



ELECTRONICS TESTING CENTER, TAIWAN  
 ADDRESS: NO.5 HSIN HO 2 RD., AN PIN INDUSTRIAL PARK,  
 TAINAN , TAIWAN  
 TEL:06-2925787 FAX:06-2650302  
<http://www.etc.org.tw>



Testing Laboratory  
 1161

Ind. Ser. No. : 14-06-NEF-008

Issue Date : 2014 / 7 / 3

## TEST REPORT

Ind. Ser. No. : 14-06-NEF-008  
 Applicant : Qualtek Electronics Corporation  
 Address : 7610 Jenther Drive Mentor, Ohio 44060 U.S.A.  
 Products : Axial fans  
 Model : See the following sheets  
 Quantity : 11 sets  
 Date of Receipt :  
 Date of Testing :  
 Test specification : IEC60529 Edition 2.1 2001-02  
 Inspection Site : Electronics Testing Center, Taiwan – Southern Taiwan Industry  
 Service Department  
 (TAF Certification No:1161)  
 Ambient Environment : IP5X Temp. 26 ± 1 °C , R.H. 52 ± 2 %  
 IPX4 Temp. 26 ± 1 °C , R.H. 58 ± 2 %  
 Testing Item : IP54  
 Test condition : See the following sheets  
 Test result : PASS ( Reference : ETC's Report NO.14-06-NEF-003 )



The test results relate only to the items tested.

The report shall not be reproduced except in full without the written approval of Electronics Testing Center, Taiwan.

This inspection has carried out to the best of our knowledge and ability, and our responsibility is limited to the exercise of reasonable care, this certification is not intended to believe the sellers from their contractual obligations.

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Tested by : Yip Lieh Fu.  
 2014.7.3.  
 Southern Taiwan Industry  
 Service Department

Approved by : Shen Wang 2014.7.03  
 Southern Taiwan Industry  
 Service Department



# TEST REPORT

Ind. Ser. No. : 14-06-NEF-008

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	<b>Model</b>
<b>Plastic Impeller</b>	<b>: FDA2-17251xxxx3F (round)</b>
	<b>FDA2-17238xxxx3F</b>
	<b>FDA2-17251xxxx3F</b>
	<b>FDA2-17255xxxx3F</b>
<b>Steel Impeller</b>	<b>: FDA2-17251xxxx4F (round)</b>
	<b>FDA2-17238xxxx4F</b>
	<b>FDA2-17251xxxx4F</b>
	<b>FDA2-17255xxxx4F</b>
	<b>FDA2-25489xxxx4F</b>
	<b>FDA2-22580xxxx4F</b>
	<b>FDA2-28080xxxx4F</b>



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## Testing Item: IP54

### Testing Conditions :

#### (1) IP5X :

- (1) Maximum depression of 2kPa (20mbar) °
- (2) The test shall be continued for a period of 8 hours °

#### (2) IPX4 :

- (1) The oscillating tube has spray hole over the whole 180 ° of the semicircle .
- (2) The tube is caused to oscillate through an angle of almost 360° , 180° on either side of the vertical , the time for one complete oscillation ( 2×360° ) be
- (3) The duration of the test is 10 min.
- (4) Mean flow rate per hole  $qv1=0.07 \text{ l/min}$

### Testing Result :

Request/Experiment	Results	Remark
Accordance with IEC60529 13.1,13.4and 13.5 test. The protection is satisfactory if, on inspection, talcum powder has not accumulated in a quantity or location such that, as with any other kind of dust, it could interfere with the correct operation of the equipment or impair safety.	There are some traces of dust inside, but not impaired safety.	IP5X
After testing in accordance with appropriate requirements of IEC60529 14.1,14.2.4 and 14.3	There are some traces of water inside, but not impaired safety.	IPX4

NOTE : This report does not imply the assessment of CORD of the EUT.



