

| | | | | | |
|---|----------------------|---|-------------------------|----------------------|--------------------|
| <i>Test Report No.:</i> | | NTRF202301005 | | <i>Page 1 of 18</i> | |
| <i>Applicant Name:</i> | | Gree Electric Appliances Inc. of Zhuhai Jinji West Road, Qianshan, Zhuhai, Guangdong 519070, P.R.China | | | |
| <i>Test item:</i> | | Split Air Conditioner | | | |
| <i>Identification:</i> | | GWH12AVCXD-K6DN**A (*represent design code of different front panel;first*=A-Z,second*=1-9) | <i>Serial No.:</i> | | Engineering sample |
| <i>Receipt No.:</i> | | RZ00027793 | <i>Date of receipt:</i> | | 2022.12.15 |
| <i>Testing location:</i> | | Gree Electric Appliances Inc. of Zhuhai Jinji West Road, Qianshan, Zhuhai, Guangdong 519070, P.R.China | | | |
| <i>Test specification:</i> | | Commission Regulation (EU) No 206/2012 Commission Delegated Regulation (EU) No 626/2011 EN 14825:2016 EN 14511-2,3:2013 EN 12102-1:2017 | | | |
| <i>Test Result:</i> | | <i>The test items passed the test specification(s).</i> | | | |
| <i>Testing Laboratory:</i> | | Testing Center of Gree Electric Appliances Inc. of Zhuhai | | | |
| <i>tested by:</i> | | | <i>reviewed by:</i> | | |
| 2023.01.03 | Lu Zhibin | | 2023.01.03 | Shang Mingyan | |
| <i>Date</i> | <i>Name/Position</i> | <i>Signature</i> | <i>Date</i> | <i>Name/Position</i> | <i>Signature</i> |
| <i>Other Aspects:</i> | | | | | |
| Abbreviations: <i>P(ass) = passed</i> <i>F(ail) = failed</i> <i>N/A = not applicable</i> <i>N/T =not tested</i> | | | | | |
| <i>This test report 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 safety mark on this or similar products.</i> | | | | | |

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

| 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 models are indeticial with each other except the panels.All the tests were performedon the model GWH12AVCXD-K6DNA1A as representative. | | | |
| 4. The samples are engineering samples without serial numbers. | | | |
| Test item particulars | | | |
| Class of temperature | | T1 | |
| Type | | Split Air Conditioner | |
| Degree of protection | | Indoor unit:IPX0 Outdoor unit:IPX4 | |
| 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 | | 2022.12.20 | |
| Date (s) of performance of tests | | 2022.12.20-2022.12.23 | |
| General remarks | | | |
| <ul style="list-style-type: none"> ➤ 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). ➤ 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. | | | |
| Critical components: | | | |
| Model | Compressor model | Indoor fan motor | Outdoor fan motor |
| GWH12AVCXD-K6DN**A | QXF-A098zE170 | FN10D-ZL(10P) | FW30R-ZL(10P) |



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

Rating labels and marking:

Match table:

| Whole model | Indoor unit | Outdoor unit |
|---|----------------------|----------------------|
| GWH12AVCXD-K6DN**A | GWH12AVCXD-K6DN**A/I | GWH12AVCXD-K6DN**A/O |
| (**represent design code of different front panel;first*=A-Z,second*=1-9) | | |

The artwork below may be only a draft.

The labels of other GWH12AVCXD-K6DN**A are indetical to the representative model GWH12AVCXD-K6DNA1A as below except for the model name.

GREE

SPLIT AIR CONDITIONER INDOOR UNIT

Model GWH12AVCXD-K6DNA1A/I

| | | | |
|-------------------------|-----------|------------------|----------------------|
| Rated Voltage | 220-240V~ | Heating Capacity | 3.81kW |
| Rated Frequency | 50Hz | Air Flow Volume | 720m ³ /h |
| Cooling Capacity | 3.50kW | Weight | 10.5kg |
| Sound Pressure Level(H) | 39dB(A) | Serial No. | |

Manufactured Date YYYY.MM
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070

