for the intended use, provide off mode and/or standby mode, and/or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source.</td></tr></table>				Off mode	Power consumption of equipment in any off-mode condition shall not exceed 1,00 W.	Standby mode	The power consumption of equipment in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 1,00 W.	The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display, shall not exceed 2,00 W.	Availability of standby and/or off mode	Equipment shall, except where this is inappropriate for the intended use, provide off mode and/or standby mode, and/or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source.	—												
Off mode	Power consumption of equipment in any off-mode condition shall not exceed 1,00 W.																							
Standby mode	The power consumption of equipment in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 1,00 W.																							
	The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display, shall not exceed 2,00 W.																							
Availability of standby and/or off mode	Equipment shall, except where this is inappropriate for the intended use, provide off mode and/or standby mode, and/or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source.																							

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 206/2012																
Cl.	Requirement-Test		Result-Remark	Verdict												
	<div>Table 3</div> <div>Requirements for maximum sound power level</div> <div>Indoor sound power level in dB(A)</div> <div>65</div>			—												
(b)	From 1 January 2013, air conditioners, except single and double duct air conditioners, shall correspond to minimum energy efficiency and maximum sound power level requirements as indicated in Tables 4 and 5 below, calculated in accordance with Annex II. The requirements on energy efficiency shall take into account the reference design conditions specified in Annex II, Table 3 using the 'Average' heating season where applicable.			N/A												
	The requirements on sound power shall relate to the standard rating conditions specified in Annex II, Table 2			N/A												
	<div>Table 4</div> <div>Requirements for minimum energy efficiency</div> <table><tr><td></td><td>SEER</td><td colspan="2">SCOP (Average heating season)</td></tr><tr><td>If GWP of refrigerant > 150</td><td>3,60</td><td colspan="2">3,40</td></tr><tr><td>If GWP of refrigerant ≤ 150</td><td>3,24</td><td colspan="2">3,06</td></tr></table>				SEER	SCOP (Average heating season)		If GWP of refrigerant > 150	3,60	3,40		If GWP of refrigerant ≤ 150	3,24	3,06		—
	SEER	SCOP (Average heating season)														
If GWP of refrigerant > 150	3,60	3,40														
If GWP of refrigerant ≤ 150	3,24	3,06														
	<div>Table 5</div> <div>Requirements for maximum sound power level</div> <table><tr><td colspan="2">Rated capacity ≤ 6 kW</td><td colspan="2">6 < Rated capacity ≤ 12 kW</td></tr><tr><td>Indoor sound power level in dB(A)</td><td>Outdoor sound power level in dB(A)</td><td>Indoor sound power level in dB(A)</td><td>Outdoor sound power level in dB(A)</td></tr><tr><td>60</td><td>65</td><td>65</td><td>70</td></tr></table>			Rated capacity ≤ 6 kW		6 < Rated capacity ≤ 12 kW		Indoor sound power level in dB(A)	Outdoor sound power level in dB(A)	Indoor sound power level in dB(A)	Outdoor sound power level in dB(A)	60	65	65	70	—
Rated capacity ≤ 6 kW		6 < Rated capacity ≤ 12 kW														
Indoor sound power level in dB(A)	Outdoor sound power level in dB(A)	Indoor sound power level in dB(A)	Outdoor sound power level in dB(A)													
60	65	65	70													
(c)	From 1 January 2014, air conditioners shall correspond to requirements as indicated in the table below, calculated in accordance with Annex II. The requirements on energy efficiency for air conditioners, excluding single and double duct air conditioners, shall relate to the reference design conditions specified in Annex II, Table 3 using the 'Average' heating season where applicable. The requirements on energy efficiency for single and double duct air conditioners shall relate to the standard rating conditions specified in Annex II, Table 2.		GWP of refrigerant ≤ 150 Rated capacity < 6 kW	P												

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 206/2012																																															
Cl.	Requirement-Test			Result-Remark		Verdict																																									
	<div>Table 6</div> <div>Requirements for minimum energy efficiency</div> <table><tr><th rowspan="2"></th><th colspan="2">Air conditioners, except double and single duct air conditioners</th><th colspan="2">Double duct air conditioners</th><th colspan="2">Single duct air conditioners</th></tr><tr><th>SEER</th><th>SCOP (heating season: Average)</th><th>EER_{rated}</th><th>COP_{rated}</th><th>EER_{rated}</th><th>COP_{rated}</th></tr><tr><td>If GWP of refrigerant > 150 for < 6 kW</td><td>4,60</td><td>3,80</td><td>2,60</td><td>2,60</td><td>2,60</td><td>2,04</td></tr><tr><td>If GWP of refrigerant ≤ 150 for < 6 kW</td><td>4,14</td><td>3,42</td><td>2,34</td><td>2,34</td><td>2,34</td><td>1,84</td></tr><tr><td>If GWP of refrigerant > 150 for 6-12 kW</td><td>4,30</td><td>3,80</td><td>2,60</td><td>2,60</td><td>2,60</td><td>2,04</td></tr><tr><td>If GWP of refrigerant ≤ 150 for 6-12 kW</td><td>3,87</td><td>3,42</td><td>2,34</td><td>2,34</td><td>2,34</td><td>1,84</td></tr></table>						Air conditioners, except double and single duct air conditioners		Double duct air conditioners		Single duct air conditioners		SEER	SCOP (heating season: Average)	EER _{rated}	COP _{rated}	EER _{rated}	COP _{rated}	If GWP of refrigerant > 150 for < 6 kW	4,60	3,80	2,60	2,60	2,60	2,04	If GWP of refrigerant ≤ 150 for < 6 kW	4,14	3,42	2,34	2,34	2,34	1,84	If GWP of refrigerant > 150 for 6-12 kW	4,30	3,80	2,60	2,60	2,60	2,04	If GWP of refrigerant ≤ 150 for 6-12 kW	3,87	3,42	2,34	2,34	2,34	1,84	—
	Air conditioners, except double and single duct air conditioners		Double duct air conditioners		Single duct air conditioners																																										
	SEER	SCOP (heating season: Average)	EER _{rated}	COP _{rated}	EER _{rated}	COP _{rated}																																									
If GWP of refrigerant > 150 for < 6 kW	4,60	3,80	2,60	2,60	2,60	2,04																																									
If GWP of refrigerant ≤ 150 for < 6 kW	4,14	3,42	2,34	2,34	2,34	1,84																																									
If GWP of refrigerant > 150 for 6-12 kW	4,30	3,80	2,60	2,60	2,60	2,04																																									
If GWP of refrigerant ≤ 150 for 6-12 kW	3,87	3,42	2,34	2,34	2,34	1,84																																									
(d)	From 1 January 2014, single duct and double duct air conditioners and comfort fans shall correspond to requirements as indicated in Table 7 below, calculated in accordance with Annex II.					P																																									
	<div>Table 7</div> <div>Requirements for maximum power consumption in off-mode and standby mode</div> <table><tr><td>Off mode</td><td>Power consumption of equipment in any off-mode condition shall not exceed 0,50 W.</td></tr><tr><td rowspan="2">Standby mode</td><td>The power consumption of equipment in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 0,50 W.</td></tr><tr><td>The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display shall not exceed 1,00 W.</td></tr><tr><td>Availability of standby and/or off mode</td><td>Equipment shall, except where this is inappropriate for the intended use, provide off mode and/or standby mode, and/or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source.</td></tr></table>					Off mode	Power consumption of equipment in any off-mode condition shall not exceed 0,50 W.	Standby mode	The power consumption of equipment in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 0,50 W.	The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display shall not exceed 1,00 W.	Availability of standby and/or off mode	Equipment shall, except where this is inappropriate for the intended use, provide off mode and/or standby mode, and/or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source.	—																																		
Off mode	Power consumption of equipment in any off-mode condition shall not exceed 0,50 W.																																														
Standby mode	The power consumption of equipment in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 0,50 W.																																														
	The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display shall not exceed 1,00 W.																																														
Availability of standby and/or off mode	Equipment shall, except where this is inappropriate for the intended use, provide off mode and/or standby mode, and/or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source.																																														