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## Utilized testing equipments

used	Kind of Instrument	Manufacturer	Model Serial NO.
✓	TEMP/HUM RECORDER Cal. Date:2014/05/06 Recommended Recal Date:2015 / 05 / 05	KIMO	KH210-AO/13491047-001
	Electrical Safety Compliance Analyzer	EXTECH	7452/E992214
	AC 20Kv 200mA	Asis	SYT-20kV200mA/S97-004
	Push And Pull Dynamometer with Linear Scale (0...50N)	PTL	P10.35/5001028
	Push-Pull gauge	ALGOL	NK-300/30954
	Protractor	—	A7028-J ( 0° ~ 90° )
✓	Stop Watch Clock Alarm Cal. Date:2013/09/03 Recommended Recal Date:2014/09/02	CATIGA	CT-500
✓	Test rod,1mm	E.D.&D.	TRP-02
	Test rod,2.5mm	ASIA QTECH	TRP-1/0803
	Test sphere 50mm	ASIA QTECH	TSP-1/0801
	Test finger	PTL	P10.14/5001023/13502009-001
	Test sphere 12.5mm	ASIA QTECH	TSP-2/0802
✓	DUST TEST CHAMBER Cal. Date:2014/04/18 Recommended Recal Date:2015/04/17	PTL	P14.41/5050255
	Drip Box ( IPX1~IPX2 )	PTL	P01.18/5080026
✓	Oscillating Tube ( IPX3~IPX4 )	PTL	P02.27/5080027
	Hose Nozzle ( IPX5 )	PTL	P03.26/5080028
	Hose Nozzle ( IPX6 )	PTL	P03.28/5080029
	Water Butt ( IPX7~8 )	—	—

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### Axial fans : IP5X Test Photo





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### Axial fans : IPX4 Test Photo



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**Appearance : FDA2-17238xxxx4F**



