Test Report No.:	*NTR20140120*		*Page 1 of 19*
Applicant Name:	Gree Electric Appliances Inc. of Zhuhai Jinji West Road, Qianshan, Zhuhai, Guangdong 519070, P.R.China		
Test item:	Split Air Conditioner		
Identification:	GWH18UC-K3DNA4F	*Serial No.:*	Engineering sample
Receipt No.:	RZ00324094	*Date of receipt:*	2014.08.18
Testing location:	**Gree Electric Appliances Inc. of Zhuhai** Jinji West Road, Qianshan, Zhuhai, Guangdong 519070, P.R.China		
Test specification:	NO 206/2012 NO 626/2011 EN 14825：2012 EN 14511-1,2,3,4:2011		
Test Result:	*The test items passed the test specification(s).*		
Testing Laboratory:	Test laboratory of Gree Electric Appliances Inc. of Zhuhai(GTL)		

tested by:

2014-08-18	yangkankan	
Date	*Name/Position*	*Signature*

reviewed by:

2014-9-30	Lushunrong	
Date	*Name/Position*	*Signature*

Other Aspects:

Abbreviations:
P(ass) = passed
F(ail) = failed
N/A = not applicable
N/T =not tested

Summary of testing

1. The appliance was tested according to EN 14511.
2. The SEER and SCOP were calculated according to EN14825.
3. All the tests were performedon the model GWH18UC-K3DNA4F as representive.
4. The samples are engineering samples without serial numbers.

Test item particulars.....:

Class of temperature	T1
Type .....:	Split wall-mounted type
Degree of protection	Indoor unit:IP20
	Outdoor unit:IP24
Supply Connection.....:	Type Y attachment

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..... :	2014.9.02
Date (s) of performance of tests..... :	2014.9.13-2014.9.25

General remarks

- This appliance is split type air conditioner, which consist of one outdoor unit and one indoor unit.
- The indoor unit is a wall mounted type air conditioner, which is usually not accessible (only for maintenance purpose). It will be mounted 2,5 meters above the floor.
- Cooling and heating modes are applied by reverse cycle method. In the heating mode, defrost operation may be applied.
- The indoor unit is equipped with an infrared wireless battery powered remote control unit.

Model list:

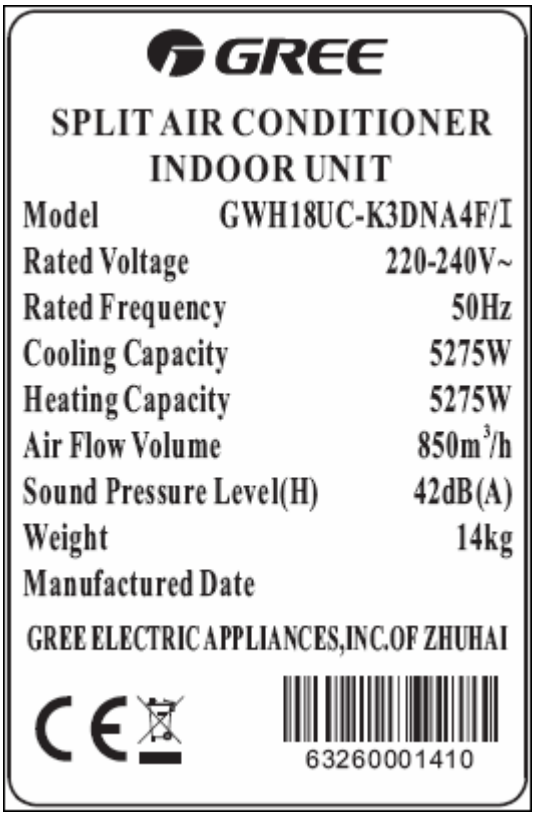
Model	Compressor model	Indoor fan motor	Outdoor fan motor
GWH18UC-K3DNA4F	QXAT-B121zF070	FN20V-ZL	LW60M-ZL

Note:

Rating labels and marking:
Match table:

Whole model	Indoor unit	Outdoor unit
GWH18UC-K3DNA4F	GWH18UC-K3DNA4F/I	GWH18UC-K3DNA4F/O

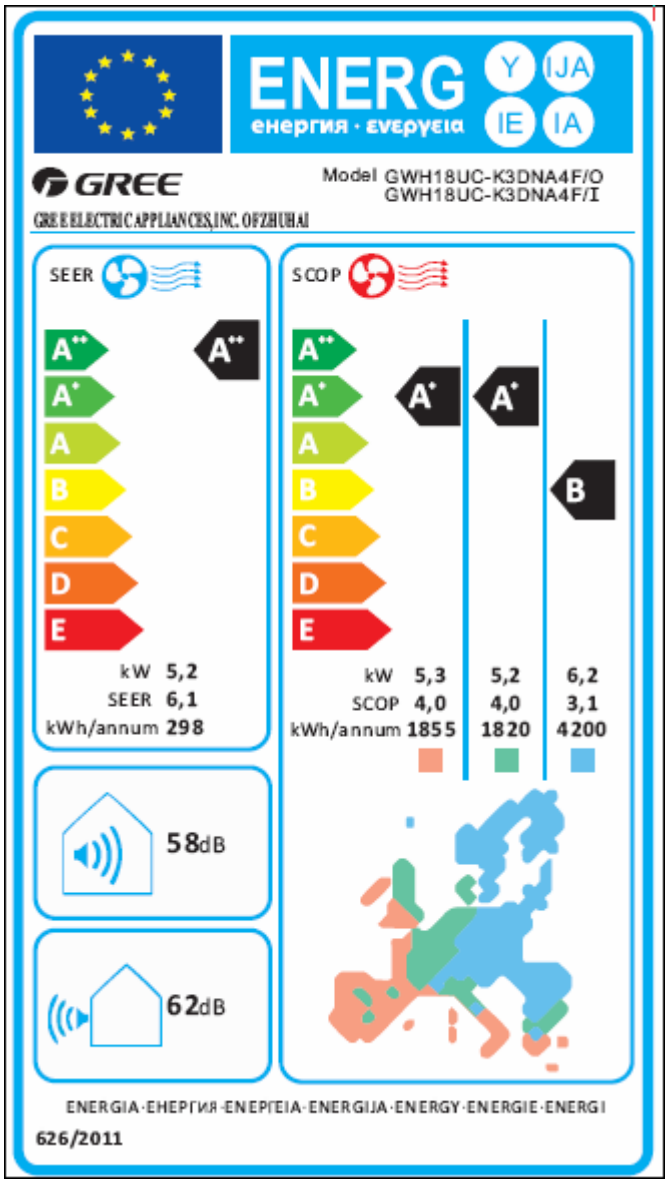
Indoor unit：



Outdoor unit：

Rating labels and marking:

Energy lablling



NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 206/2012			
Article 1	Subject matter and scope		P
1	This Regulation establishes eco-design requirements for the placing on the market of electric mains-operated air conditioners with a rated capacity of ⩽12 kW for cooling, or heating if the product has no cooling function, and comfort fans with an electric fan power input ⩽ 125W.	Air conditioner Rated capacity ⩽12 kW	P
2	This Regulation shall not apply to: (a) appliances that use non-electric energy sources; (b) air conditioners of which the condenser-side or evaporator-side, or both, do not use air for heat transfer medium.		N/A
Article 2	Definitions For the purposes of this Regulation, the definitions in Article 2 of Directive 2009/125/EC of the European Parliament and of the Council shall apply.		-
Article 3	Ecodesign requirements and timetable		P
1	The ecodesign requirements for air conditioners and comfort fans are set out in Annex I.		P
2	Each ecodesign requirement shall apply in accordance with the following timetable:	See table 1	P
single duct and double duct air conditioners	From 1 January 2013: single duct and double duct air conditioners shall correspond to requirements as indicated in Annex I, point 2(a).		N/A

	Double duct air conditioners		Single duct air conditioner	
	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

N/A

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.

