



**客戶承認書**  
**SPECIFICATION FOR APPROVAL**

CUSTOMER: \_\_\_\_\_ DPC \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_ DC FAN \_\_\_\_\_

CUSTOMER P/N: \_\_\_\_\_ REV: \_\_\_\_\_

DELTA MODEL: \_\_\_\_\_ EHB1548SHG-C126 \_\_\_\_\_ REV: \_\_\_\_\_ 00 \_\_\_\_\_

SAMPLE ISSUE DATE: \_\_\_\_\_ 06/07/2011 \_\_\_\_\_

QUANTITY: \_\_\_\_\_

**PLEASE SIGN BACK ONE COPY OF THIS SPECIFICATION  
AFTER COMPLETION OF APPROVAL**

**APPROVED BY:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

DELTA ELECTRONICS COMPONENTS (WUJIANG) LTD.

FAN/MOTOR PLANT

No.1688 Jiangxing East Road, WuJiang Economy Development Zone  
Wujiang City JiangSu Province, P.R.C.

TEL:86-512-63406008

FAX:86-512-63015608

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SPECIFICATION FOR APPROVAL  
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|                    |                 |                                   |
|--------------------|-----------------|-----------------------------------|
| Customer:          | DPC             |                                   |
| Description:       | DC FAN          |                                   |
| Customer P/N:      |                 | REV:                              |
| Delta Model NO.:   | EHB1548SHG-C126 | Delta Safety Model NO: EHB1548SHG |
| Sample Rev:        | 00              | Issue NO:                         |
| Sample Issue Date: | JUN-07-2011     | Quantity:                         |

1. SCOPE:

THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THE DC BRUSHLESS AXIAL FLOW FAN.

2. CHARACTERS:

| ITEM                                       | DESCRIPTION  |
|--|--|
| RATED VOLTAGE                              | 48 VDC   |
| OPERATION VOLTAGE                          | 32.0 - 80.0 VDC  |
| INPUT CURRENT                              | 0.88 (MAX. 1.06) A<br>(SAFETY CURRENT 1.06 A)                                    |
| INPUT POWER                                | 42.24 (MAX. 50.88) W   |
| SPEED                                      | 4900±10% R.P.M.  |
| MAX. AIR FLOW<br>(AT ZERO STATIC PRESSURE) | 9.828 (MIN. 8.850) M <sup>3</sup> /MIN.<br>347.08 (MIN. 312.37) CFM              |
| MAX. AIR PRESSURE<br>(AT ZERO AIRFLOW)     | 37.89 (MIN. 30.69) mmH <sub>2</sub> O<br>1.492 (MIN. 1.209) inchH <sub>2</sub> O |
| ACOUSTICAL NOISE (AVG.)                    | 66.5 (MAX. 70.5) dB-A  |
| INSULATION TYPE                            | UL: CLASS A  |

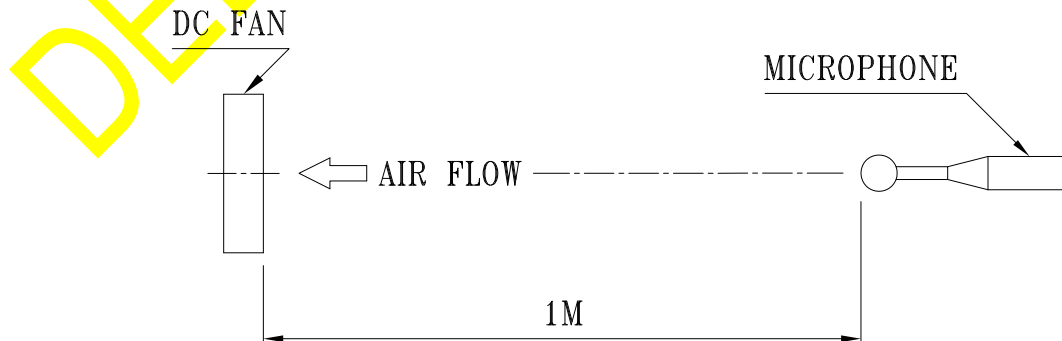
(continued)