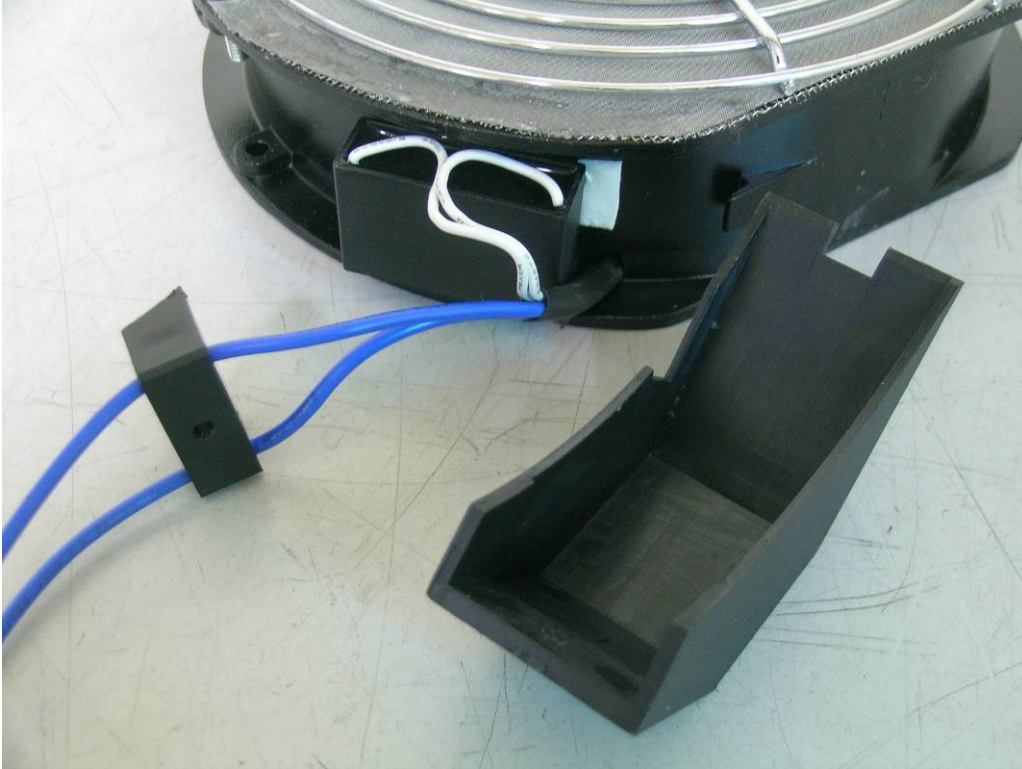
**Appearance : FDA2-17238xxxx4F**



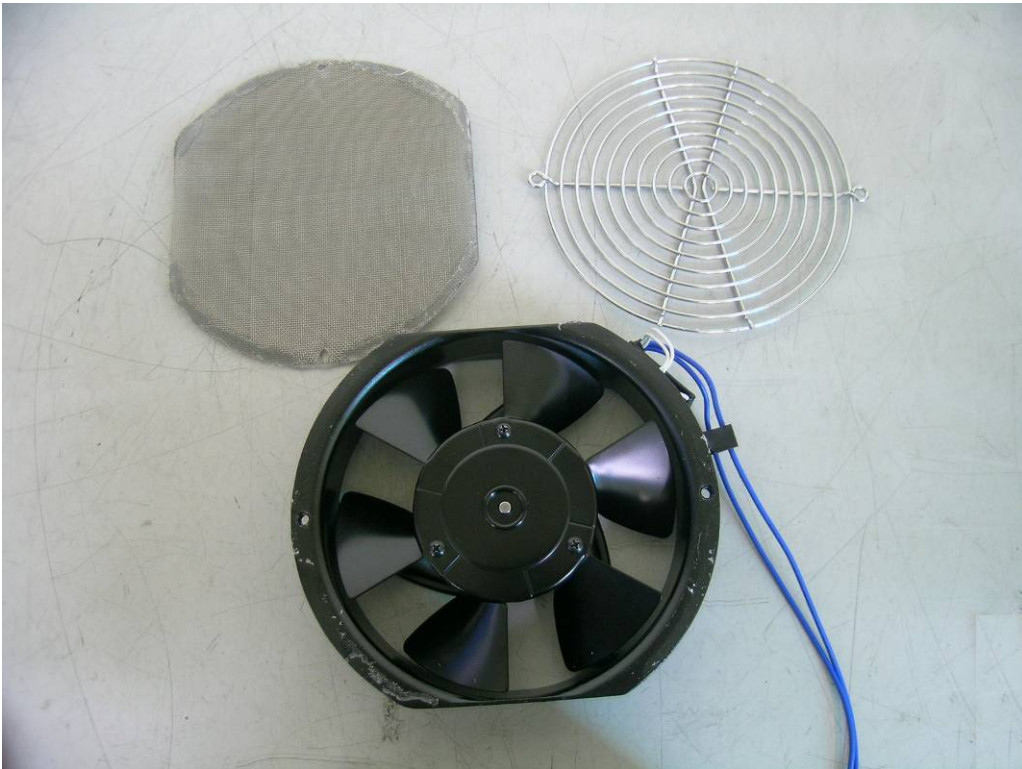


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**Appearance : FDA2-17238xxxx4F**



**Appearance : FDA2-17238xxxx4F**





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**Inside : FDA2-17238xxxx4F**



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**Appearance : FDA2-17238xxxx3F**



**Inside : FDA2-17238xxxx3F**



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**Appearance : FDA2-17251xxxx4F**