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 206/2012			
Cl.	Requirement-Test		Verdict
	Power management	When equipment is not providing the main function, or when other energy-using product(s) are not dependent on its functions, equipment shall, unless inappropriate for the intended use, offer a power management function, or a similar function, that switches equipment after the shortest possible period of time appropriate for the intended use of the equipment, automatically into: — standby mode, or — off mode, or — another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source. The power management function shall be activated before delivery.	—
3.	PRODUCT INFORMATION REQUIREMENTS		P
	(a) From 1 January 2013, as regards air conditioners and comfort fans, the information set out in points below and calculated in accordance with Annex II shall be provided on:		P
	(i) the technical documentation of the product;		P
	(ii) free access websites of manufacturers of air conditioners and comfort fans;		N/A
	(b) The manufacturer of air conditioners and comfort fans shall provide laboratories performing market surveillance checks, upon request, the necessary information on the setting of the unit as applied for the establishment of declared capacities, SEER/EER, SCOP/COP values and service values and provide contact information for obtaining such information.		P
	(c) Information requirements for air conditioners, except double duct and single duct air conditioners.		N/A
	(d) Information requirements for single duct and double duct air conditioners. Single duct air conditioners shall be named 'local air conditioners' in packaging, product documentation and in any advertisement material, whether electronic or in paper. Manufacturer shall provide information as detailed in the table 2.		P
	(e) Information requirements for comfort fans. Manufacturer shall provide information as detailed in the table 3		N/A
ANNEX II	Measurements and calculations		—

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 206/2012			
Cl.	Requirement-Test	Result-Remark	Verdict
1	For the purposes of compliance and verification of compliance with the requirements of this Regulation, measurements and calculations shall be made using harmonised standards the reference numbers of which have been published in the Official Journal of European Union , or other reliable, accurate and reproducible method, which takes into account the generally recognised state of the art methods, and whose results are deemed to be of low uncertainty. They shall fulfil all of the following technical parameters.	EN 14511-2: 2018 EN 14511-3: 2018 EN 12102: 2017 used	P
2	The determination of the seasonal energy consumption and efficiency for seasonal energy efficiency ratio (SEER) and seasonal coefficient of performance (SCOP) shall take into account:		N/A
	(a) European cooling and heating season(s), as defined in Table 1 below;		N/A
	(b) reference design conditions, as defined in Table 3 below;		N/A
	(c) electric energy consumption for all relevant modes of operation, using time periods as defined in Table 4 below;		N/A
	(d) effects of the degradation of the energy efficiency caused by on/off cycling (if applicable) depending on the type of control of the cooling and/or heating capacity;		N/A
	(e) corrections on the seasonal coefficients of performance in conditions where the heating load can not be met by the heating capacity;		N/A
	(f) the contribution of a back-up heater (if applicable) in the calculation of the seasonal efficiency of a unit in heating mode.		N/A
3	Where the information relating to a specific model, being a combination of indoor and outdoor unit(s), has been obtained by calculation on the basis of design, and/or extrapolation from other combinations, the documentation should include details of such calculations and/or extrapolations, and of tests undertaken to verify the accuracy of the calculations undertaken (including details of the mathematical model for calculating performance of such combinations, and of measurements taken to verify this model).		N/A
4	The rated energy efficiency ratio (EER rated) and, when applicable, rated coefficient of performance (COP rated) for single and double duct air conditioners shall be established at the standard rating conditions as defined in Table 2 below.		P
5	The calculation of seasonal electricity consumption for cooling (and/or heating) shall take into account electric energy consumption of all relevant modes of operation, as defined in Table 3 below, using operational hours, as defined in Table 4 below.		N/A

COMMISSION REGULATION (EU) No 206/2012
COMMISSION DELEGATED REGULATION (EU) No 626/2011

Clause	Requirement - Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------

COMMISSION REGULATION (EU) No 206/2012

Cl.	Requirement-Test	Result-Remark	Verdict
6	The comfort fan efficiency shall be determined on the basis of the nominal air flow rate of the unit divided by the nominal electric power input of the unit.		N/A

Table 1 Cooling and heating season bins (j = bin index, T _j = outdoor temperature, h _j = hours per annum per bin) where 'db' = dry bulb temperature								
COOLING SEASON			HEATING SEASON					
j #	T _j °C db	h _j h/annum	j #	T _j °C db	h _j h/annum			
					Average	Warmer	Colder	
1	17	205	1 to 8	- 30 to - 23	0	0	0	
2	18	227	9	- 22	0	0	1	
3	19	225	10	- 21	0	0	6	
4	20	225	11	- 20	0	0	13	
5	21	216	12	- 19	0	0	17	
6	22	215	13	- 18	0	0	19	
7	23	218	14	- 17	0	0	26	
8	24	197	15	- 16	0	0	39	
9	25	178	16	- 15	0	0	41	
10	26	158	17	- 14	0	0	35	
11	27	137	18	- 13	0	0	52	
12	28	109	19	- 12	0	0	37	
13	29	88	20	- 11	0	0	41	
14	30	63	21	- 10	1	0	43	
15	31	39	22	- 9	25	0	54	
16	32	31	23	- 8	23	0	90	
17	33	24	24	- 7	24	0	125	
18	34	17	25	- 6	27	0	169	
19	35	13	26	- 5	68	0	195	
20	36	9	27	- 4	91	0	278	
21	37	4	28	- 3	89	0	306	
22	38	3	29	- 2	165	0	454	
23	39	1	30	- 1	173	0	385	
24	40	0	31	0	240	0	490	
			32	1	280	0	533	
			33	2	320	3	380	
			34	3	357	22	228	
			35	4	356	63	261	
			36	5	303	63	279	
			37	6	330	175	229	
			38	7	326	162	269	
			39	8	348	259	233	
			40	9	335	360	230	
			41	10	315	428	243	
			42	11	215	430	191	
			43	12	169	503	146	
			44	13	151	444	150	
			45	14	105	384	97	
			46	15	74	294	61	
Total h.		2 602	Total h.		4 910	3 590	6 446	