Indoor sound power level in dB(A)
65

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

<table>
<tr>
<td></td>
<td>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.</td>
<td>
Requirements for maximum power consumption in off-mode and standby mode
<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>
<tr><td>Power management</td><td>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.</td></tr>
</table>
</td>
<td>N/A</td>
</tr>
<tr>
<td rowspan="2">except single and double duct air conditioners</td>
<td rowspan="2">From 1 January 2013: (a) air conditioners, except single and double duct air conditioners, shall correspond to requirements as indicated in Annex I, point 2(b) and points 3(a), 3(b), 3(c); (b) single ducts and double ducts shall correspond to requirements as indicated in Annex I, points 3(a), 3(b), 3(d); (c) comfort fans shall correspond to requirements as indicated in Annex I, points 3(a), 3(b), 3(e).</td>
<td>
Requirements for minimum energy efficiency
<table>
<tr><td></td><td>SEER</td><td>SCOP (Average heating season)</td></tr>
<tr><td>If GWP of refrigerant > 150</td><td>3,60</td><td>3,40</td></tr>
<tr><td>If GWP of refrigerant ≤ 150</td><td>3,24</td><td>3,06</td></tr>
</table>
</td>
<td>P</td>
</tr>
<tr>
<td>
Requirements for maximum sound power level
<table>
<tr><td colspan="2">Rated capacity≤6KW</td><td colspan="2">6＜Rated capacity≤12KW</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>
</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>From 1 January 2014: (a) air conditioners shall correspond to ecodesign requirements as indicated in Annex I, point 2(c); (b) single duct and double duct air conditioners shall correspond to requirements as indicated in Annex I, point 2(d).</td>
<td>
Requirements for minimum energy efficiency
<table>
<tr><td rowspan="2"></td><td colspan="2">Air conditioners, except double and single duct air conditioners</td><td colspan="2">Double duct air conditioners</td><td colspan="2">Single duct air conditioners</td></tr>
<tr><td>SEER</td><td>SCOP(heating season: Average)</td><td>EERrated</td><td>COPrated</td><td>EERrated</td><td>COPrated</td></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>
</td>
<td>P</td>
</tr>
</table>

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

3	Compliance with ecodesign requirements shall be measured and calculated in accordance with requirements set out in Annex II.		P
Article 4	Conformity assessment		P
1	The conformity assessment procedure referred to in Article 8 of Directive 2009/125/EC shall be the internal design control set out in Annex IV to that Directive or the management system set out in Annex V to that Directive.		P
2	For the purposes of conformity assessment pursuant to Article 8 of Directive 2009/125/EC, the technical documen-tation file shall contain the results of the calculation set out in Annex II to this Regulation.		P
Article 5	Verification procedure for market surveillance purposes		P
	Member States shall apply the verification procedure described in Annex III to this Regulation when performing the market surveillance checks referred to in Article 3(2) of Directive 2009/125/EC for compliance with requirements set out in Annex I to this Regulation.		P
Article 6	Benchmarks		-
	The indicative benchmarks for best-performing air conditioners available on the market at the time of entry into force of this Regulation are set out in Annex IV.		-
Article 7	Revision		-
	The Commission shall review this Regulation in the light of technological progress and present the result of this review to the Ecodesign Consultation Forum no later than 5 years from the date of the entry into force of this Regulation. The review shall in particular assess the efficiency and sound power level requirements, the approach to promote the use of low-global warming potential (GWP) refrigerants and the scope of the Regulation for air conditioners and possible changes in market share of types of appliances, including air conditioners above 12 kW rated output power. The review shall also assess the appropriateness of the standby and off mode requirements, seasonal calculation and measurement method, including considerations on the development of a possible seasonal calculation and measurement method for all air conditioners in the scope for cooling and heating seasons.		-
Article 8	Entry into force and application		P
	1. This Regulation shall enter into force on the 20th day following its publication in the Official Journal of the European Union. 2. It shall apply from 1 January 2013.		P
Annex I	Ecodesign requirements		P
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

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

	(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.		N/A

	Double duct air conditioners		Single duct air conditioner	
	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

N/A

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.