**Appearance : FDA2-17251xxxx4F**



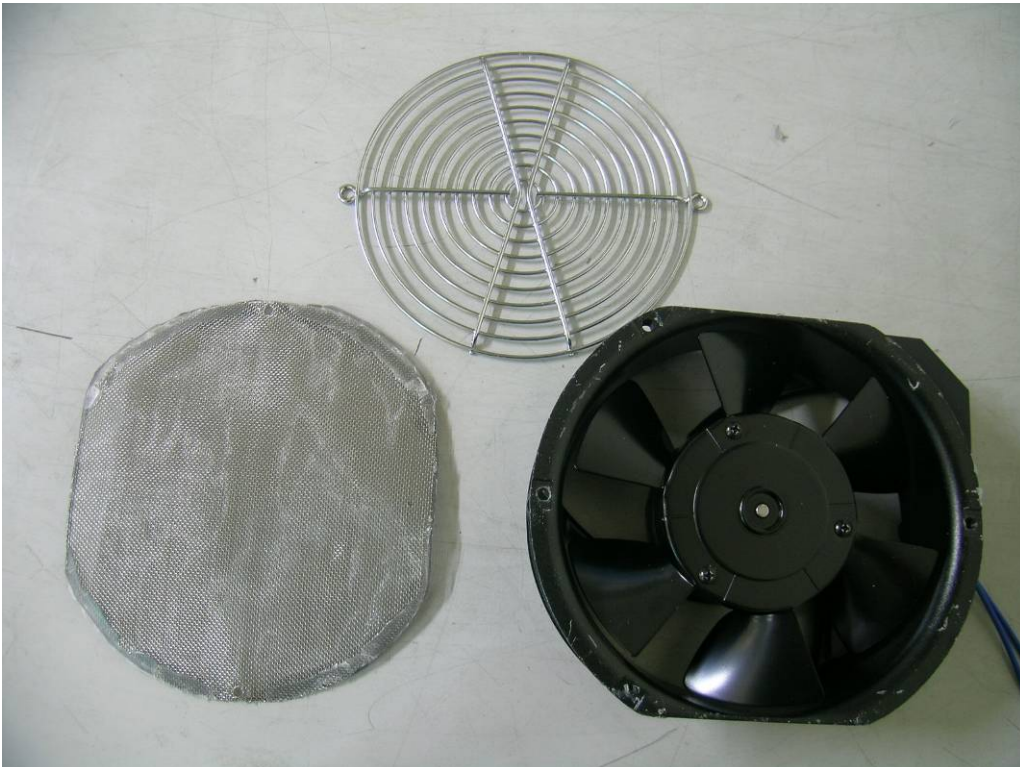


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**Appearance : FDA2-17251xxxx4F**