600004083487

GREE

SPLIT AIR CONDITIONER INDOOR UNIT

Model GWH12AVCXD-K6DNA1A/I

| | | | |
|-------------------------|-----------|------------------|----------------------|
| Rated Voltage | 220-240V~ | Heating Capacity | 3.81kW |
| Rated Frequency | 50Hz | Air Flow Volume | 720m ³ /h |
| Cooling Capacity | 3.50kW | Weight | 10.5kg |
| Sound Pressure Level(H) | 39dB(A) | UV-C lamp | 12VDC, 2W |
| Manufactured Date | YYYY.MM | Serial No. | |

Manufactured Date YYYY.MM
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070

600004082361

GREE

AIR CONDITIONER OUTDOOR UNIT

Model GWH12AVCXD-K6DNA1A/O

| | |
|--|------------|
| Rated Voltage | 220-240V~ |
| Rated Frequency | 50Hz |
| Climate Type | T1 |
| Cooling Capacity | 3.50kW |
| Heating Capacity | 3.81kW |
| Cooling Power Input | 875W |
| Heating Power Input | 952W |
| Cooling Rated Input | 1600W |
| Heating Rated Input | 1800W |
| Maximum Allowable Pressure | 4.3MPa |
| Operating Pressure (Discharge Side/Suction Side) | 4.3/2.5MPa |
| Sound Pressure Level | 53dB(A) |
| Moisture Protection | IPX4 |
| Isolation | I |
| Refrigerant | R32 |
| Refri. Charge | 0.80kg |
| Weight | 30kg |
| GWP | 675 |
| CO ₂ equivalent | 0.54tonnes |
| Manufactured Date | YYYY.MM |
| Serial No. | |

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070

600004082360

Contains fluorinated greenhouse gases

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

ENERG

енергия · ΕΝΕΡΓΕΙΑ

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

Model GWH12AVCXD-K6DNA1A/O
GWH12AVCXD-K6DNA1A/I

SEER

A+++

| | |
|-----------|-----|
| kW | 3,5 |
| SEER | 8,5 |
| kWh/annum | 144 |

SCOP

A+++

| | | | |
|-----------|-----|-----|------|
| kW | 3,5 | 3,0 | 4,3 |
| SCOP | 5,6 | 4,6 | 3,6 |
| kWh/annum | 875 | 913 | 2508 |

60dB

64dB

ENERGIA · ЕНЕРГИЯ · ΕΝΕΡΓΕΙΑ · ENERGIJA · ENERGY · ENERGIE · ENERGI

626/2011

| NO 626/2011 & EN 14511 and NO 206/2012 & EN 14825 | | | |
|---|--------------------|-----------------|---------|
| 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 ≤ 125 W. | 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). | <table border="1"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">Double duct air conditioners</th> <th colspan="2">Single duct air conditioner</th> </tr> <tr> <th>EER rated</th> <th>COP rated</th> <th>EER rated</th> <th>COP rated</th> </tr> </thead> <tbody> <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> </tbody> </table> | | 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 |
| | | | | 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 | | | | | | | | | | | | | | | | | | |
| Off mode | Power consumption of equipment in any off-mode condition shall not exceed 1,00 W. | | N/A | | | | | | | | | | | | | | | | | | | |
| Standby mode | <p>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.</p> <p>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.</p> | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | |
| Clause | Requirement - Test | Result - Remark | Verdict |

