TEST REPORT

EN 60704-1:2010+A11:2012 & EN 60704-2-7:1998
Household and similar electrical appliances
Test code for the determination of airborne acoustical noise
Part 2: Particular requirements for fans
EN 50564:2011
Electrical and electronic household and office equipment-Measurement of low power consumption
ISO 5801:2007(E)
Industrial fans — Performance testing using standardized airways

Report Reference No. ..... :	CGF-ESH-P20110165
Compiled by (name+ function+ signature) ..... :	Rex Zhou, project engineer
Approved by (name+ function+ signature) ..... :	Bluce Ma, project manager
Date of issue ..... :	2020-11-23
Number of pages..... :	9
Testing Laboratory name ..... :	LCIE CHINA COMPANY LIMITED
Address ..... :	Building 4, No. 518, Xin Zhuan Road, CaoHejing Songjiang High-Tech Park, Shanghai P.R.C (201612)
Applicant's name:	Cixi Changfeng Electric Appliance Factory
Address:	East Industrial Zone Guanhaiwei Town Cixi, Zhejiang 315314 P.R.China
Test specification:	
Standard..... :	ISO 5801:2007(E), EN 60704-1:2010+A11:2012 & EN 60704-2-7:1998 EN 50564:2011
Test procedure:	☒ Commission Regulation (EU) No. 206/2012 of 6 March 2012 and Amending Commission Regulation (EU) 2016/2282 Implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for air conditioners and comfort fans
Non-standard test method……..:	N/A
Test Report Form No. ..... :	TRF_ ISO 5801 & EN 60704& EN 50564A
Test Report Form(s) Originator..... :	LCIE
Master TRF ..... :	2016-07-08
Test item description..... :	
Test object..... :	Fan
Trade Mark..... :	-
Model/Type reference ..... :	ATF-011L, ATF-011HL, ATF-010L
Input range supply voltage / frequency ..... :	220-240V~, 50Hz, 60W
Manufacturer..... :	Cixi Changfeng Electric Appliance Factory
Address ..... :	East Industrial Zone Guanhaiwei Town Cixi, Zhejiang 315314 P.R.China
Test result:	**PASS**

Note: The test results presented in this report relate only to the sample submitted by client tested and also cannot be used for other purpose except the use presented.

Pictures of the samples

ATF-010L

ATF-010L

ATF-011HL

ATF-011HL

ATF-011L

ATF-011L

Test item particulars…….....:	Fan
Classification of installation and use.....:	Class II
Supply Connection.....:	A type Y Non-detachable supply cord with plug

Possible test case verdicts:	
- Test object does meet the requirement:	P (Pass)
- Test case does not apply to the test object:	NA (Not applicable)
- Test object does not meet the requirement:	F (Fail)
- Test object does not demand	N.D (Not demanded)

General remarks:

"(See remark #)" refers to a remark appended to the report.

Throughout this report a comma is used as the decimal separator.

The test results presented in this report relate only to the object tested.

Performance test results

Description	Model	Value	Unit
Test voltage	ATF-011L	230	V
Test frequency		50	Hz
Maximum fan flow rate		3,1	m³/min
Maximum air velocity		3,4	Meters/sec
Note: tested both 50Hz and 60Hz, 50Hz more unfavourable.			

Description	Model	Value	Unit
Test voltage	ATF-011HL	230	V
Test frequency		50	Hz
Maximum fan flow rate		3,1	m³/min
Maximum air velocity		3,4	Meters/sec
Note: tested both 50Hz and 60Hz, 50Hz more unfavourable.			

Description	Model	Value	Unit
Test voltage	ATF-010L	230	V
Test frequency		50	Hz
Maximum fan flow rate		3,3	m³/min
Maximum air velocity		3,6	Meters/sec
Note: tested both 50Hz and 60Hz, 50Hz more unfavourable.			

Requirements for maximum power consumption in off-mode and standby mode

Mode	**Ecodesign requirements, From Jan,01.2013**	**Result-Remark**	**Verdict**
Off mode	Power consumption of equipment in any off-mode condition shall not exceed 1,00W	-	NA
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 1,00W.	-	NA
	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 2,00W.	-	NA
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.	-	NA
Mode	**Ecodesign requirements, From Jan,01.2014**	**Result-Remark**	**Verdict**
Off mode	Power consumption of equipment in any off-mode condition shall not exceed 0,50W		NA
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 0,50W.	-	NA
	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 1,00W.	**0,2 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.	-	NA
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 switched 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.	-	NA