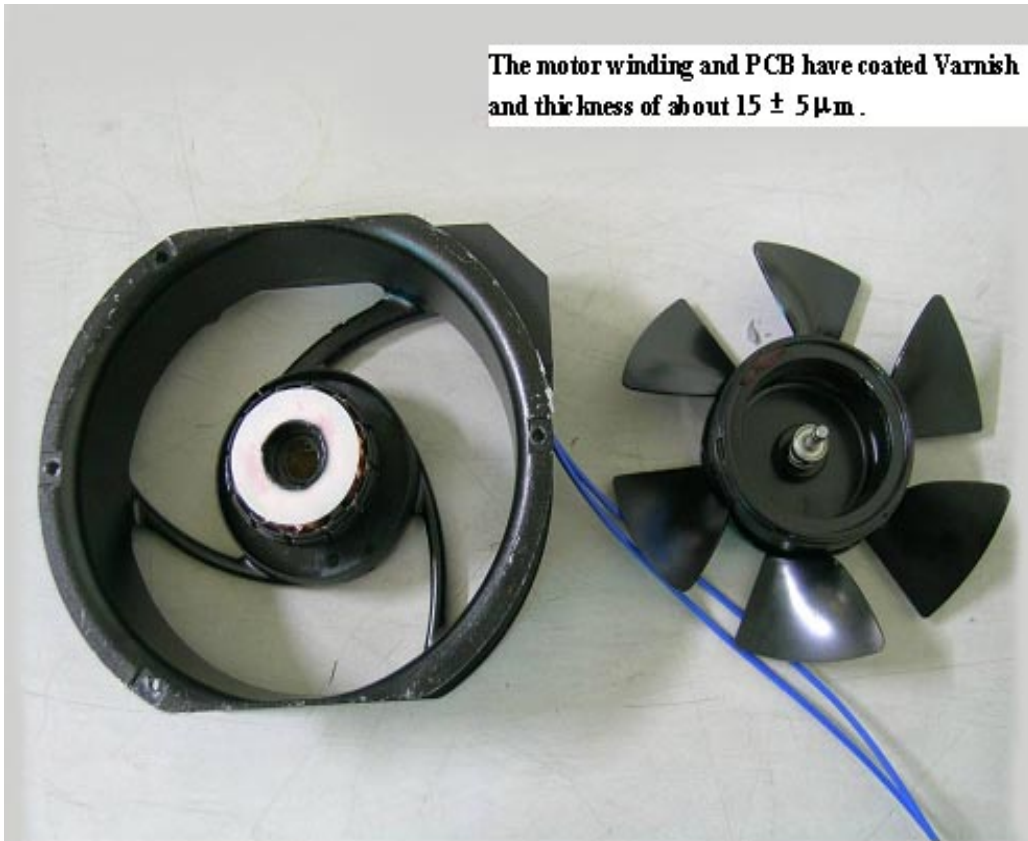
**Appearance : FDA2-17251xxxx4F**





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**Inside : FDA2-17251xxxx4F**

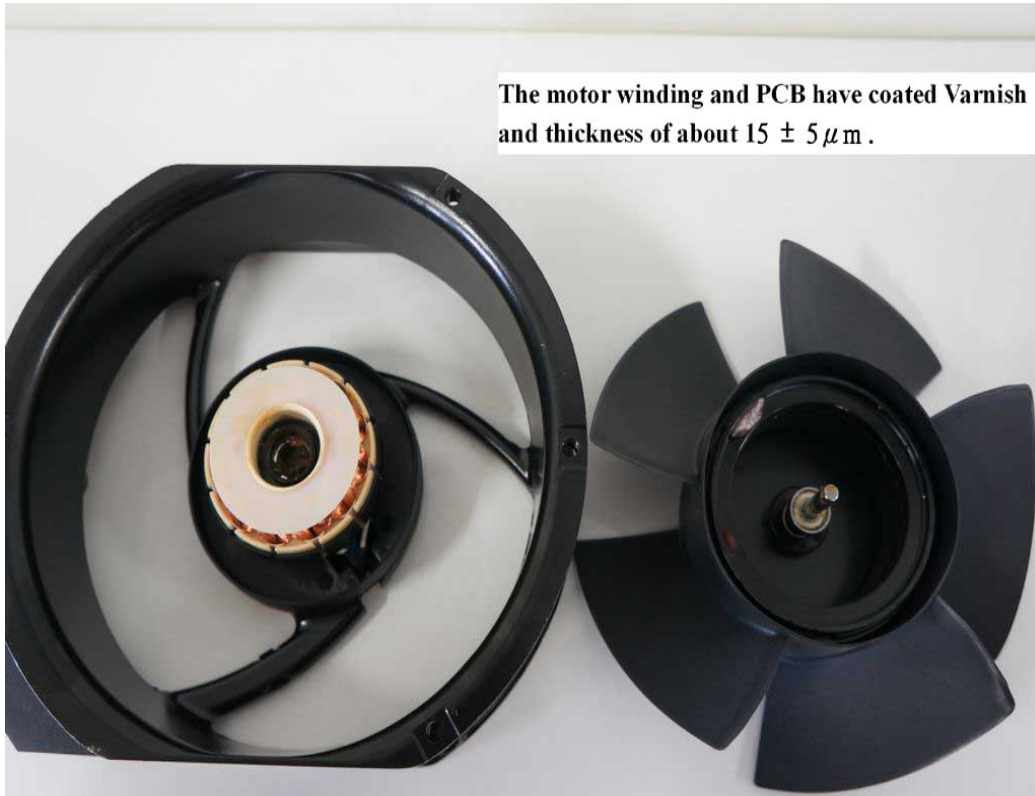


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**Appearance : FDA2-17251xxxx3F**