Indoor sound power level in dB(A)
65

	(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. The requirements on sound power shall relate to the standard rating conditions specified in Annex II, Table 2		P

Requirements for minimum energy efficiency

	SEER	SCOP (Average heating season)
If GWP of refrigerant > 150	3,60	3,40
If GWP of refrigerant ≤ 150	3,24	3,06

P

Requirements for maximum sound power level

Rated capacity≤6KW		6＜Rated capacity≤12KW	
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

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

	(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.	Requirements for minimum energy efficiency	N/A

	Air conditioners, except double and single duct air conditioners		Double duct air conditioners		Single duct air conditioners	
	SEER	SCOP(heating season: Average)	EERrated	COPrated	EERrated	COPrated
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.	**Requirements for maximum power consumption in off-mode and standby mode**	N/A

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.
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: (i) the technical documentation of the product; (ii) free access websites of manufacturers of air conditioners and comfort fans;		P

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

	(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.	See appendix	P
	(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	See appendix	N/A
	(e)Information requirements for comfort fans.	Air conditioner	N/A
Annex II	Measurements and calculations		P
	The measurements and calculations come from EN 14825:2012		P
Annex III	Verification procedure for market surveillance purposes		P
Annex IV	Benchmarks		P
		Benchmarks for air conditioners Air conditioners, excluding double duct and single duct conditioners: SEER 8,50; SCOP 5,10 Double duct air conditioner: EER 3,00(*); COP 3,15 Single duct air conditioner: EER 3,15(*); COP 2,60 Benchmark for level of GWP of the refrigerant used in the air conditioner is GWP≤20. (*) based on efficiency of evaporatively cooled single duct air conditioners.	N/A

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Article 3	Responsibilities of suppliers		P
1	Suppliers shall take action as described in points (a) to (g)		-
	(a) a printed label is provided for each air conditioner respecting energy efficiency classes as set out in Annex II. The label shall comply with the format and content of information as set out in Annex III. For air conditioners, except single and double duct air conditioners, a printed label must be provided, at least in the packaging of the outdoor unit, for at least one combination of indoor and outdoor units at capacity ratio 1. For other combinations, the information can be alternatively provided on a free access web site		P
	(b) a product fiche, as set out in Annex IV, is made available. For air conditioners, except single and double duct air conditioners, a product fiche must be provided at least in the packaging of the out door unit, for at least one combinationof indoor and outdoor units at capacity ratio 1. For other combinations, the information can be alternatively provided on a free access web site		P
	(c) technical documentation as set out in Annex V is made available electronically on request to the authorities of the Member States and to the Commission		P
	(d) any advertisement for a specific model of an air conditioner shall contain the energy efficiency class, if the advertisement discloses energy-related or price information. Where more than one efficiency class is possible, the supplier or the manufacturer, as appropriate, shall declare the energy efficiencyclass for heating at least in 'Average' heating season. Information in the cases where end-users cannot be expected to see the product displayed is to be provided as set out in Annex VI		P
	(e) any technical promotional material concerning a specific model of an air conditioner which describes its specific technical parameters shall include the energy efficiency class of that model as set out Annex II		P
	(f) instructions for use are made available		P