| | | Requirements for maximum power consumption in off-mode and standby mode | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|------------------------------------|---|--|--|--|---|--|-----------------------------|---|-------------------------------|-----------|----------|----------|----------|--|------|------|------|------|------|------|--|------|------|------|------|------|------|---|------|------|------|------|------|------|---|------|------|------|------|------|------|--|
| | 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. | <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:30%;">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> | 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. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| except single and double duct air conditioners | 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). | Requirements for minimum energy efficiency | P | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align:center;">SEER</th> <th style="text-align:center;">SCOP (Average heating season)</th> </tr> </thead> <tbody> <tr> <td>If GWP of refrigerant > 150</td> <td style="text-align:center;">3,60</td> <td style="text-align:center;">3,40</td> </tr> <tr> <td>If GWP of refrigerant ≤ 150</td> <td style="text-align:center;">3,24</td> <td style="text-align:center;">3,06</td> </tr> </tbody> </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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Requirements for maximum sound power level | | P | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align:center;">Rated capacity ≤ 6KW</th> <th colspan="2" style="text-align:center;">6 < Rated capacity ≤ 12KW</th> </tr> <tr> <th style="text-align:center;">Indoor sound power level in dB(A)</th> <th style="text-align:center;">Outdoor sound power level in dB(A)</th> <th style="text-align:center;">Indoor sound power level in dB(A)</th> <th style="text-align:center;">Outdoor sound power level in dB(A)</th> </tr> </thead> <tbody> <tr> <td style="text-align:center;">60</td> <td style="text-align:center;">65</td> <td style="text-align:center;">65</td> <td style="text-align:center;">70</td> </tr> </tbody> </table> | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 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). | Requirements for minimum energy efficiency | P | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2" style="text-align:center;">Air conditioners, except double and single duct air conditioners</th> <th colspan="2" style="text-align:center;">Double duct air conditioners</th> <th colspan="2" style="text-align:center;">Single duct air conditioners</th> </tr> <tr> <th style="text-align:center;">SEER</th> <th style="text-align:center;">SCOP(heating season: Average)</th> <th style="text-align:center;">EER rated</th> <th style="text-align:center;">COPrated</th> <th style="text-align:center;">EERrated</th> <th style="text-align:center;">COPrated</th> </tr> </thead> <tbody> <tr> <td>If GWP of refrigerant > 150 for < 6 kW</td> <td style="text-align:center;">4,60</td> <td style="text-align:center;">3,80</td> <td style="text-align:center;">2,60</td> <td style="text-align:center;">2,60</td> <td style="text-align:center;">2,60</td> <td style="text-align:center;">2,04</td> </tr> <tr> <td>If GWP of refrigerant ≤ 150 for < 6 kW</td> <td style="text-align:center;">4,14</td> <td style="text-align:center;">3,42</td> <td style="text-align:center;">2,34</td> <td style="text-align:center;">2,34</td> <td style="text-align:center;">2,34</td> <td style="text-align:center;">1,84</td> </tr> <tr> <td>If GWP of refrigerant > 150 for 6-12 kW</td> <td style="text-align:center;">4,30</td> <td style="text-align:center;">3,80</td> <td style="text-align:center;">2,60</td> <td style="text-align:center;">2,60</td> <td style="text-align:center;">2,60</td> <td style="text-align:center;">2,04</td> </tr> <tr> <td>If GWP of refrigerant ≤ 150 for 6-12 kW</td> <td style="text-align:center;">3,87</td> <td style="text-align:center;">3,42</td> <td style="text-align:center;">2,34</td> <td style="text-align:center;">2,34</td> <td style="text-align:center;">2,34</td> <td style="text-align:center;">1,84</td> </tr> </tbody> </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 | 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 | |
| | Air conditioners, except double and single duct air conditioners | | | | Double duct air conditioners | | Single duct air conditioners | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SEER | SCOP(heating season: Average) | | EER rated | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825 | | | |
|--|--|-----------------|---------|
| 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 documentation 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 | | | |
| 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. | Double duct air conditioners | | Single duct air conditioner | | N/A | |
| | | 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 | |
| | | Off mode | Power consumption of equipment in any off-mode condition shall not exceed 1,00 W. | | | | N/A |
| | | 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. | | | | |
| | | Availability of standby and/or off mode | 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. | | | | |
| | | 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 | Requirements for minimum energy efficiency | | | | P | |
| | | | SEER | SCOP (Average heating season) | | | |
| | | If GWP of refrigerant >150 | 3,60 | 3,40 | | | |
| | | If GWP of refrigerant ≤150 | 3,24 | 3,06 | | | |
| | | Requirements for maximum sound power level | | | | P | |
| | | 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 | | |
| | | Sound power level test result according to EN 12102-1:2017: | | | | | |
| | | Indoor: 60 dB(A) | | | | | |
| | | Outdoor: 64 dB(A) | | | | | |



