



<b>TEST REPORT</b> <b>COMMISSION REGULATION (EU) No 206/2012</b> <b>Implementing Directive 2009/125/EC of the European Parliament and of the Council</b> <b>with regard to ecodesign requirements for comfort fans</b>	
Report Reference No. ....	EFSH18120127-IE-01-P01
Tested by (name + signature) .....	David Du (Project Engineer) 
Approved by (name + signature).....	Martin Qi (Project Supervisor) 
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<b>Applicant's name</b> .....	Ningbo Yunnuo Electric Co., Ltd.
Address .....	Fuhai Industrial Zone, Fuhai Town, Cixi, Ningbo, Zhejiang 315332, China
<b>Test specification:</b>	
Test standard .....	COMMISSION REGULATION (EU) No 206/2012
Non-standard test method.....	N/A
<b>Test Report Form No.</b> .....	EU_206_2012_B
TRF Originator .....	Eurofins
Master TRF .....	Dated 2013-01-16
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<b>Test item description</b> .....	Mist Fan
Trade Mark.....	--
Manufacturer .....	Same as the applicant
Model/Type reference .....	FS400-W, FS400-V, FS400-C
Ratings .....	220-240V~, 50/60Hz, 100W, Class II

<b>Test item particulars</b> .....	
Classification of installation and use.....	: Portable appliance for household indoor use
Supply Connection.....	: Type Y
Off mode.....	: No
Standby mode .....	: Yes
<b>Possible test case verdicts:</b>	
- 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)
<b>Testing</b> .....	
Date of receipt of test item .....	: 2018-12-03
Date (s) of performance of tests .....	: 2018-12-21
<b>Summary of testing:</b>	
From the result of our inspection and tests on the submitted sample(s), we conclude they <b>comply with</b> the followed stage <input checked="" type="checkbox"/> <b>Stage I: Jan. 01, 2013 to Dec. 31, 2013</b> <input checked="" type="checkbox"/> <b>Stage II: From Jan. 01, 2014</b> the requirements of <b>COMMISSION REGULATION (EU) No 206/2012.</b> <b>—“implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for air conditioners and comfort fans”</b>	
<b>General remarks:</b>	
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. These testes fulfil the  Throughout this report a comma is used as the decimal separator.  Tests and measurements have been performed in accordance with EN 50564: 2011 Determination of the test results includes consideration of measurement uncertainty from the test equipment and methods. The regulations on energy using products are undergoing a steady development. For testing and evaluating of the above mentioned products, the hereby applied standards and regulations are the most suitable and applicable test fundamentals for the time being. However it is possible, that these will be superseded by more product specific regulations as soon as they come into force, which might require other tests or evaluations.	
<b>General product information:</b>	
The appliances covered by this report are Mist fans for household and indoor use only.	

**Scope:**

Comfort Fans covered by **COMMISSION REGULATION (EU) No 206/2012** “implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for air conditioners and comfort fans”

**Definitions:**

**EUT** – equipment under test

**Off mode** – a condition in which the equipment is connected to the mains power source and is not providing any function; the following shall also be considered as off mode:

- conditions providing only an indication of off-mode condition; or conditions providing only functionalities intended to ensure electromagnetic compatibility pursuant to Directive 2004/108/EC of the European Parliament and of the Council;

**Standby mode(s)** – a condition where the equipment (air conditioner or comfort fan) is connected to the mains power source, depends on energy input from the mains power source to work as intended and provides only the following functions, which may persist for an indefinite time:

- reactivation function, or reactivation function and only an indication of enabled reactivation function, and/or information or status display;

Reactivation function – a function facilitating the activation of other modes, including active mode, by remote switch, including remote control, internal sensor, timer to a condition providing additional functions, including the main function;

Information or status display – a continuous function providing information or indicating the status of the equipment on a display, including clocks;

Active mode(s) – a condition in which the equipment is connected to the mains power source and at least one of the main function(s) providing the intended service of the equipment has been activated;

Sound power level – the A-weighted sound power level [dB(A)] indoors and/or outdoors measured at standard rating conditions for cooling (or heating, if the product has no cooling function);

Service value(SV) [(m<sup>3</sup>/min)/W] – for comfort fans the ratio of the maximum fan flow rate [m<sup>3</sup>/min] and the fan power input [W];

Standby mode power consumption(P<sub>SB</sub>) – means the power consumption of the unit [kW] while in standby mode;

Off-mode power consumption(P<sub>OFF</sub>) – means the power consumption of the unit [kW] while in off-mode;

Maximum fan flow rate(F) – the air flow rate of the comfort fan at its maximum setting [m<sup>3</sup>/min], measured at the fan outlet with the oscillating mechanism (if applicable) turned off;

Oscillating mechanism – the capability of the comfort fan to automatically vary the direction of the air flow while the fan is operating;

Fan sound power level – the A-weighted sound power level of the comfort fan while providing the maximum fan flow rate, measured at the outlet side;

Fan active mode hours (H<sub>CE</sub>) – the number of hours [h/a] the comfort fan is assumed to provide the maximum fan flow rate.

**EUT preparation:**

The appliance shall be prepared and set up in accordance with the manufacturer's instructions, except where these conflict with the requirements of this standard. If no instructions are given, then factory or "default" settings shall be used, or where there are no indications for such settings, the appliance is tested as supplied.

**Test Procedure:**

Monitor ac input power for a period of 5 minutes to assess the stability of the EUT. If the power level does not drift by more than 5% from the maximum value observed, the EUT can be considered stable and the measurements can be recorded at the end of the 5 minute period.