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 206/2012																																
Cl.	Requirement-Test		Result-Remark	Verdict																												
	<div>Table 2</div> <div>Standard rating conditions, temperatures in 'dry bulb' air temperature (‘wet bulb’ indicated in brackets)</div> <table><tr><th>Appliance</th><th>Function</th><th>Indoor air temperature (°C)</th><th>Outdoor air temperature (°C)</th></tr><tr><td rowspan="2">air conditioners, excluding single duct air conditioners</td><td>cooling</td><td>27 (19)</td><td>35 (24)</td></tr><tr><td>heating</td><td>20 (max. 15)</td><td>7(6)</td></tr><tr><td rowspan="2">single duct air conditioner</td><td>cooling</td><td>35 (24)</td><td>35 (24) (*)</td></tr><tr><td>heating</td><td>20 (12)</td><td>20 (12) (*)</td></tr></table> <div>(*) In case of single duct air conditioners the condenser (evaporator) when cooling (heating) is not supplied with outdoor air, but indoor air.</div>			Appliance	Function	Indoor air temperature (°C)	Outdoor air temperature (°C)	air conditioners, excluding single duct air conditioners	cooling	27 (19)	35 (24)	heating	20 (max. 15)	7(6)	single duct air conditioner	cooling	35 (24)	35 (24) (*)	heating	20 (12)	20 (12) (*)	—										
Appliance	Function	Indoor air temperature (°C)	Outdoor air temperature (°C)																													
air conditioners, excluding single duct air conditioners	cooling	27 (19)	35 (24)																													
	heating	20 (max. 15)	7(6)																													
single duct air conditioner	cooling	35 (24)	35 (24) (*)																													
	heating	20 (12)	20 (12) (*)																													
	<div>Table 3</div> <div>Reference design conditions, temperatures in 'dry bulb' air temperature (‘wet bulb’ indicated in brackets)</div> <table><tr><th>Function/season</th><th>Indoor air temperature (°C)</th><th>Outdoor air temperature (°C)</th><th>Bivalent temperature (°C)</th><th>Operating limit temperature (°C)</th></tr><tr><td></td><td>T_{in}</td><td>T_{designc}/T_{designh}</td><td>T_{biv}</td><td>T_{ol}</td></tr><tr><td>cooling</td><td>27 (19)</td><td>T_{designc} = 35 (24)</td><td>n.a.</td><td>n.a.</td></tr><tr><td>heating/Average</td><td rowspan="3">20 (15)</td><td>T_{designh} = – 10 (– 11)</td><td>max. 2</td><td>max. – 7</td></tr><tr><td>heating/Warmer</td><td>T_{designh} = 2 (1)</td><td>max. 7</td><td>max. 2</td></tr><tr><td>heating/Colder</td><td>T_{designh} = – 22 (– 23)</td><td>max. – 7</td><td>max. – 15</td></tr></table>			Function/season	Indoor air temperature (°C)	Outdoor air temperature (°C)	Bivalent temperature (°C)	Operating limit temperature (°C)		T _{in}	T _{designc} /T _{designh}	T _{biv}	T _{ol}	cooling	27 (19)	T _{designc} = 35 (24)	n.a.	n.a.	heating/Average	20 (15)	T _{designh} = – 10 (– 11)	max. 2	max. – 7	heating/Warmer	T _{designh} = 2 (1)	max. 7	max. 2	heating/Colder	T _{designh} = – 22 (– 23)	max. – 7	max. – 15	—
Function/season	Indoor air temperature (°C)	Outdoor air temperature (°C)	Bivalent temperature (°C)	Operating limit temperature (°C)																												
	T _{in}	T _{designc} /T _{designh}	T _{biv}	T _{ol}																												
cooling	27 (19)	T _{designc} = 35 (24)	n.a.	n.a.																												
heating/Average	20 (15)	T _{designh} = – 10 (– 11)	max. 2	max. – 7																												
heating/Warmer		T _{designh} = 2 (1)	max. 7	max. 2																												
heating/Colder		T _{designh} = – 22 (– 23)	max. – 7	max. – 15																												