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

| | <p>(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.</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="7" style="text-align: center;">Requirements for minimum energy efficiency</th> </tr> <tr> <th rowspan="2"></th> <th colspan="2" style="text-align: center;">Air conditioners, except double and single duct air conditioners</th> <th colspan="2" style="text-align: center;">Double duct air conditioners</th> <th colspan="2" style="text-align: center;">Single duct air conditioners</th> </tr> <tr> <th style="text-align: center;">SEER</th> <th style="text-align: center;">SCOP(heating season: Average)</th> <th style="text-align: center;">EER rated</th> <th style="text-align: center;">COPrated</th> <th style="text-align: center;">EERrated</th> <th style="text-align: center;">COPrated</th> </tr> </thead> <tbody> <tr> <td style="font-size: small;">If GWP of refrigerant > 150 for < 6 kW</td> <td style="text-align: center;">4,60</td> <td style="text-align: center;">3,80</td> <td style="text-align: center;">2,60</td> <td style="text-align: center;">2,60</td> <td style="text-align: center;">2,60</td> <td style="text-align: center;">2,04</td> </tr> <tr> <td style="font-size: small;">If GWP of refrigerant ≤ 150 for < 6 kW</td> <td style="text-align: center;">4,14</td> <td style="text-align: center;">3,42</td> <td style="text-align: center;">2,34</td> <td style="text-align: center;">2,34</td> <td style="text-align: center;">2,34</td> <td style="text-align: center;">1,84</td> </tr> <tr> <td style="font-size: small;">If GWP of refrigerant > 150 for 6-12 kW</td> <td style="text-align: center;">4,30</td> <td style="text-align: center;">3,80</td> <td style="text-align: center;">2,60</td> <td style="text-align: center;">2,60</td> <td style="text-align: center;">2,60</td> <td style="text-align: center;">2,04</td> </tr> <tr> <td style="font-size: small;">If GWP of refrigerant ≤ 150 for 6-12 kW</td> <td style="text-align: center;">3,87</td> <td style="text-align: center;">3,42</td> <td style="text-align: center;">2,34</td> <td style="text-align: center;">2,34</td> <td style="text-align: center;">2,34</td> <td style="text-align: center;">1,84</td> </tr> </tbody> </table> | Requirements for minimum energy efficiency | | | | | | | | Air conditioners, except double and single duct air conditioners | | Double duct air conditioners | | Single duct air conditioners | | SEER | SCOP(heating season: Average) | EER rated | 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 | N/A |
|---|---|--|---|----------|------------------------------|---|--------------|--|--|---|--|------------------|---|-----|------------------------------|--|------|-------------------------------|-----------|----------|----------|----------|--|------|------|------|------|------|------|--|------|------|------|------|------|------|---|------|------|------|------|------|------|---|------|------|------|------|------|------|-----|
| Requirements for minimum energy efficiency | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Air conditioners, except double and single duct air conditioners | | Double duct air conditioners | | Single duct air conditioners | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SEER | SCOP(heating season: Average) | EER rated | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>(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> | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Requirements for maximum power consumption in off-mode and standby mode</th> </tr> </thead> <tbody> <tr> <td style="font-size: small;">Off mode</td> <td style="font-size: small;">Power consumption of equipment in any off-mode condition shall not exceed 0,50 W.</td> </tr> <tr> <td rowspan="2" style="font-size: small;">Standby mode</td> <td style="font-size: small;">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 style="font-size: small;">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 style="font-size: small;">Availability of standby and/or off mode</td> <td style="font-size: small;">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 style="font-size: small;">Power management</td> <td style="font-size: small;">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> </tbody> </table> | Requirements for maximum power consumption in off-mode and standby mode | | 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. | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Requirements for maximum power consumption in off-mode and standby mode | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <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> <p>(i) the technical documentation of the product;</p> <p>(ii) free access websites of manufacturers of air conditioners and comfort fans;</p> | | P | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| NO 626/2011 & EN 14511 and NO 206/2012 & EN 14825 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|-----------------------------|------|-----------------------------|---------------------------------|--|--|--|--|--|--|--|-----------------------------|--|-----------------------------|--|------|------|-----|-----|-----|-----|------|------|---------|------|---------|------|--|--|--|--|--|--|---|--|--|--|--|--|-----|
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Annex III | Verification procedure for market surveillance purposes | | | | P | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Annex IV | Benchmarks | | | | P | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <thead> <tr> <th colspan="6">Benchmarks for air conditioners</th> </tr> <tr> <th colspan="2">Air conditioners, excluding double duct and single duct conditioners</th> <th colspan="2">Double duct air conditioner</th> <th colspan="2">Single duct air conditioner</th> </tr> <tr> <th>SEER</th> <th>SCOP</th> <th>EER</th> <th>COP</th> <th>EER</th> <th>COP</th> </tr> </thead> <tbody> <tr> <td>8,50</td> <td>5,10</td> <td>3,00(*)</td> <td>3,15</td> <td>3,15(*)</td> <td>2,60</td> </tr> <tr> <td colspan="6">Benchmark for level of GWP of the refrigerant used in the air conditioner is $GWP \leq 20$.</td> </tr> <tr> <td colspan="6">(*) based on efficiency of evaporatively cooled single duct air conditioners.</td> </tr> </tbody> </table> | | | | Benchmarks for air conditioners | | | | | | Air conditioners, excluding double duct and single duct conditioners | | Double duct air conditioner | | Single duct air conditioner | | SEER | SCOP | EER | COP | EER | COP | 8,50 | 5,10 | 3,00(*) | 3,15 | 3,15(*) | 2,60 | Benchmark for level of GWP of the refrigerant used in the air conditioner is $GWP \leq 20$. | | | | | | (*) based on efficiency of evaporatively cooled single duct air conditioners. | | | | | | N/A |
| Benchmarks for air conditioners | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Air conditioners, excluding double duct and single duct conditioners | | Double duct air conditioner | | Single duct air conditioner | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEER | SCOP | EER | COP | EER | COP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8,50 | 5,10 | 3,00(*) | 3,15 | 3,15(*) | 2,60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Benchmark for level of GWP of the refrigerant used in the air conditioner is $GWP \leq 20$. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (*) based on efficiency of evaporatively cooled single duct air conditioners. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 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 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 |
| | (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 efficiency class 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 |
| | (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; | | N/A |
| | (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; | | N/A |
| | (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; | | N/A |
| | (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. | Cooling mode:A+++ Heating mode: Warmmer: A+++ Average: A++ Colder:A | P |
| 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 & 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 | | | |
|---|--------------------|-----------------|---------|
| Clause | Requirement - Test | Result - Remark | Verdict |