PART NO:

DELTA MODEL: EHB1548SHG-C126

|                        |   |
|------------------------|---|
| INSULATION STRENGTH    | 10 MEG OHM MIN. AT 500 VDC<br>(BETWEEN FRAME AND (+) TERMINAL)                                    |
| DIELECTRIC STRENGTH    | 5 mA MAX. AT1000 VAC 60 Hz<br>ONE MINUTE, (BETWEEN FRAME AND<br>(+) TERMINAL)                     |
| EXTERNAL COVER         | OPEN TYPE   |
| LIFE EXPECTANCE        | 100,000 HOURS CONTINOUS OPERATION<br>AT 40 °C WITH 15 ~ 65 %RH.                                   |
| ROTATION               | COUNTER CLOCKWISE VIEW<br>FROM NAME PLATE SIDE  |
| OVER CURRENT SHUT DOWN | THE CURRENT WILL SHUT DOWN WHEN<br>LOCKING ROTOR.   |
| STARTING PROTECTION    | START AT LOW SPEED , AFTER 15 SEC<br>RUNNING AT FULL SPEED  |
| LEAD WIRE              | UL 1007 -F- AWG #24<br>BLACK WIRE NEGATIVE(-)<br>RED WIRE POSITIVE(+)<br>BLUE WIRE FREQUENCY(F00) |

- NOTES: 1. ALL READINGS ARE MEASURED AFTER STABLY WARMING UP THROUGH 10 MINUTES.
2. THE VALUES WRITTEN IN PARENS , ( ), ARE LIMITED SPEC.
3. ACOUSTICAL NOISE MEASURING CONDITION:



NOISE IS MEASURED AT RATED VOLTAGE IN FREE AIR IN ANECHOIC CHAMBER WITH B & K SOUND LEVEL METER WITH MICROPHONE AT A DISTANCE OF ONE METER FROM THE FAN INTAKE.

PART NO:

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3. MECHANICAL:

- 3-1. DIMENSIONS ----- SEE DIMENSIONS DRAWING
- 3-2. FRAME ----- DIE-CAST ALUMINUM
- 3-3. IMPELLER ----- PLASTIC UL: 94V-0
- 3-4. BEARING SYSTEM ----- TWO BALL BEARINGS
- 3-5. WEIGHT ----- 800 GRAMS
- 3-6. INGRESS PROTECTION ----- IP55

4. ENVIRONMENTAL:

- 4-1. OPERATING TEMPERATURE ----- -40 TO +80 DEGREE C
- 4-2. STORAGE TEMPERATURE ----- -40 TO +85 DEGREE C
- 4-3. OPERATING HUMIDITY ----- 5 TO 90 % RH
- 4-4. STORAGE HUMIDITY ----- 5 TO 95 % RH

5. PROTECTION:

5-1. LOCKED ROTOR PROTECTION

IMPEDANCE OF MOTOR WINDING PROTECTS MOTOR FROM FIRE IN 96 HOURS OF LOCKED ROTOR CONDITION AT THE RATED VOLTAGE.

5-2. POLARITY PROTECTION

BE CAPABLE OF WITHSTANDING IF REVERSE CONNECTION FOR POSITIVE AND NEGATIVE LEADS.

6. RE OZONE DEPLETING SUBSTANCES:

- 6-1. NO CONTAINING PBBs, PBBOs, CFCs, PBBEs, PBDPEs AND HCFCs.

7. PRODUCTION LOCATION

- 7-1. PRODUCTS WILL BE PRODUCED IN CHINA OR THAILAND OR TAIWAN

8. RESTRICTION OF THE USE CERTAIN OF HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRIC EQUIPMENT.

- 8-1 NO CONTAINING PB , CD , HG , CR 6+ , PBB , PBDE.