**Inside : FDA2-17251xxxx3F**

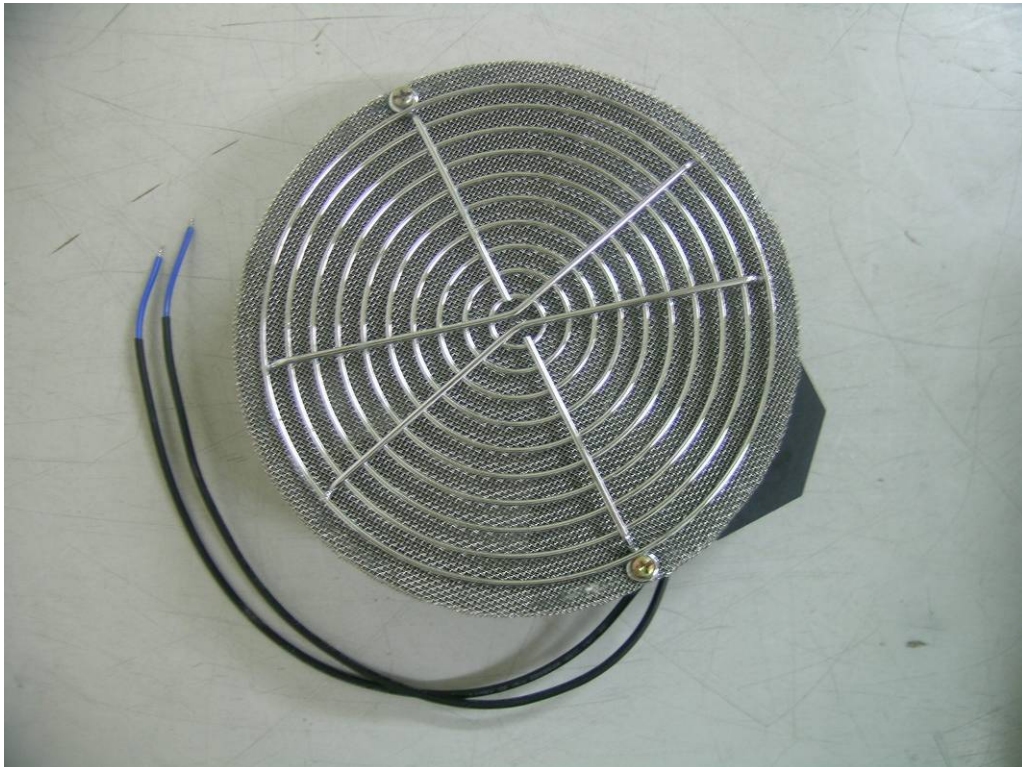


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**Appearance : FDA2-17251xxxx4F (round)**