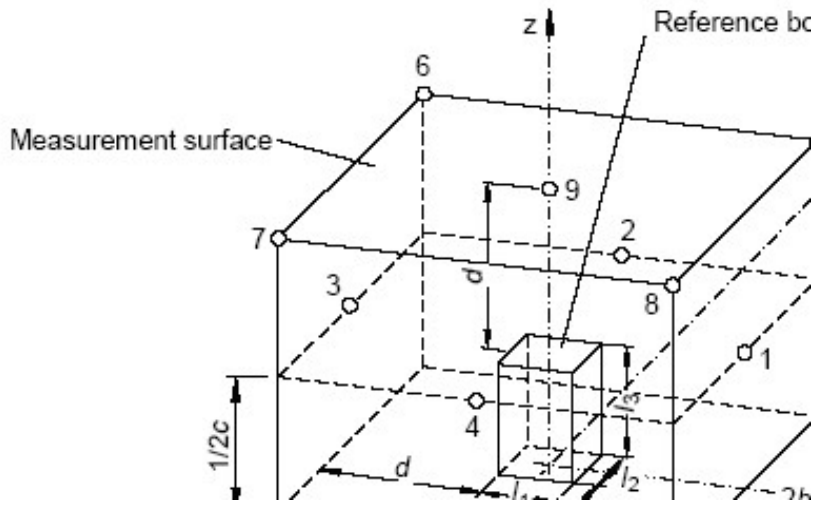
Fan sound power level test

Model: ATF-011L									
Test voltage/frequency:		230V~ / 50Hz							
Fan setting:		Maximum speed							
Oscillating mechanism (if applicable):		Turned off							
Measured surface:		See figure 1							
Address and environments:	Background noise	<20 dB(A)							
	Radius of free field	4.0 m							
	Ambient temperature	22 ℃							
	Relative humidity	74 %RH							
	Wind velocity	<0,5 m/s							
Microphone Position		1	2	3	4	5	6	7	8	9
Lpi: (circle 1)		48,3	47,3	49,9	50,5	43,6	44,5	43,8	43,9	46,6
Lpi: (circle 2)		48,5	47,0	49,8	49,9	43,9	44,4	43,4	43,7	46,7
Lpi: (circle 3)		48,4	47,5	50,1	50,3	43,7	44,7	43,9	44,1	46,5
LW/ Sound power level		60,3 dB(A)							

Model: ATF-011HL									
Test voltage/frequency:		230V~ / 50Hz							
Fan setting:		Maximum speed							
Oscillating mechanism (if applicable):		Turned off							
Measured surface:		See figure 1							
Address and environments:	Background noise	<20 dB(A)							
	Radius of free field	4.0 m							
	Ambient temperature	22 ℃							
	Relative humidity	74 %RH							
	Wind velocity	<0,5 m/s							
Microphone Position		1	2	3	4	5	6	7	8	9
Lpi: (circle 1)		48,2	47,2	48,2	49,5	43,5	44,3	43,7	43,5	46,1
Lpi: (circle 2)		48,7	47,5	49,0	49,6	43,4	44,5	43,5	43,9	46,3
Lpi: (circle 3)		48,3	47,3	48,5	49,8	43,9	44,6	43,6	44,0	46,5
LW/ Sound power level		60,2 dB(A)							

Model: ATF-010L									
Test voltage/frequency:		230V~ / 50Hz							
Fan setting:		Maximum speed							
Oscillating mechanism (if applicable):		Turned off							
Measured surface:		See figure 1							
Address and environments:	Background noise	<20 dB(A)							
	Radius of free field	4.0 m							
	Ambient temperature	22 ℃							
	Relative humidity	74 %RH							
	Wind velocity	<0,5 m/s							
Microphone Position		1	2	3	4	5	6	7	8	9
Lpi: (circle 1)		49,2	47,4	50,2	50,4	43,2	44,7	43,7	43,8	46,2
Lpi: (circle 2)		49,5	47,6	50,1	50,3	43,5	44,8	43,5	44,2	46,5
Lpi: (circle 3)		49,3	47,6	50,3	50,0	50,0	44,5	43,6	44,1	46,8
LW/ Sound power level		61,2 dB(A)							

Figure 1 for fan sound power level test:



-Figure 1

Appendix 1

Information Requirements

Model: ATF-011L			
Description	Symbol	Value	Unit
Maximum fan flow rate	F	3,1	m³/min
Fan power input	P	38,1	W
Service value	SV	0,08	(m³/min) / W
Standby power consumption	PSB	0,2	W
Seasonal electricity consumption	Q	12,4	KWh/a
Fan sound power level	LWA	60,3	dB(A)
Maximum air velocity	C	3,4	meters/sec

Model: ATF-011HL			
Description	Symbol	Value	Unit
Maximum fan flow rate	F	3,1	m³/min
Fan power input	P	38,4	W
Service value	SV	0,08	(m³/min) / W
Standby power consumption	PSB	0,2	W
Seasonal electricity consumption	Q	12,5	KWh/a
Fan sound power level	LWA	60,2	dB(A)
Maximum air velocity	C	3,4	meters/sec

Model: ATF-010L			
Description	Symbol	Value	Unit
Maximum fan flow rate	F	3,3	m³/min
Fan power input	P	68,9	W
Service value	SV	0,05	(m³/min) / W
Standby power consumption	PSB	0,2	W
Seasonal electricity consumption	Q	22,3	KWh/a
Fan sound power level	LWA	61,2	dB(A)
Maximum air velocity	C	3,6	meters/sec