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PART NO:  
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DELTA MODEL:            EHB1548SHG-C126  
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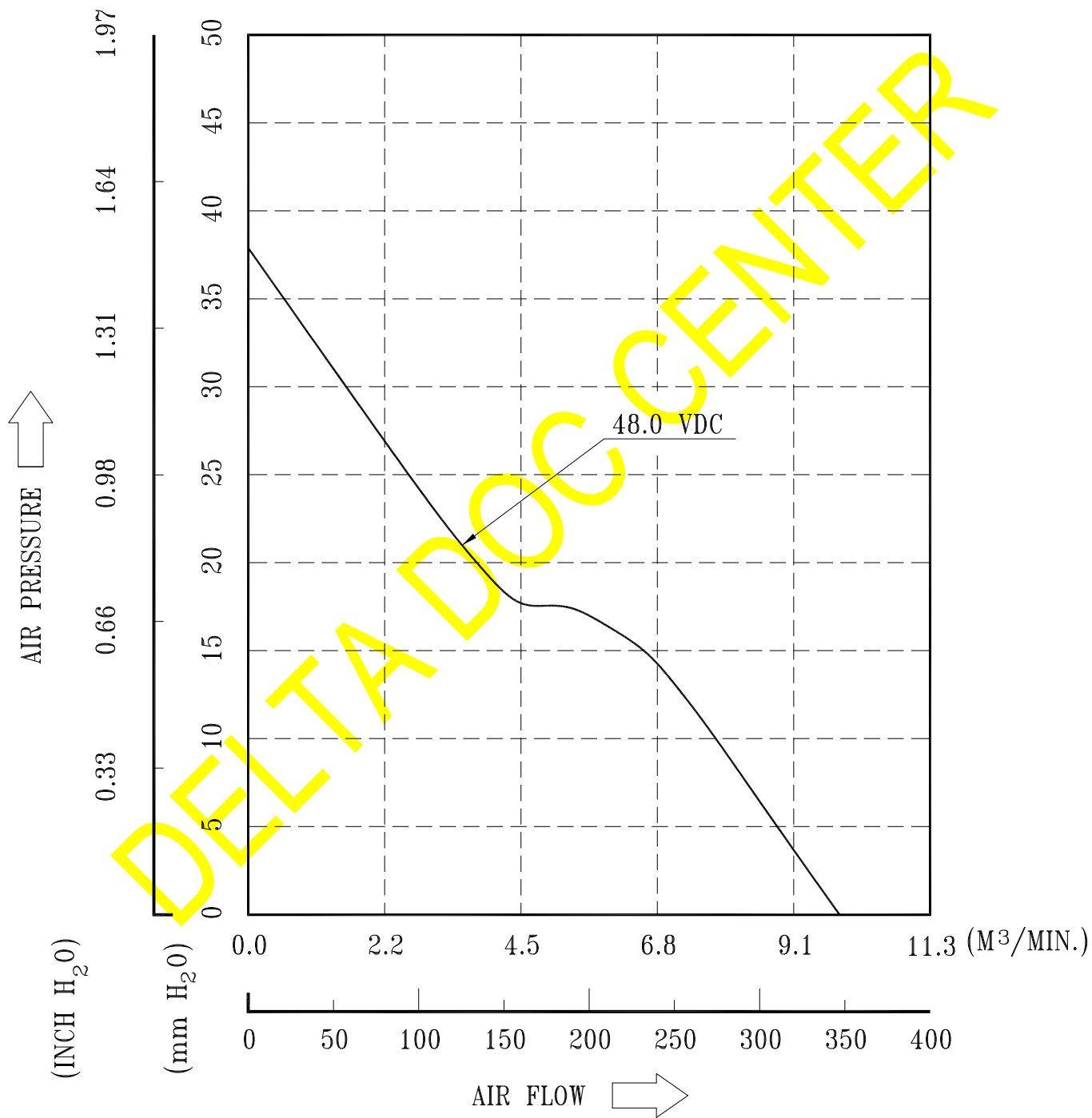
9. BASIC RELIABILITY REQUIREMENT :