**Appearance : FDA2-17251xxxx4F (round)**



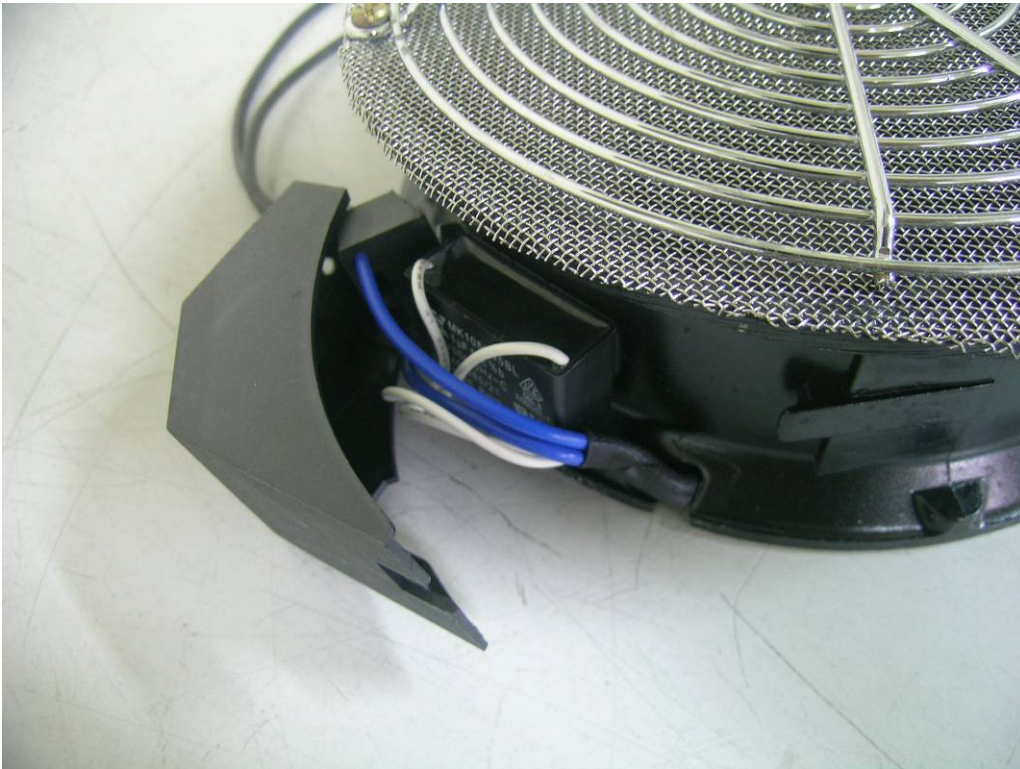


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**Appearance : FDA2-17251xxxx4F (round)**



**Appearance : FDA2-17251xxxx4F (round)**





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**Inside : FDA2-17251xxxx4F (round)**

The motor winding and PCB have coated Varnish and thickness of about  $15 \pm 5 \mu\text{m}$ .



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**Appearance : FDA2-17251xxxx3F (round)**



**Inside : FDA2-17251xxxx3F (round)**

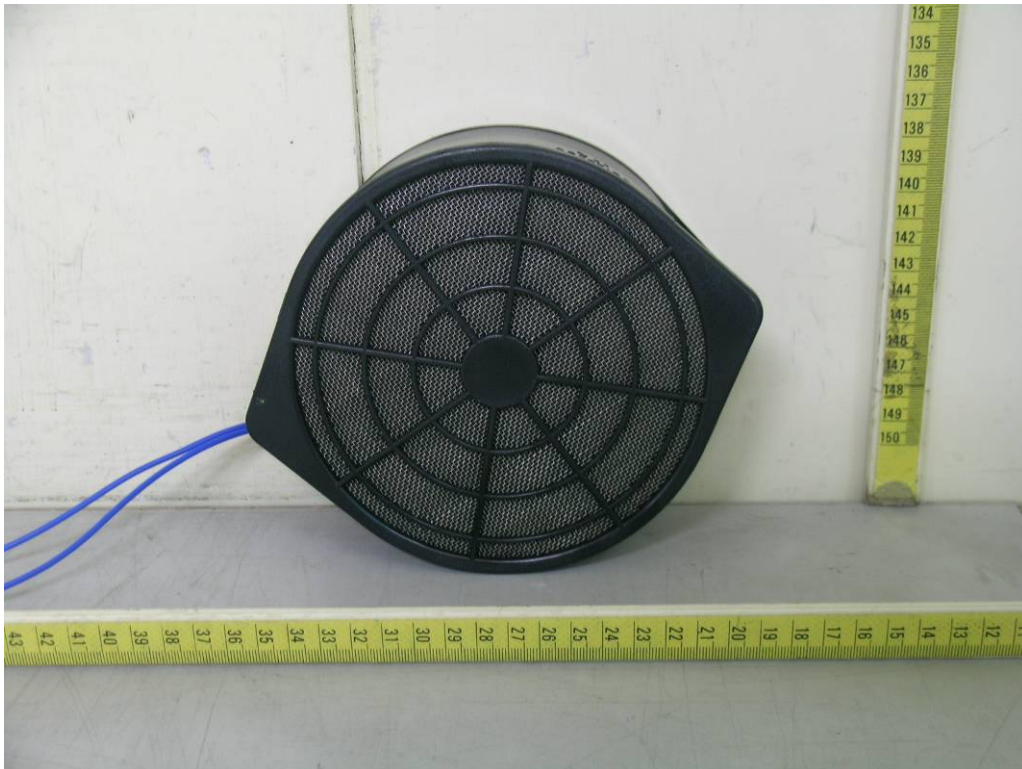


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**Appearance : FDA2-17255xxxx4F**