Measuring the power input in conditions **off mode and/or standby mode(s)**:

## PART 1: Power management requirements according to Annex I, Cl.2

Table 1:

<b>Stage I: Annex I, Ecodesign requirements, Cl.2(a)—Jan. 01, 2013 to Dec. 31, 2013</b>			
Standby and off mode electric power consumption test results			
Title	In off mode power consumption (W)	In standby mode power consumption (W)	
		Standby mode A <sup>1)</sup>	Standby mode B <sup>2)</sup>
Requirement	≤1,00	≤1,00	≤2,00
Result for FS400-C	Not applicable	0,181	Not applicable
Result for FS400-V	Not applicable	0,398	Not applicable
Result for FS400-W	Not applicable	0,486	Not applicable
Annex I clause 2(a)	Requirements: 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.  <input checked="" type="checkbox"/> Complied, off mode and/or standby mode available. <input type="checkbox"/> Off mode/standby mode inappropriate for the intended use, It is necessary that the user pull out the plug after use, acc. the user manual.		
Compliance	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
1): Only a reactivation function or providing only a reactivation function and a mere indication of enabled reactivation function;			
2): Only information or status display, or providing only a combination of reactivation function and information or status display.			

Table 2:

<b>Stage II: Annex I, Ecodesign requirements, Cl.2(d)—from Jan. 01, 2014</b>			
Standby and off mode electric power consumption test results			
Title	In off mode power consumption (W)	In standby mode power consumption (W)	
		Standby mode A <sup>1)</sup>	Standby mode B <sup>2)</sup>
Requirement	≤0,50	≤0,50	≤1,00
Result for FS400-C	Not applicable	0,181	Not applicable
Result for FS400-V	Not applicable	0,398	Not applicable
Result for FS400-W	Not applicable	0,486	Not applicable
Annex I clause 2(d)	<p>Requirements: 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.</p> <p><input checked="" type="checkbox"/> Complied, off mode and/or standby mode available. <input type="checkbox"/> Off mode/standby mode inappropriate for the intended use, It is necessary that the user pull out the plug after use, acc. the user manual.</p>		
Annex I clause 2(d)	<p>Requirements: 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:</p> <ul style="list-style-type: none"> <li>— standby mode, or</li> <li>— off mode, or</li> <li>— 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.</li> </ul> <p>The power management function shall be activated before delivery.</p> <p><input type="checkbox"/> Complied, power management or similar function available. <input checked="" type="checkbox"/> Power management or similar function inappropriate for the intended use, It is necessary that the user pull out the plug after use, acc. the user manual.</p>		
Compliance	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
<p>1): Only a reactivation function or providing only a reactivation function and a mere indication of enabled reactivation function; 2): Only information or status display, or providing only a combination of reactivation function and information or status display.</p>			

Table 3:

General conditions for measurements	
Test condition parameter	Value
Air speed test condition parameter "d" close to the EUT	≤0,5 m/s
Ambient temperature	23°C±5°C
Test voltage	230V~±1 %
Test frequency	50Hz±1 %
Total harmonic content of the test voltage at the EUT	≤2%(up to and including the 13th harmonic)
Crest factor of test voltage	1,34 – 1,49
Power measurement accuracy	≤2% (power≥0,5W)
	≤0,01W(power<0,5W)
Resolution of power meter	0,01W

## PART 2: PRODUCT INFORMATION REQUIREMENTS according to Annex I, Cl.3

Table 4:

Product information requirements
<p>(a) From 1 January 2013, as regards 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;  <input checked="" type="checkbox"/> Complied, technical documentation provided and checked, related information listed.  <input type="checkbox"/> <b>Not</b> Comply, technical documentation provided and checked, related information <b>NOT</b> listed.</p> <p>(ii) free access websites of manufacturers of comfort fans;  <input checked="" type="checkbox"/> Complied, website provided: <a href="mailto:YUNNUO@MINGPINGYUN.COM">YUNNUO@MINGPINGYUN.COM</a>  <input type="checkbox"/> <b>Not</b> Comply, website NOT provided.</p>
<p>(b) The manufacturer of 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 service values and provide contact information for obtaining such information.  <input checked="" type="checkbox"/> Complied, the manufacturer confirmed that will provide the necessary information upon request.  <input type="checkbox"/> <b>NOT</b> Comply, the manufacturer did not confirm that will provide the necessary information upon request.</p>

**Table 5, Information requirements for comfort fans:**

Information provided by manufacturer as detailed in the table below.

Information to identify the model(s) to which the information relates to			
Description	Symbol	Value	Unit
Maximum fan flow rate	F	52	m <sup>3</sup> /min
Fan power input	P	100	W
Service value	SV	0,52	(m <sup>3</sup> /min)/W
Standby power consumption FS400-C	P <sub>SB</sub>	0,181	W
Standby power consumption FS400-W	P <sub>SB</sub>	0,478	W
Standby power consumption FS400-V	P <sub>SB</sub>	0,486	W
Fan sound power level	L <sub>WA</sub>	67	dB(A)
Maximum air velocity	C	5,5	meters/sec
Measurement standard for service value	IEC 60879:1986 (corr. 1992) Performance and construction of electric circulating fans and regulators		
Contact details for obtaining more information	Ningbo Yunnuo Electric Co., Ltd. Fuhai Industrial Zone, Fuhai Town, Cixi, Ningbo, Zhejiang 315332, China		

Photo 1

Description: Overview for FS400-C



Photo 2

Description: Switch view for FS400-C





Photo 3

Description: Overview for FS400-W



Photo 4

Description: Switch view for FS400-W



Photo 5

Description: Overview for FS400-V



Photo 6

Description: Switch view for FS400-V