COMMISSION REGULATION (EU) No 206/2012
COMMISSION DELEGATED REGULATION (EU) No 626/2011

Clause	Requirement - Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------

COMMISSION REGULATION (EU) No 206/2012

Cl.	Requirement-Test				Result-Remark			Verdict																																																	
	<div>Table 4</div> <div>Operational hours per type of appliance per functional mode to be used for calculation of electricity consumption</div> <table><tr><th>Type of appliance/functionality (if applicable)</th><th>Unit</th><th>Heating season</th><th>On mode</th><th>Thermostat-off mode</th><th>Standby mode</th><th>Off mode</th><th>Crankcase heater mode</th></tr><tr><td></td><td></td><td></td><td>cooling: H_{CE} heating: H_{HE}</td><td>H_{TO}</td><td>H_{SB}</td><td>H_{OFF}</td><td>H_{CK}</td></tr></table> <div>Air conditioners, except single and double duct air conditioner</div> <table><tr><td>Cooling mode, if appliance offers cooling only</td><td>h/annum</td><td></td><td>350</td><td>221</td><td>2 142</td><td>5 088</td><td>7 760</td></tr><tr><td rowspan="4">Cooling and heating modes, if appliance offers both modes</td><td>Cooling mode</td><td>h/annum</td><td>350</td><td>221</td><td>2 142</td><td>0</td><td>2 672</td></tr><tr><td rowspan="3">Heating mode</td><td rowspan="3">h/annum</td><td>Average</td><td>1 400</td><td>179</td><td>0</td><td>179</td></tr><tr><td>Warmer</td><td>1 400</td><td>755</td><td>0</td><td>755</td></tr><tr><td>Colder</td><td>2 100</td><td>131</td><td>0</td><td>131</td></tr></table>							Type of appliance/functionality (if applicable)	Unit	Heating season	On mode	Thermostat-off mode	Standby mode	Off mode	Crankcase heater mode				cooling: H_{CE} heating: H_{HE}	H_{TO}	H_{SB}	H_{OFF}	H_{CK}	Cooling mode, if appliance offers cooling only	h/annum		350	221	2 142	5 088	7 760	Cooling and heating modes, if appliance offers both modes	Cooling mode	h/annum	350	221	2 142	0	2 672	Heating mode	h/annum	Average	1 400	179	0	179	Warmer	1 400	755	0	755	Colder	2 100	131	0	131	
Type of appliance/functionality (if applicable)	Unit	Heating season	On mode	Thermostat-off mode	Standby mode	Off mode	Crankcase heater mode																																																		
			cooling: H_{CE} heating: H_{HE}	H_{TO}	H_{SB}	H_{OFF}	H_{CK}																																																		
Cooling mode, if appliance offers cooling only	h/annum		350	221	2 142	5 088	7 760																																																		
Cooling and heating modes, if appliance offers both modes	Cooling mode	h/annum	350	221	2 142	0	2 672																																																		
	Heating mode	h/annum	Average	1 400	179	0	179																																																		
			Warmer	1 400	755	0	755																																																		
			Colder	2 100	131	0	131																																																		
	<table><tr><th>Type of appliance/functionality (if applicable)</th><th>Unit</th><th>Heating season</th><th>On mode</th><th>Thermostat-off mode</th><th>Standby mode</th><th>Off mode</th><th>Crankcase heater mode</th></tr><tr><td></td><td></td><td></td><td>cooling: H_{CE} heating: H_{HE}</td><td>H_{TO}</td><td>H_{SB}</td><td>H_{OFF}</td><td>H_{CK}</td></tr></table> <table><tr><td>Heating mode, if appliance offers heating only</td><td>h/annum</td><td>Average</td><td>1 400</td><td>179</td><td>0</td><td>3 672</td><td>3 851</td></tr><tr><td></td><td></td><td>Warmer</td><td>1 400</td><td>755</td><td>0</td><td>4 345</td><td>4 476</td></tr><tr><td></td><td></td><td>Colder</td><td>2 100</td><td>131</td><td>0</td><td>2 189</td><td>2 944</td></tr></table>							Type of appliance/functionality (if applicable)	Unit	Heating season	On mode	Thermostat-off mode	Standby mode	Off mode	Crankcase heater mode				cooling: H_{CE} heating: H_{HE}	H_{TO}	H_{SB}	H_{OFF}	H_{CK}	Heating mode, if appliance offers heating only	h/annum	Average	1 400	179	0	3 672	3 851			Warmer	1 400	755	0	4 345	4 476			Colder	2 100	131	0	2 189	2 944										
Type of appliance/functionality (if applicable)	Unit	Heating season	On mode	Thermostat-off mode	Standby mode	Off mode	Crankcase heater mode																																																		
			cooling: H_{CE} heating: H_{HE}	H_{TO}	H_{SB}	H_{OFF}	H_{CK}																																																		
Heating mode, if appliance offers heating only	h/annum	Average	1 400	179	0	3 672	3 851																																																		
		Warmer	1 400	755	0	4 345	4 476																																																		
		Colder	2 100	131	0	2 189	2 944																																																		
	<div>Double duct air conditioner</div> <table><tr><td>Cooling mode, if appliance offers cooling only</td><td>h/60 min</td><td></td><td>1</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td></tr><tr><td rowspan="2">Cooling and heating modes, if appliance offers both modes</td><td>Cooling mode</td><td>h/60 min</td><td>1</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td></tr><tr><td>Heating mode</td><td>h/60 min</td><td>1</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td></tr><tr><td>Heating mode, if appliance offers heating only</td><td>h/60 min</td><td></td><td>1</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td></tr></table> <div>Single duct air conditioner</div> <table><tr><td>Cooling mode</td><td>h/60 min</td><td></td><td>1</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td></tr><tr><td>Heating mode</td><td>h/60 min</td><td></td><td>1</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td></tr></table>							Cooling mode, if appliance offers cooling only	h/60 min		1	n/a	n/a	n/a	n/a	Cooling and heating modes, if appliance offers both modes	Cooling mode	h/60 min	1	n/a	n/a	n/a	n/a	Heating mode	h/60 min	1	n/a	n/a	n/a	n/a	Heating mode, if appliance offers heating only	h/60 min		1	n/a	n/a	n/a	n/a	Cooling mode	h/60 min		1	n/a	n/a	n/a	n/a	Heating mode	h/60 min		1	n/a	n/a	n/a	n/a			
Cooling mode, if appliance offers cooling only	h/60 min		1	n/a	n/a	n/a	n/a																																																		
Cooling and heating modes, if appliance offers both modes	Cooling mode	h/60 min	1	n/a	n/a	n/a	n/a																																																		
	Heating mode	h/60 min	1	n/a	n/a	n/a	n/a																																																		
Heating mode, if appliance offers heating only	h/60 min		1	n/a	n/a	n/a	n/a																																																		
Cooling mode	h/60 min		1	n/a	n/a	n/a	n/a																																																		
Heating mode	h/60 min		1	n/a	n/a	n/a	n/a																																																		
ANNEX III	Verification procedure for market surveillance purposes																																																								

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 206/2012			
Cl.	Requirement-Test	Result-Remark	Verdict
	When performing the market surveillance checks referred to in Article 3(2) of Directive 2009/125/EC, the authorities of the Member States shall apply the following verification procedure for the requirements set out in Annex I.		—
1	The authorities of the Member State shall test one single unit.		N/A
2	2. The air conditioner model, except single and double duct air conditioners, shall be considered to comply with the requirements set out in Annex I, as applicable, to this Regulation, if its seasonal energy efficiency ratio (SEER), or seasonal coefficient for performance (SCOP), if applicable, is not less than the declared value minus 8 % at the declared capacity of the unit. The SEER and SCOP values shall be established in accordance with Annex II.		N/A
	The model of a single and double duct air conditioner shall be considered to comply with the requirements set out in Annex I, as applicable, to this Regulation, if the results for off-mode and standby-mode conditions do not exceed the limit values by more than 10 %, and if the energy efficiency ratio (EER rated), or coefficient for performance (COP rated), if applicable, is not less than the declared value minus 10 %. The EER and COP values shall be established in accordance with Annex II.		N/A
	The air conditioner model shall be considered to comply with the requirements set out in this Regulation, as applicable, if the maximum sound power level does not exceed more than 2 dB(A) of the declared value.		N/A
3	If the result referred to in point 2 is not achieved, the market surveillance authority shall randomly select three additional units of the same model for testing.		N/A
4	The air conditioner model, except single and double duct air conditioners, shall be considered to comply with the requirements set out in Annex I, as applicable, to this Regulation, if the average of the three units for the seasonal energy efficiency ratio (SEER), or seasonal coefficient of performance (SCOP), if applicable, is not less than the declared value minus 8 % at the declared capacity of the unit. The SEER and SCOP values shall be established in accordance with Annex II.		N/A
	The model of a single and double duct air conditioner shall be considered to comply with the requirements set out in Annex I, as applicable, to this Regulation, if the average of the results of the three units for off-mode and standby- mode conditions do not exceed the limit values by more than 10 %, and if the average of the energy efficiency ratio (EER rated), or coefficient of performance (COP rated), if applicable, is not less than the declared value minus 10 %. The EER and COP values shall be established in accordance with Annex II.		N/A

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 206/2012			
Cl.	Requirement-Test	Result-Remark	Verdict
	The air conditioner model shall be considered to comply with the requirements set out in this Regulation, as applicable, if the average of the maximum sound power level does not exceed more than 2 dB(A) of the declared value.		N/A
5	If the results referred to in point 4 are not achieved, the model shall be considered not to comply with this Regulation.		N/A
	For the purposes of checking conformity with the requirements of this Regulation, Member States shall apply the procedures referred to in Annex II, and harmonised standards the reference numbers of which have been published in the Official Journal of the European Union, or other reliable, accurate and reproducible calculation and measurement methods, which take into account the generally recognised state-of-the-art.		N/A

COMMISSION REGULATION (EU) No 626/2011			
Cl.	Requirement-Test	Result-Remark	Verdict
ANNEX II	Energy efficiency classes		—
1	The energy efficiency of air conditioners shall be determined on the basis of measurements and calculations set out Annex VII.		P
	Both the SEER and SCOP shall take into account the reference design conditions and the operational hours per relevant mode of operation, and the SCOP shall relate to the heating season 'average', as laid down in Annex VII. The rated energy efficiency ratio (EER rated) and the rated coefficient of performance (COP rated) shall relate to standard rating conditions, as laid down in Annex VII.		P