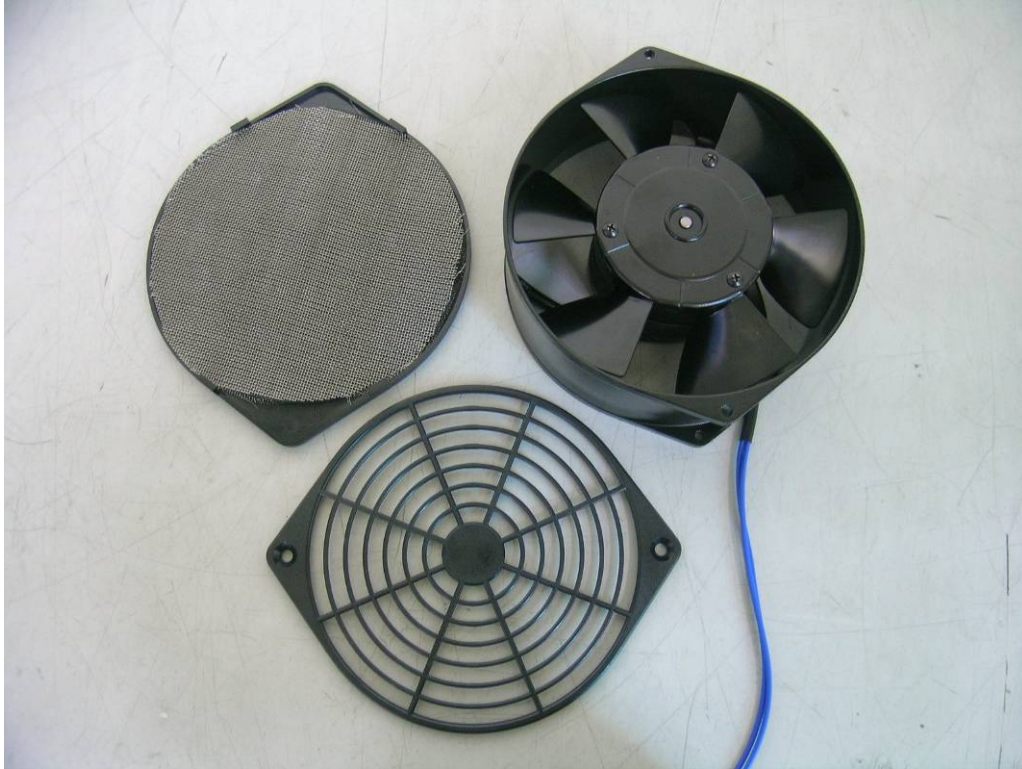
**Appearance : FDA2-17255xxxx4F**





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**Appearance : FDA2-17255xxxx4F**



**Inside : FDA2-17255xxxx4F**





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**Appearance : FDA2-17255xxxx3F**



**Inside : FDA2-17255xxxx3F**

The motor winding and PCB have coated Varnish and thickness of about  $15 \pm 5 \mu\text{m}$ .



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**Appearance : FDA2-25489xxxx4F**



**Appearance : FDA2-25489xxxx4F**





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**Appearance : FDA2-25489xxxx4F**



**Inside : FDA2-25489xxxx4F**

The motor winding and PCB have coated Varnish and thickness of about  $15 \pm 5 \mu\text{m}$ .





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**Appearance : FDA2-28080xxxx4F**



**Appearance : FDA2-28080xxxx4F**



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**Appearance : FDA2-28080xxxx4F**



**Inside : FDA2-28080xxxx4F**





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**Appearance : FDA2-22580xxxx4F**



**Appearance : FDA2-22580xxxx4F**





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### Appearance : FDA2-22580xxxx4F



### Inside : FDA2-22580xxxx4F