Test result of part load according to EN 14825:

Calculation of SEER in cooling mode:

| Full load (Pdesignc):3500 W | | Tdesignc: 35°C | Tested Voltage: 230V | Frequency: 50Hz | |
|--|------------------|-------------------|----------------------|-----------------|------|
| Test item | Indoor DB/WB(°C) | Outdoor DB/WB(°C) | Ptest (W) | Tested EER | Cd |
| A | 27/19 | 35/- | 3531 | 4.11 | 0,25 |
| B | | 30/- | 2590 | 6.21 | 0,25 |
| C | | 25/- | 1680 | 9.44 | 0,25 |
| D | | 20/- | 752 | 17.22 | 0,25 |
| Psb= Poff =1.22 W; Pck= 0W; Pto=6.0 W, Q _{CE} =143 kWh/a | | | | | |
| Test SEER | | | 8.544 | | |
| Declared SEER | | | 8.5 | | |
| Test SEER≥Declared SEER | | | Pass | | |
| The calculation method of SEER according to the clause 6 of EN14825:2016 | | | | | |
| According table 1 of NO 626/2011, the result efficiency classes: A+++ | | | | | |

Calculation of SCOP in heating mode:

| Full load (Pdesignh):3000W | | Tdesignh: -10°C | Climate: Average | | |
|--|---------------|----------------------|------------------|------------|------|
| Tbivalent: -10 °C ; TOL: -10°C | | Tested Voltage: 230V | Frequency: 50Hz | | |
| Test item | Indoor DB(°C) | Outdoor DB/WB(°C) | Ptest(w) | Tested COP | Cd |
| A | 20/- | -7/-8 | 2660 | 3.05 | 0,25 |
| B | | 2/1 | 1631 | 4.61 | 0,25 |
| C | | 7/6 | 1090 | 5.90 | 0,25 |
| D | | 12/11 | 902 | 7.14 | 0,25 |
| E | | TOL | 3107 | 2.52 | 0,25 |
| F | | Tbivalent | 3107 | 2.52 | 0,25 |
| Psb= Poff=1.22 W; Pck= 0W; Pto=10.93 W, Q _{HE} = 903 kWh/a | | | | | |
| SCOP | | | 4.650 | | |
| Declared SCOP | | | 4.6 | | |
| SCOP≥Declared SCOP | | | Pass | | |
| The calculation method of SCOP according to the clause 7 of EN14825:2016 | | | | | |
| According table 1 of NO 626/2011, the result efficiency classes: A++ | | | | | |