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict
	(g) single ducts shall be named 'local air conditioners' in packaging, product documentation and in any advertisement material, whether electronic or in paper.		N/A
2	The energy efficiency class shall be determined as set out in Annex VII.		P
3	The format of the label for air conditioners except for single and double duct air conditioners shall be as set out in Annex III.		P
4	For the air conditioners, except for single and double duct air conditioners, the format of the label set out in Annex III shall be applied according to the following timetable:		P
	(a) as regards air conditioners, except single duct and double duct air conditioners, placed on the market from 1 January 2013, labels with energy efficiency classes A, B, C, D, E, F, G shall be in accordance with point 1.1 of Annex III for reversible air conditioners, with point 2.1 of Annex III for cooling-only air conditioners and with point 3.1 of Annex III for heating-only air conditioners;		P
	(b) as regards air conditioners, except single duct and double duct air conditioners, placed on the market from 1 January 2015, labels with energy efficiency classes A+, A, B, C, D, E, F, shall be in accordance with point 1.2 of Annex III for reversible air conditioners, with point 2.2 of Annex III for cooling-only air conditioners and with point 3.2 of Annex III for heating-only air conditioners;		P
	(c) as regards air conditioners, except single duct and double duct air conditioners, placed on the market from 1 January 2017, labels with energy efficiency classes A++, A+, A, B, C, D, E, shall be in accordance with point 1.3 of Annex III for reversible air conditioners, with point 2.3 of Annex III for cooling-only air conditioners and with point 3.3 of Annex III for heating-only air conditioners;	Cooling mode:A++ Heating mode:A+ Heating mode:A+ (Warmer) Heating mode:B(Colder)	P
	(d) as regards air conditioners, except single duct and double duct air conditioners, placed on the market from 1 January 2019, labels with energy efficiency classes A+++, A++, A+, A, B, C, D shall be in accordance with point 1.4 of Annex III for reversible air conditioners, with point 2.4 of Annex III for cooling-only air conditioners and with point 3.4 of Annex III for heating-only air conditioners.		N/A

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict
5	The format of the label for double duct air conditioners placed on the market from 1 January 2013 with energy efficiency classes A+++, A++, A+, A, B, C, D shall be in accordance with point 4.1 of Annex III for reversible double duct air conditioners, with point 4.3 of Annex III for cooling-only double duct air conditioners and with point 4.5 of Annex III for heating-only double duct air conditioners.		N/A
Annex I	Definitions		
	The definition same to EN14825:2012 & NO 206/2012		P
Annex II	Energy efficiency classes		P
	Energy efficiency classes for air conditioners, except double ducts and single ducts.	See energy lable	P
	Energy efficiency classes for double ducts and single ducts.		N/A
Annex II	Energy label	See the page 3	P

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

Test result of part load according to EN 14825:

Calculation of SEER in cooling mode:

Full load (Pdesignc): 5200 W; **Tdesignc: 35**℃						
Test item	Indoor DB/WB(℃)	Outdoor DB/WB(℃)	Ptest（W）	frequency of compressor (±3Hz)	Tested EER	Cd
A	27/19	35/-	5022	52	3,28	0,25
B		30/-	3557	34	4.95	0,25
C		25/-	2331	30	7.00	0,25
D		20/-	1410	27	8.08	0,25
Psb= Poff =5.9508W; Pck= 0W; Pto= 9.4524W						
Test SEER			5.78			
Declared SEER			6,1			
Test SEER≥Declared SEER*0.92			Pass			
The calculation method of SEER acoording to the clause 6 of EN14825:2012						
According table 1 of NO 626/2011, the result efficency classes: A++						

Calculation of SCOP in heating mode:

Full load (Pdesignc):5200W ;Tdesignh: -10℃; Climate: Average ; Tbivalent: -7℃; TOL: -10℃						
Test item	Indoor DB(℃)	Outdoor DB/WB(℃)	Ptest(W)	frequency of compressor（±3Hz)	Tested COP	Cd
A	20/-	-7/-8	4391	65	2.63	0,25
B		2/1	2661	39	4.06	0,25
C		7/6	1813	23	5.09	0,25
D		12/11	1675	12	5.58	0,25
E		TOL	3909	71	2.44	0,25
F		Tbivalent	4391	65	2.63	0.25
Psb= Poff= 5.9508 W; Pck= 0W; Pto= 13.8188W						
SCOP			4.00			
Declared SCOP			4,0			
SCOP≥Declared SCOP*0.92			Pass			
The calculation method of SEER acoording to the clause 7 of EN14825:2012						
According table 1 of NO 626/2011, the result efficency classes: A+						

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

Calculation of SCOP in heating mode:

Full load (Pdesignc):5300W ;Tdesignh: 2℃； Climate: Warmer ；Tbivalent: 2℃； TOL:2℃						
Test item	Indoor DB(℃)	Outdoor DB/WB(℃)	P_{test}(W)	frequency of compressor（±3Hz)	Tested COP	Cd
A	20/-	-7/-8	2758	63	2.39	0,25
B		2/1	2661	43	3.87	0,25
C		7/6	3227	46	4.38	0,25
D		12/11	1476	18	5.07	0,25
E		TOL	3909	70	2.44	0,25
F		Tbivalent	2758	63	2.39	0.25
Psb= Poff= 5.9508 W; Pck= 0W; Pto= 13.8188W						
SCOP			4.65			
Declared SCOP			4.0			
SCOP≥Declared SCOP*0.92			Pass			
The calculation method of SEER acoording to the clause 7 of EN14825:2012						
According table 1 of NO 626/2011, the result efficency classes: A+						

Calculation of SCOP in heating mode:

Full load (Pdesignc):6200W ;Tdesignh: -22℃； Climate: Colder ；Tbivalent: -22℃； TOL: -22℃						
Test item	Indoor DB(℃)	Outdoor DB/WB(℃)	P_{test}(W)	frequency of compressor（±3Hz)	Tested COP	Cd
A	20/-	-7/-8	3549	70	2.69	0,25
B		2/1	2185	35	4.07	0,25
C		7/6	1404	15	4.63	0,25
D		12/11	865	12	3.75	0,25
E		TOL	5126	71	3.64	0,25
F		Tbivalent	3549	70	2.69	0.25
G			6017	70	1.96	
Psb= Poff= 5.9508 W; Pck= 0W; Pto= 13.8188W						
SCOP			4.37			
Declared SCOP			3.1			
SCOP≥Declared SCOP*0.92			Pass			
The calculation method of SEER acoording to the clause 7 of EN14825:2012						
According table 1 of NO 626/2011, the result efficency classes: B						

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

Appendix I: information according to clause 3 of NO 206/2012 ANNEX Ⅰ, for air conditioners，except single duct and double duct air conditioners

Function (indicate if present)				Only for heating mode, if applicable			
Cooling	Y			Average(mandatory)		Y	
Heating	Y			Warmer(if designed)		Y	
				Colder(if designed)		Y	
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Design load				Seasonal efficiency			
Cooling	Pdesignc	5.2	kW	Cooling	SEER	6,1	—
Heating/average	Pdesignh	5.2	kW	Heating/average	SCOP/A	4,0	—
Heating/warmer	Pdesignh	5.3	kW	Heating/warmer	SCOP/W	4.0	—
Heating/colder	Pdesignh	6.2	kW	Heating/colder	SCOP/C	3.1	—
Declared capacity (*) for cooling, at indoor temperature 27(19) °C and outdoor temperature Tj				Declared energy efficiency ratio (*), at indoor temperature 27(19) °C and outdoor temperature Tj			
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Tj=35℃	Pdc	5.0	kW	Tj=35℃	EERd	3.3	—
Tj=30℃	Pdc	3.5	kW	Tj=30℃	EERd	5.2	—
Tj=25℃	Pdc	2.3	kW	Tj=25℃	EERd	7.6	—
Tj=20℃	Pdc	1.4	kW	Tj=20℃	EERd	8.5	—
Declared capacity (*) for heating/Average season, at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance(*)/Average season, at indoor temperature 20 °C and outdoor temperature Tj			
Tj=-7℃	Pdh	4.4	kW	Tj=-7℃	COPd	2.6	—
Tj=2℃	Pdh	2.7	kW	Tj=2℃	COPd	4.1	—
Tj=7℃	Pdh	1.8	kW	Tj=7℃	COPd	5,1	—
Tj=12℃	Pdh	1.7	kW	Tj=12℃	COPd	5.5	—
Tj=bivalent temperature	Pdh	3.9	kW	Tj=bivalent temperature	COPd	2.2	—
Tj=operating limit	Pdh	4.4	kW	Tj=operating limit	COPd	2,5	—