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 626/2011																																																															
Cl.	Requirement-Test		Result-Remark	Verdict																																																											
2	<div>Table 1</div> <div>Energy efficiency classes for air conditioners, except double ducts and single ducts</div> <table><tr><th>Energy Efficiency Class</th><th>SEER</th><th>SCOP</th></tr><tr><td>A+++</td><td>SEER ≥ 8,50</td><td>SCOP ≥ 5,10</td></tr><tr><td>A++</td><td>6,10 ≤ SEER < 8,50</td><td>4,60 ≤ SCOP < 5,10</td></tr><tr><td>A+</td><td>5,60 ≤ SEER < 6,10</td><td>4,00 ≤ SCOP < 4,60</td></tr><tr><td>A</td><td>5,10 ≤ SEER < 5,60</td><td>3,40 ≤ SCOP < 4,00</td></tr><tr><td>B</td><td>4,60 ≤ SEER < 5,10</td><td>3,10 ≤ SCOP < 3,40</td></tr><tr><td>C</td><td>4,10 ≤ SEER < 4,60</td><td>2,80 ≤ SCOP < 3,10</td></tr><tr><td>D</td><td>3,60 ≤ SEER < 4,10</td><td>2,50 ≤ SCOP < 2,80</td></tr><tr><td>E</td><td>3,10 ≤ SEER < 3,60</td><td>2,20 ≤ SCOP < 2,50</td></tr><tr><td>F</td><td>2,60 ≤ SEER < 3,10</td><td>1,90 ≤ SCOP < 2,20</td></tr><tr><td>G</td><td>SEER < 2,60</td><td>SCOP < 1,90</td></tr></table>			Energy Efficiency Class	SEER	SCOP	A+++	SEER ≥ 8,50	SCOP ≥ 5,10	A++	6,10 ≤ SEER < 8,50	4,60 ≤ SCOP < 5,10	A+	5,60 ≤ SEER < 6,10	4,00 ≤ SCOP < 4,60	A	5,10 ≤ SEER < 5,60	3,40 ≤ SCOP < 4,00	B	4,60 ≤ SEER < 5,10	3,10 ≤ SCOP < 3,40	C	4,10 ≤ SEER < 4,60	2,80 ≤ SCOP < 3,10	D	3,60 ≤ SEER < 4,10	2,50 ≤ SCOP < 2,80	E	3,10 ≤ SEER < 3,60	2,20 ≤ SCOP < 2,50	F	2,60 ≤ SEER < 3,10	1,90 ≤ SCOP < 2,20	G	SEER < 2,60	SCOP < 1,90	N/A																										
Energy Efficiency Class	SEER	SCOP																																																													
A+++	SEER ≥ 8,50	SCOP ≥ 5,10																																																													
A++	6,10 ≤ SEER < 8,50	4,60 ≤ SCOP < 5,10																																																													
A+	5,60 ≤ SEER < 6,10	4,00 ≤ SCOP < 4,60																																																													
A	5,10 ≤ SEER < 5,60	3,40 ≤ SCOP < 4,00																																																													
B	4,60 ≤ SEER < 5,10	3,10 ≤ SCOP < 3,40																																																													
C	4,10 ≤ SEER < 4,60	2,80 ≤ SCOP < 3,10																																																													
D	3,60 ≤ SEER < 4,10	2,50 ≤ SCOP < 2,80																																																													
E	3,10 ≤ SEER < 3,60	2,20 ≤ SCOP < 2,50																																																													
F	2,60 ≤ SEER < 3,10	1,90 ≤ SCOP < 2,20																																																													
G	SEER < 2,60	SCOP < 1,90																																																													
	<div>Table 2</div> <div>Energy efficiency classes for double ducts and single ducts</div> <table><tr><th rowspan="2">Energy Efficiency Class</th><th colspan="2">Double ducts</th><th colspan="2">Single ducts</th></tr><tr><th>EER_{rated}</th><th>COP_{rated}</th><th>EER_{rated}</th><th>COP_{rated}</th></tr><tr><td>A+++</td><td>≥ 4,10</td><td>≥ 4,60</td><td>≥ 4,10</td><td>≥ 3,60</td></tr><tr><td>A++</td><td>3,60 ≤ EER < 4,10</td><td>4,10 ≤ COP < 4,60</td><td>3,60 ≤ EER < 4,10</td><td>3,10 ≤ COP < 3,60</td></tr><tr><td>A+</td><td>3,10 ≤ EER < 3,60</td><td>3,60 ≤ COP < 4,10</td><td>3,10 ≤ EER < 3,60</td><td>2,60 ≤ COP < 3,10</td></tr><tr><td>A</td><td>2,60 ≤ EER < 3,10</td><td>3,10 ≤ COP < 3,60</td><td>2,60 ≤ EER < 3,10</td><td>2,30 ≤ COP < 2,60</td></tr><tr><td>B</td><td>2,40 ≤ EER < 2,60</td><td>2,60 ≤ COP < 3,10</td><td>2,40 ≤ EER < 2,60</td><td>2,00 ≤ COP < 2,30</td></tr><tr><td>C</td><td>2,10 ≤ EER < 2,40</td><td>2,40 ≤ COP < 2,60</td><td>2,10 ≤ EER < 2,40</td><td>1,80 ≤ COP < 2,00</td></tr><tr><td>D</td><td>1,80 ≤ EER < 2,10</td><td>2,00 ≤ COP < 2,40</td><td>1,80 ≤ EER < 2,10</td><td>1,60 ≤ COP < 1,80</td></tr><tr><td>E</td><td>1,60 ≤ EER < 1,80</td><td>1,80 ≤ COP < 2,00</td><td>1,60 ≤ EER < 1,80</td><td>1,40 ≤ COP < 1,60</td></tr><tr><td>F</td><td>1,40 ≤ EER < 1,60</td><td>1,60 ≤ COP < 1,80</td><td>1,40 ≤ EER < 1,60</td><td>1,20 ≤ COP < 1,40</td></tr><tr><td>G</td><td>< 1,40</td><td>< 1,60</td><td>< 1,40</td><td>< 1,20</td></tr></table>			Energy Efficiency Class	Double ducts		Single ducts		EER _{rated}	COP _{rated}	EER _{rated}	COP _{rated}	A+++	≥ 4,10	≥ 4,60	≥ 4,10	≥ 3,60	A++	3,60 ≤ EER < 4,10	4,10 ≤ COP < 4,60	3,60 ≤ EER < 4,10	3,10 ≤ COP < 3,60	A+	3,10 ≤ EER < 3,60	3,60 ≤ COP < 4,10	3,10 ≤ EER < 3,60	2,60 ≤ COP < 3,10	A	2,60 ≤ EER < 3,10	3,10 ≤ COP < 3,60	2,60 ≤ EER < 3,10	2,30 ≤ COP < 2,60	B	2,40 ≤ EER < 2,60	2,60 ≤ COP < 3,10	2,40 ≤ EER < 2,60	2,00 ≤ COP < 2,30	C	2,10 ≤ EER < 2,40	2,40 ≤ COP < 2,60	2,10 ≤ EER < 2,40	1,80 ≤ COP < 2,00	D	1,80 ≤ EER < 2,10	2,00 ≤ COP < 2,40	1,80 ≤ EER < 2,10	1,60 ≤ COP < 1,80	E	1,60 ≤ EER < 1,80	1,80 ≤ COP < 2,00	1,60 ≤ EER < 1,80	1,40 ≤ COP < 1,60	F	1,40 ≤ EER < 1,60	1,60 ≤ COP < 1,80	1,40 ≤ EER < 1,60	1,20 ≤ COP < 1,40	G	< 1,40	< 1,60	< 1,40	< 1,20	P
Energy Efficiency Class	Double ducts		Single ducts																																																												
	EER _{rated}	COP _{rated}	EER _{rated}	COP _{rated}																																																											
A+++	≥ 4,10	≥ 4,60	≥ 4,10	≥ 3,60																																																											
A++	3,60 ≤ EER < 4,10	4,10 ≤ COP < 4,60	3,60 ≤ EER < 4,10	3,10 ≤ COP < 3,60																																																											
A+	3,10 ≤ EER < 3,60	3,60 ≤ COP < 4,10	3,10 ≤ EER < 3,60	2,60 ≤ COP < 3,10																																																											
A	2,60 ≤ EER < 3,10	3,10 ≤ COP < 3,60	2,60 ≤ EER < 3,10	2,30 ≤ COP < 2,60																																																											
B	2,40 ≤ EER < 2,60	2,60 ≤ COP < 3,10	2,40 ≤ EER < 2,60	2,00 ≤ COP < 2,30																																																											
C	2,10 ≤ EER < 2,40	2,40 ≤ COP < 2,60	2,10 ≤ EER < 2,40	1,80 ≤ COP < 2,00																																																											
D	1,80 ≤ EER < 2,10	2,00 ≤ COP < 2,40	1,80 ≤ EER < 2,10	1,60 ≤ COP < 1,80																																																											
E	1,60 ≤ EER < 1,80	1,80 ≤ COP < 2,00	1,60 ≤ EER < 1,80	1,40 ≤ COP < 1,60																																																											
F	1,40 ≤ EER < 1,60	1,60 ≤ COP < 1,80	1,40 ≤ EER < 1,60	1,20 ≤ COP < 1,40																																																											
G	< 1,40	< 1,60	< 1,40	< 1,20																																																											
ANNEX IV	Product fiche			—																																																											
	1. The information in the product fiche shall be given in the order specified below:			P																																																											
	(a) supplier's name or trade mark;			P																																																											
	(b) model identifier of the indoor air conditioner or of the indoor and outdoor elements of the air conditioner;			P																																																											