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

Calculation of SCOP in heating mode:

| Full load (P_{designh}):3500W | | T_{designh}: 2 °C | | Climate: Warmer | |
|--|---------------|----------------------------------|-----------------------|-------------------------|------|
| T_{bivalent}: 2 °C ; TOL: 2 °C | | Tested Voltage: 230V | | Frequency: 50Hz | |
| Test item | Indoor DB(°C) | Outdoor DB/WB(°C) | P _{test} (W) | T _{tested} COP | Cd |
| A | 20/- | / | / | / | 0,25 |
| B | | 2/1 | 3613 | 2.61 | 0,25 |
| C | | 7/6 | 2271 | 5.06 | 0,25 |
| D | | 12/11 | 902 | 7.14 | 0,25 |
| E | | TOL | 3613 | 2.61 | 0,25 |
| F | | T _{bivalent} | 3613 | 2.61 | 0.25 |
| P _{sb} = P _{off} =1.22 W; P _{ck} = 0W; P _{to} =10.93 W, Q _{HE} =868 kWh/a | | | | | |
| SCOP | | | | 5.643 | |
| Declared SCOP | | | | 5.6 | |
| SCOP≥Declared SCOP | | | | Pass | |
| The calculation method of SCOP according to the clause 7 of EN14825:2016 | | | | | |
| According table 1 of NO 626/2011, the result efficiency classes: A+++ | | | | | |

Calculation of SCOP in heating mode:

| Full load (P_{designh}):4300W | | T_{designh}: -22 °C | | Climate: Colder | |
|---|---------------|------------------------------------|-----------------------|-------------------------|------|
| T_{bivalent}: -10 °C ; TOL: -22 °C | | Tested Voltage: 230V | | Frequency: 50Hz | |
| Test item | Indoor DB(°C) | Outdoor DB/WB(°C) | P _{test} (W) | T _{tested} COP | Cd |
| A | 20/- | -7/-8 | 2603 | 3.06 | 0,25 |
| B | | 2/1 | 1631 | 4.61 | 0,25 |
| C | | 7/6 | 1090 | 5.90 | 0,25 |
| D | | 12/11 | 902 | 7.14 | 0,25 |
| E | | TOL | 2610 | 1.72 | 0,25 |
| F | | T _{bivalent} | 3107 | 2.52 | 0.25 |
| G | | -15/- | 3090 | 2.08 | 0.25 |
| P _{sb} = P _{off} =1.22 W; P _{ck} = 0W; P _{to} =10.93 W, Q _{HE} =2497 kWh/a | | | | | |
| SCOP | | | | 3.624 | |
| Declared SCOP | | | | 3.6 | |
| SCOP≥Declared SCOP | | | | Pass | |
| The calculation method of SCOP according to the clause 7 of EN14825:2016 | | | | | |
| According table 1 of NO 626/2011, the result efficiency classes: A | | | | | |

| NO 626/2011 & EN 14511 and NO 206/2012 & EN 14825 | | | |
|---|--------------------|-----------------|---------|
| 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 | 3.5 | kW | Cooling | SEER | 8.5 | — |
| Heating/average | Pdesignh | 3.0 | kW | Heating/average | SCOP/A | 4.6 | — |
| Heating/warmer | Pdesignh | 3.5 | kW | Heating/warmer | SCOP/W | 5.6 | — |
| Heating/colder | Pdesignh | 4.3 | kW | Heating/colder | SCOP/C | 3.6 | — |
| 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°C | Pdc | 3.50 | kW | Tj=35°C | EERd | 4.00 | — |
| Tj=30°C | Pdc | 2.58 | kW | Tj=30°C | EERd | 6.20 | — |
| Tj=25°C | Pdc | 1.66 | kW | Tj=25°C | EERd | 9.40 | — |
| Tj=20°C | Pdc | 0.74 | kW | Tj=20°C | EERd | 17.20 | — |
| 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°C | Pdh | 2.65 | kW | Tj=-7°C | COPd | 3.00 | — |
| Tj=2°C | Pdh | 1.62 | kW | Tj=2°C | COPd | 4.60 | — |
| Tj=7°C | Pdh | 1.04 | kW | Tj=7°C | COPd | 5.90 | — |
| Tj=12°C | Pdh | 0.90 | kW | Tj=12°C | COPd | 7.10 | — |
| Tj=operating limit | Pdh | 3.00 | kW | Tj=operating limit | COPd | 2.50 | — |
| Tj=bivalent temperature | Pdh | 3.00 | kW | Tj=bivalent temperature | COPd | 2.50 | — |

| NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825 | | | |
|--|--------------------|-----------------|---------|
| 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°C | Pdh | 3.50 | kW | Tj=2°C | COPd | 2.60 | — |
| Tj=7°C | Pdh | 2.25 | kW | Tj=7°C | COPd | 5.00 | — |
| Tj=12°C | Pdh | 0.90 | kW | Tj=12°C | COPd | 7.10 | — |
| Tj=operating limit | Pdh | 3.50 | kW | Tj=operating limit | COPd | 2.60 | — |
| Tj=bivalent temperature | Pdh | 3.50 | kW | Tj=bivalent temperature | COPd | 2.60 | — |
| 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°C | Pdh | 2.60 | kW | Tj=-7°C | COPd | 3.06 | — |
| Tj=2°C | Pdh | 1.62 | kW | Tj=2°C | COPd | 4.60 | — |
| Tj=7°C | Pdh | 1.04 | kW | Tj=7°C | COPd | 5.90 | — |
| Tj=12°C | Pdh | 0.90 | kW | Tj=12°C | COPd | 7.10 | — |
| Tj=operating limit | Pdh | 2.50 | kW | Tj=operating limit | COPd | 1.72 | — |
| Tj=bivalent temperature | Pdh | 3.00 | kW | Tj=bivalent temperature | COPd | 2.50 | — |
| Tj=-15°C | Pdh | 2.98 | kW | Tj=-15°C | COPd | 2.07 | — |
| Bivalent temperature | | | | Operating limit temperature | | | |
| Heating/Average | Tbiv | -10 | °C | Heating/Average | Tol | -10 | °C |
| Heating/Warmer | Tbiv | 2 | °C | Heating/Warmer | Tol | 2 | °C |
| Heating/Colder | Tbiv | -10 | °C | Heating/Colder | Tol | -22 | °C |
| Cycling interval capacity | | | | Cycling interval efficiency | | | |
| for cooling | Pcycc | x,x | kW | for cooling | EERcyc | x,x | — |
| for heating | Pcyh | x,x | kW | for heating | COPcyc | x,x | — |
| Degradation co-efficient cooling (**) | Cdc | 0.25 | — | Degradation co-efficient heating (**) | Cdh | 0.25 | — |



| NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825 | | | | | | | |
|--|--------------------|-------------|---|--------------------------------------|-----------------|----------|-----------------------|
| 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} | 0.0012 | kW | Cooling | Q _{CE} | 144 | kWh/a |
| Standby mode | P _{SB} | 0.0012 | kW | Heating/Average | Q _{HE} | 913 | kWh/a |
| Thermostat-off mode | P _{TO} | 0.006/0.011 | kW | Heating/Warmer | Q _{HE} | 875 | kWh/a |
| Crankcase heater mode | P _{CK} | 0 | kW | Heating/Colder | Q _{HE} | 2508 | kWh/a |
| Capacity control (indicate one of three options) | | | | Other items | | | |
| fixed | N | | | Sound power level (indoor/outdoor) | L _{WA} | 60/64 | dB(A) |
| staged | N | | | Global warming potential | GWP | 675 | kgCO ₂ eq. |
| variable | Y | | | Rated air flow (indoor/outdoor) | — | 720/1950 | m ³ /h |
| Contact details for obtaining more information on the setting of the unit | | | Gree Electric Appliances Inc. of Zhuhai Jinji West Road, Qianshan, Zhuhai, Guangdong 519070, P.R.China Email: greerzsykt@cn.gree.com | | | | |
| <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>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> | | | | | | | |

--End of report--