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

Function (indicate if present)				Only for heating mode, if applicable			
Cooling	Y			Average(mandatory)		Y	
Heating	Y			Warmer(if designed)		Y	
				Colder(if designed)		Y	
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Declared capacity (*) for heating/Warmer season, at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance(*)/Warmer season, at indoor temperature 20 °C and outdoor temperature Tj			
Tj=2℃	Pdh	2.7	kW	Tj=2℃	COPd	3.30	—
Tj=7℃	Pdh	3.2	kW	Tj=7℃	COPd	3.30	—
Tj=12℃	Pdh	1.5	kW	Tj=12℃	COPd	4.90	—
Tj=bivalent temperature	Pdh	2.8	kW	Tj=bivalent temperature	COPd	2.40	—
Tj=operating limit	Pdh	3.9	kW	Tj=operating limit	COPd	2.50	—
Declared capacity (*) for heating/Colder season, at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance(*)/Colder season, at indoor temperature 20 °C and outdoor temperature Tj			
Tj=-7℃	Pdh	3.5	kW	Tj=-7℃	COPd	2.30	—
Tj=2℃	Pdh	2.2	kW	Tj=2℃	COPd	2.90	—
Tj=7℃	Pdh	1.4	kW	Tj=7℃	COPd	3.10	—
Tj=12℃	Pdh	0.9	kW	Tj=12℃	COPd	2.40	—
Tj=bivalent temperature	Pdh	3.5	kW	Tj=bivalent temperature	COPd	2.30	—
Tj=-15℃	Pdh	6.0	kW	Tj=-15℃	COPd	1.8	—
Bivalent temperature				Operating limit temperature			
Heating/Average	Tbiv	-7	℃	Heating/Average	Tol	-7	℃
Heating/Warmer	Tbiv	2	℃	Heating/Warmer	Tol	2	℃
Heating/Colder	Tbiv	-22	℃	Heating/Colder	Tol	-22	℃
Cycling interval capacity				Cycling interval efficiency			
for cooling	Pcycc	x,x	kW	for cooling	EERcyc	x,x	—
for heating	Pcych	x,x	kW	for heating	COPcyc	x,x	—
Degradation co-efficient cooling (**)	Cdc	x,x	—	Degradation co-efficient heating (**)	Cdh	x,x	—

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

Function (indicate if present)				Only for heating mode, if applicable			
Cooling	Y			Average(mandatory)		Y	
Heating	Y			Warmer(if designed)		Y	
				Colder(if designed)		Y	
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Electric power input in power modes other than 'active mode'				Annual electricity consumption			
Off mode	P_{OFF}	0.0059508/0.0059508	kW	Cooling	Q_{CE}	298	kWh/a
Standby mode	P_{SB}	0.0059508/0.0059508	kW	Heating/Average	Q_{HE}	1820	kWh/a
Thermostat-off mode	P_{TO}	(0.0094524/0.0138188)	kW	Heating/Warmer	Q_{HE}	1855	kWh/a
Crankcase heater mode	P_{CK}	0	kW	Heating/Colder	Q_{HE}	4200	kWh/a
Capacity control (indicate one of three options)				Other items			
fixed	N			Sound power level (indoor/outdoor)	L_{WA}	(58/62)	dB(A)
staged	N			Global warming potential	GWP	1975	$kgCO_2$ eq.
variable	Y			Rated air flow (indoor/outdoor)	—	(1250/3200)	m^3 /h
Contact details for obtaining more information	Gree Electric Appliances Inc. of Zhuhai Jinji West Road, Qianshan, Zhuhai, Guangdong 519070, P.R.China Email：joannani@gree.com.cn						

(*) 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.

(**) 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.

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'.

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825：2012			
Clause	Requirement - Test	Result - Remark	Verdict

Appendix II： Photo

Indoor unit：

Outdoor unit：

Compressor：

--End of report--