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 626/2011			
Cl.	Requirement-Test	Result-Remark	Verdict
	(c) without prejudice to any requirements under the Union eco-label scheme, where a model has been granted a 'European Union eco-label' under Regulation (EC) No 66/2010, a copy of the eco-label may be added;		N/A
	(d) inside and outside sound power levels at standard rating conditions, on cooling and/or heating modes;		P
	(e) the name and GWP of the refrigerant used and a standard text as follows:		P
	'Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to [xxx]. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be [xxx] times higher than 1 kg of CO ₂ , over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.'	[xxx]=3, marked in User manual	P
2	Additionally, the following information shall be included in the product fiche on air conditioners on the cooling mode, when efficiency is declared on the basis of the seasonal energy efficiency ratio (SEER):		N/A
	(a) the SEER and the energy efficiency class of the model (model of a unit or of a combination of units) determined in accordance with definitions and test procedures in Annex I and VII for the cooling mode as well as with the class limits defined in Annex II;		N/A
	(b) the indicative annual electricity consumption Q _{CE} in kWh/a during the cooling season, determined in accordance with definitions and test procedures in Annex I and VII, respectively. It shall be described as: 'Energy consumption "XYZ" kWh per year, based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located';		N/A
	(c) the design load P _{designc} in kW of the appliance in cooling mode determined in accordance with definitions and test procedures in Annex I and VII, respectively;		N/A
3	Additionally, the following notes define the information to be included in the fiche on the heating mode, when efficiency is declared on the basis of seasonal coefficient of performance (SCOP):		N/A
	(a) the SCOP and the energy efficiency class of the model, or combination, in heating mode determined in accordance with definitions and test procedures in Annex I and VII, respectively, as well as with the class limits defined in Annex II;		N/A

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 626/2011			
Cl.	Requirement-Test	Result-Remark	Verdict
	(b) the indicative annual electricity consumption for an average heating season Q HE in kWh/a, determined in accordance with definitions and test procedures in Annex I and VII, respectively. It shall be described as: 'Energy consumption "XYZ" kWh per year, based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located';		N/A
	(c) other designated heating seasons for which the unit is declared fit for purpose, with options of warmer (optional) or colder (optional) seasons, as defined in Annex I;		N/A
	(d) the design load P _{designh} in kW of the appliance in heating mode determined in accordance with definitions and test procedures in Annex I and VII;		N/A
	(e) the declared capacity and an indication of the back up heating capacity assumed for the calculation of SCOP at reference design conditions.		N/A
4	Additionally, the following notes define the information to be included in the fiche of air conditioners, when efficiency is declared on the basis of energy efficiency ratio (EER rated) or coefficient of performance (COP rated):		P
	(a) the energy efficiency class of the model, determined in accordance with definitions and test procedures in Annex I and VII, as well as the class limits defined in Annex II;		P
	(b) for double ducts, the indicative hourly electricity consumption Q DD in kWh/60 minutes determined in accordance with definitions and test procedures in Annex I and VII. It shall be described as: 'Energy consumption "X,Y" kWh per 60 minutes, based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located';		N/A
	(c) for single ducts, the indicative hourly electricity consumption Q SD in kWh/60 minutes determined in accordance with definitions and test procedures in Annex I and VII. It shall be described as: 'Energy consumption "X,Y" kWh per 60 minutes, based on standard test results. Actual energy consumption will depend on how the appliance is used and where it is located';		P
	(d) the cooling capacity P rated in kW of the appliance determined in accordance with definitions and test procedures in Annex I and VII;		P
	(e) the heating capacity P rated in kW of the appliance determined in accordance with definitions and test procedures in Annex I and VII.		P
5	One fiche may cover a number of appliance models supplied by the same supplier.		N/A

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 626/2011			
Cl.	Requirement-Test	Result-Remark	Verdict
6	The information contained in the fiche may be given in the form of a copy of the label, either in colour or in black and white. Where this is the case, the information listed in points 1-4 not already displayed on the label shall also be provided.		N/A
ANNEX V	Technical documentation		—
	The technical documentation referred to in Article 3 (1)(c) shall include at least the following items:		P
	(a) the name and address of the supplier;		P
	(b) a general description of the appliance model, sufficient for it to be unequivocally and easily identified. Single ducts shall be referred to as 'local air conditioners';		P
	(c) where appropriate, the references for the harmonised standards applied;		P
	(d) where appropriate, the other calculation methods, measurement standards and specifications used;		N/A
	(e) identification and signature of the person empowered to bind the supplier;		P
	(f) where appropriate the technical parameters for measurements, established in accordance with Annex VII:		P
	(i) overall dimensions;		P
	(ii) specification of the type of the air conditioner;		P
	(iii) specification whether the appliance is designed for cooling or heating only or for both;		P
	(iv) the energy efficiency class of the model as defined in Annex II;		P
	(v) The energy efficiency ratio (EER rated) and coefficient of performance (COP rated) for single and double duct air conditioners or seasonal energy efficiency ratio (SEER) and seasonal coefficient of performance (SCOP) for other air conditioners;		P
	(vi) The heating season for which the appliance is declared fit for purpose;		N/A
	(vii) Sound power levels expressed in dB(A) re1 pW, rounded to the nearest integer;		P
	(viii) the name and GWP of refrigerant used.		P
	(g) the results of calculations performed in accordance with Annex VII. Suppliers may include additional information at the end of the above list.		P

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 626/2011			
Cl.	Requirement-Test	Result-Remark	Verdict
	Where the information included in the technical documentation file for a particular air conditioner model has been obtained by calculation on the basis of design, or extrapolation from other equivalent appliances, or both, the documentation shall include details of such calculations or extrapolations, or both, and of tests undertaken by suppliers to verify the accuracy of the calculations undertaken. The information shall also include a list of all other equivalent appliance models where the information was obtained on the same basis.		P
ANNEX VI	Information to be provided in the cases where end-users cannot be expected to see the product displayed		—
1	1. The information referred to in Article 4(b) shall be provided in the following order:		P
	(a) The energy efficiency class of the model as defined in Annex II;		P
	(b) for air conditioners other than single ducts and double ducts:		N/A
	(i) the seasonal energy efficiency ratio (SEER) and/or seasonal coefficient of performance (SCOP);		N/A
	(ii) the design load (in kW);		N/A
	(iii) the annual electricity consumption;		N/A
	(iv) the cooling and/or each heating ('Average, Colder, Warmer') season the appliance is declared fit for purpose;		N/A
	(c) for single duct and double duct air conditioners:		P
	(i) the energy efficiency ratio (EER) and/or coefficient of performance (COP);		P
	(ii) the rated capacity (kW);		P
	(iii) for double ducts, the hourly electricity consumption for cooling and/or heating;		N/A
	(iv) for single ducts, the hourly electricity consumption for cooling and/or heating;		P
	(d) Sound power levels expressed in dB(A) re 1 pW, rounded to the nearest integer;		P
	(e) Name and GWP of refrigerant used.		P
2	Where other information contained in the product information fiche is also provided, it shall be in the form and order specified in Annex IV.		P
3	The size and font in which all the information referred in this Annex is printed or shown shall be legible.		P

Table 1: Information requirements for air conditioners, except double duct and single duct air conditioners.							N/A	
(the number of decimals in the box indicates the precision of reporting) Information to identify the model(s) to which the information relates to:								
Function (indicate if present)				If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.				
Cooling		—		Average (mandatory)			—	
Heating		—		Warmer (if designated)			—	
				Colder (if designated)			—	
Item	symbol	value	unit	item	symbol	value	unit	
Design load				Seasonal efficiency				
Cooling	P _{designc}	—	kW	Cooling	SEER	—	—	
Heating/Average	P _{designh}	—	kW	Heating/Average	SCOP/A	—	—	
Heating/Warmer	P _{designh}	—	kW	Heating/Warmer	SCOP/W	—	—	
Heating/Colder	P _{designh}	—	kW	Heating/Colder	SCOP/C	—	—	
Declared capacity (*) for cooling, at indoor temperature 27(19) °C and outdoor temperature T _j				Declared energy efficiency ratio (*), at indoor temperature 27(19) °C and outdoor temperature T _j				
Function (indicate if present)				If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.				
Cooling		—		Average (mandatory)			—	
Heating		—		Warmer (if designated)			—	
				Colder (if designated)			—	
Item	symbol	value	unit	item	symbol	value	unit	
T _j = 35 °C	P _{dc}	—	kW	T _j = 35 °C	EER _{dc}	—	—	
T _j = 30 °C	P _{dc}	—	kW	T _j = 30 °C	EER _{dc}	—	—	
T _j = 25 °C	P _{dc}	—	kW	T _j = 25 °C	EER _{dc}	—	—	
T _j = 20 °C	P _{dc}	—	kW	T _j = 20 °C	EER _{dc}	—	—	
Declared capacity (*) for heating/Average season, at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance (*)/Average season, at indoor temperature 20 °C and outdoor temperature T _j				
Item	symbol	value	unit	item	symbol	value	unit	
T _j = − 7 °C	P _{dh}	—	kW	T _j = − 7 °C	COP _{dc}	—	—	
T _j = 2 °C	P _{dh}	—	kW	T _j = 2 °C	COP _{dc}	—	—	
T _j = 7 °C	P _{dh}	—	kW	T _j = 7 °C	COP _{dc}	—	—	
T _j = 12 °C	P _{dh}	—	kW	T _j = 12 °C	COP _{dc}	—	—	
T _j = bivalent temperature	P _{dh}	—	kW	T _j = bivalent temperature	COP _{dc}	—	—	
T _j = operating limit	P _{dh}	—	kW	T _j = operating limit	COP _{dc}	—	—	
Declared capacity (*) for heating/Warmer season,				Declared coefficient of performance (*)/Warmer				

at indoor temperature 20 °C and outdoor temperature T _J				season, at indoor temperature 20 °C and outdoor temperature T _J			
Item	symbol	value	unit	item	symbol	value	unit
T _J = 2 °C	P _{dh}	—	kW	T _J = 2 °C	COP _{dc}	—	—
T _J = 7 °C	P _{dh}	—	kW	T _J = 7 °C	COP _{dc}	—	—
T _J = 12 °C	P _{dh}	—	kW	T _J = 12 °C	COP _{dc}	—	—
T _J = bivalent temperature	P _{dh}	—	kW	T _J = bivalent temperature	COP _{dc}	—	—
T _J = operating limit	P _{dh}	—	kW	T _J = operating limit	COP _{dc}	—	—
Declared capacity (*) for heating/Colder season, at indoor temperature 20 °C and outdoor temperature T _J				Declared coefficient of performance (*) /Colder season, at indoor temperature 20 °C and outdoor temperature T _J			
Item	symbol	value	unit	item	symbol	value	unit
T _J = -7 °C	P _{dh}	—	kW	T _J = -7 °C	COP _{dc}	—	—
T _J = 2 °C	P _{dh}	—	kW	T _J = 2 °C	COP _{dc}	—	—
T _J = 7 °C	P _{dh}	—	kW	T _J = 7 °C	COP _{dc}	—	—
T _J = 12 °C	P _{dh}	—	kW	T _J = 12 °C	COP _{dc}	—	—
T _J = bivalent temperature	P _{dh}	—	kW	T _J = bivalent temperature	COP _{dc}	—	—
T _J = operating limit	P _{dh}	—	kW	T _J = operating limit	COP _{dc}	—	—
T _J = -15 °C	P _{dh}	—	kW	T _J = -15 °C	COP _{dc}	—	—
Bivalent temperature				Operating limit temperature			
heating/Average	T _{biv}	—	°C	heating/Average	T _{ol}	—	°C
heating/Warmer	T _{biv}	—	°C	heating/Warmer	T _{ol}	—	°C
heating/Colder	T _{biv}	—	°C	heating/Colder	T _{ol}	—	°C
Cycling interval capacity				Cycling interval efficiency			
for cooling	P _{cycc}	—	kW	for cooling	EER _{cyc}	—	—
for heating	P _{cyh}	—	kW	for heating	COP _{cyc}	—	—
Degradation co-efficient cooling (**)	C _{dc}	—	—	Degradation co-efficient heating (**)	C _{dh}	—	—
Electric power input in power modes other than 'active mode'				Annual electricity consumption			
off mode	P _{OFF}	—	kW	for cooling	Q _{CE}	—	kWh/a
standby mode (cooling / heating)	P _{SB}	—	W	Heating/Average	Q _{HE}	—	kWh/a
thermostat-off mode (cooling / heating)	P _{TO}	—	W	Heating/Warmer	Q _{HE}	—	kWh/a
crankcase heater mode	P _{CK}	—	kW	Heating/Colder	Q _{HE}	—	kWh/a

Capacity control (indicate one of three options)				Other items			
Function (indicate if present)				If function includes heating: Indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.			
Cooling	—			Average (mandatory)	—		
Heating	—			Warmer (if designated)	—		
				Colder (if designated)	—		
Item	symbol	value	unit	item	symbol	value	unit
Fixed	—			Sound power level (indoor/outdoor)	level (indoor/outdoor) LWA	—	dB(A)
staged	—			Global warming potential	GWP	—	kgCO ₂ eq.
variable	—			Rated air flow (indoor/outdoor)	—	—	m ³ /h
Contact details for obtaining more information	—						
<p>(*) For staged capacity units, two values divided by a slash ('/') will be declared in each box in the section 'Declared capacity of the unit' and 'declared EER/COP' of the unit.</p> <p>(**) If default Cd = 0,25 is chosen then (results from) cycling tests are not required. Otherwise either the heating or cooling cycling test value is required.</p>							
<p>In as much as is relevant in view of the functionality, the manufacturer shall supply the information as requested in the above Table 1 in the technical documentation of the product. For units with capacity control marked 'staged', two values for the highest and lowest, noted 'hi/lo' divided by a slash ('/') will be declared in each box under 'Declared capacity'.</p>							

Table 2: Information requirements for single duct and double duct air conditioners				P
Information to identify the model(s) to which the information relates to [fill in as necessary] :				
Description	Symbol	Rated value	Measured Value	Unit
Capacity for cooling	$P_{\text{for cooling}}$	2.637	2.645	kW
Capacity for heating	$P_{\text{for heating}}$	2.051	2.058	kW
Power input for cooling	P_{EER}	1.003	1.002	kW
Power input for heating	P_{COP}	0.834	0.832	kW
Energy efficiency ratio	EER_d	2.63	2.64	—
Coefficient of performance	COP_d	2.46	2.47	—
Information to identify the model(s) to which the information relates to [fill in as necessary]:				
Description	Symbol	Rated value	Measured Value	Unit
Power consumption in off mode	P_{OFF}	—		W
Power consumption in standby mode	P_{SB}	0.50	0.43	W
Electricity consumption of single/double duct appliances (indicate for cooling and heating separately)	$DD: Q_{DD}$ $SD: Q_{SD}$	SD: 1.002 for cooling SD: 0.832 for heating		DD: kWh/a SD: kWh/h
Sound power level	L_{WA}	65	63.5	dB(A)
Global warming potential	GWP	3		kgCO ₂ eq.
Contact details for obtaining more information	—			

Description for Cooling capacity		Rating condition	Measured
Test Condition	Outdoor heat exchanger Inlet dry bulb temperature (°C)/Inlet wet bulb temperature(°C)	35/24	35/24
	Indoor heat exchanger Inlet dry bulb temperature (°C)/Inlet wet bulb temperature(°C)	35/24	35/24
	Voltage (V)	220-240	230.0
	Frequency(Hz)	50	50.0
Description for Heating capacity		Rating condition	Measured
Test Condition	Outdoor heat exchanger Inlet dry bulb temperature (°C)/Inlet wet bulb temperature(°C)	20/12	20/12
	Indoor heat exchanger Inlet dry bulb temperature (°C)/Inlet wet bulb temperature(°C)	20/12	20/12
	Voltage (V)	220-240	230.0
	Frequency(Hz)	50	50.0

Sound power level (tested according to EN 12102: 2017)	P
Sound power level (dB(A))	63.5

Summary table:

Item	Limit	Rated value	Tested value
EER	≥ 2.34	2.63	2.64
COP	≥ 1.84	2.46	2.47
Power consumption in off mode (W)	N/A	N/A	N/A
Power consumption in standby mode (W)	≤ 0.50	0.50	0.43
Sound power level (indoor) dB(A)	≤ 65	65	63.5
Sound power level (outdoor) dB(A)	N/A	N/A	N/A

List of test equipment used:

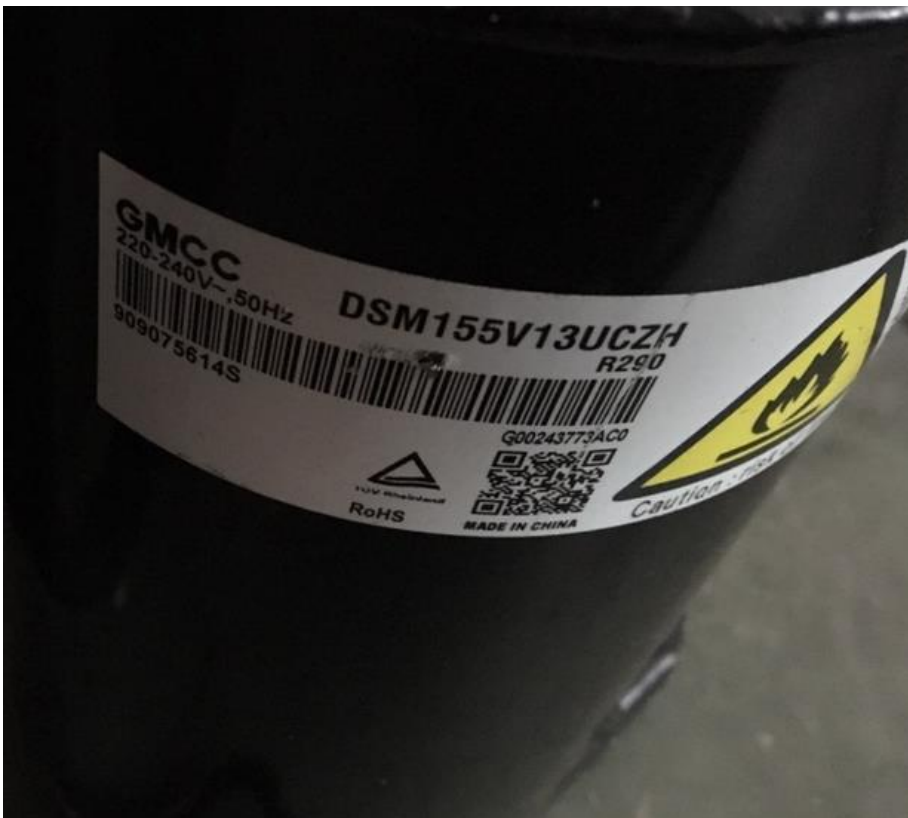
Measurement / testing	Testing / measuring equipment / material used	Range used/ accuracy	Calibration date until
Cooling/Heating capacity test	Air ehthalpy test room	--	2021-04-11
Electric power consumption of standby mode	Air ehthalpy test room	--	2021-04-11

Photos:

Picture 1



Picture 2



Picture 3



--End of report--