- 9-1. THERMAL SHOCK      LOW TEMPERATURE: -40°C  
                                HIGH TEMPERATURE: +80°C  
                                SOAK TIME: 30 MINUTES  
                                TRANSITION TIME < 5 MINUTES  
                                DURATION TIME: 48 HOURS
- 9-2. HUMIDITY EXPOSURE    TEMPERATURE: 60°C  
                                HUMIDITY: 90-95% RH  
                                POWER: 3PCS IN OPERATING(RATED VOLTAGE)  
                                POWER: 3PCS IN NON-OPERATING  
                                DURATION: 10 DAYS
- 9-3. VIBRATION            SINEWAVE  
                                ORIENTATION: X, Y, Z  
                                POWER: NON-OPERATING  
                                FREQUENCY RANGE: 5 ~ 500Hz  
                                DISPLACEMENT AMPLITUDE: 0.75mm(OR 10G)  
                                NUMBER OF SWEEP CYCLES PER AXIS: 10  
                                TEST TIME: 2 HOURS ON EACH ORIENTATION
- 9-4. MECHANICAL SHOCK    POWER: NON-OPERATING  
                                ORIENTATION: 6 AXIS  
                                ACCELERATION: 100 G ; 6ms  
                                PULSE: HALF-SINE WAVE  
                                NUMBER OF SHOCKS: 3 SHOCKS  
  FOR EACH DIRECTION
- 9-5. LIFE                    TEMPERATURE: MAX , OPERATING TEMPERATURE  
                                POWER: RATED VOLTAGE  
                                DURATION: TEST UNTIL REQUIRE TEST TIME  
  THAT CALCULATED BY FACTORY QE

PART NO:

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10. P & Q CURVE:



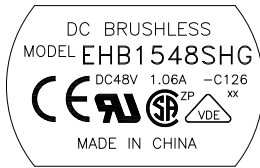
\* TEST CONDITION: INPUT VOLTAGE ----- OPERATION VOLTAGE  
TEMPERATURE ----- ROOM TEMPERATURE  
HUMIDITY ----- 65%RH

PART NO:

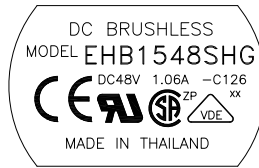
DELTA MODEL: EHB1548SHG-C126

## 11. DIMENSION DRAWING:

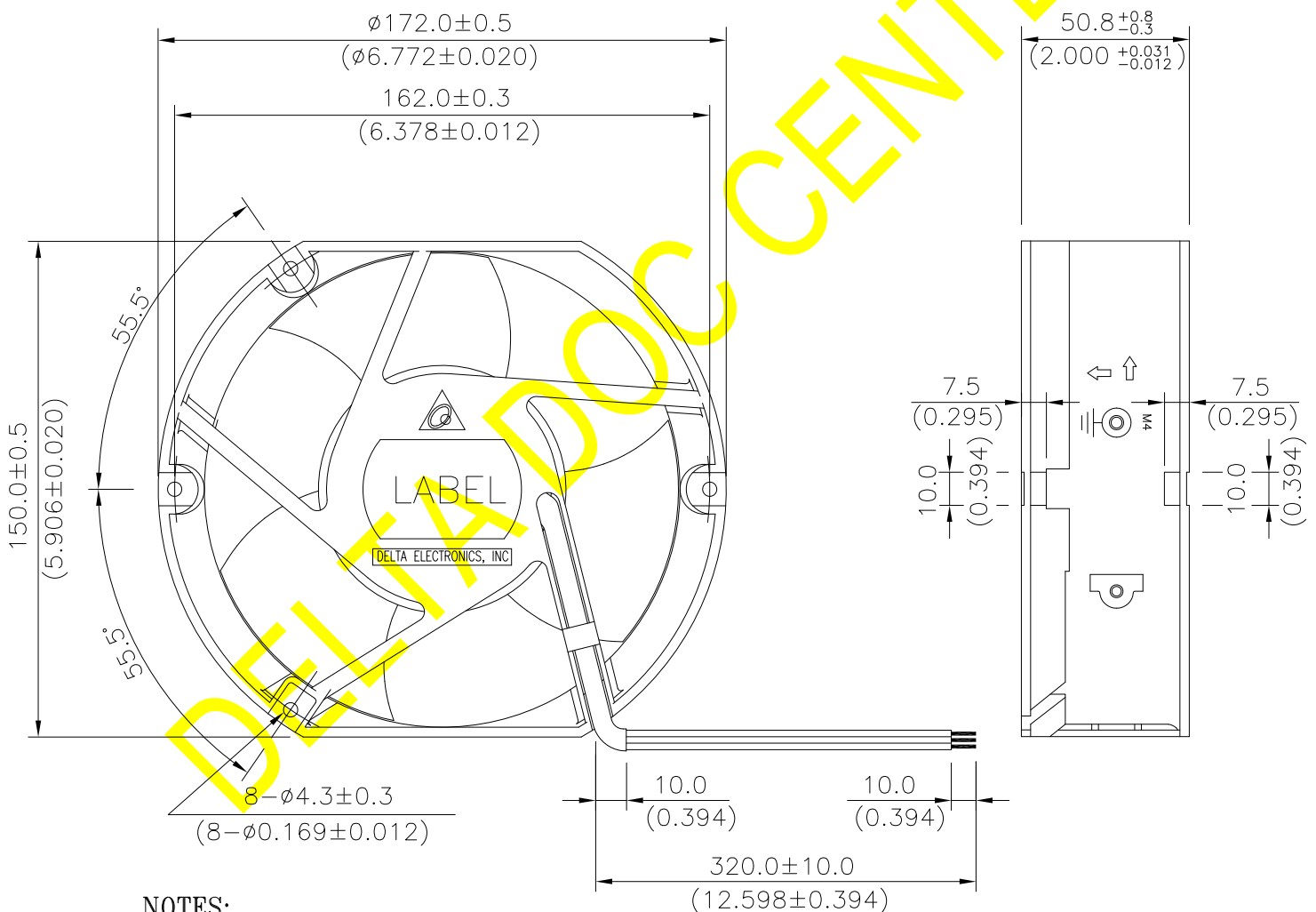
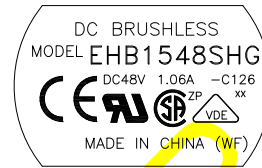
LABEL:



OR



OR



### NOTES:

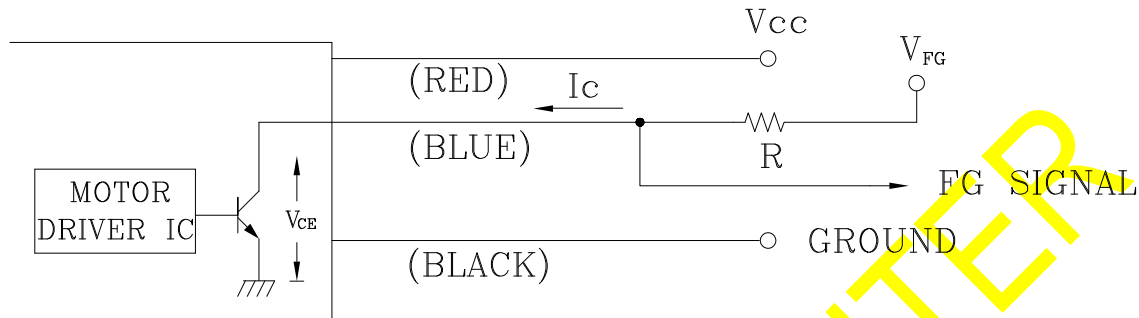
1. WIRE UL 1007 AWG #24  
BLACK WIRE -----(-)  
RED WIRE -----(+)  
BLUE WIRE -----(-F00)
2. PWB MUST BE COATING ON BOTH SIDES AND THE PINS  
OF THE WINDING FOR IP55.
3. THIS PRODUCT IS RoHS COMPLIANT

PART NO:

DELTA MODEL: EHB1548SHG-C126

## 12. FREQUENCY GENERATOR (FG) SIGNAL:

### A. OUTPUT CIRCUIT – OPEN COLLECTOR MODE:



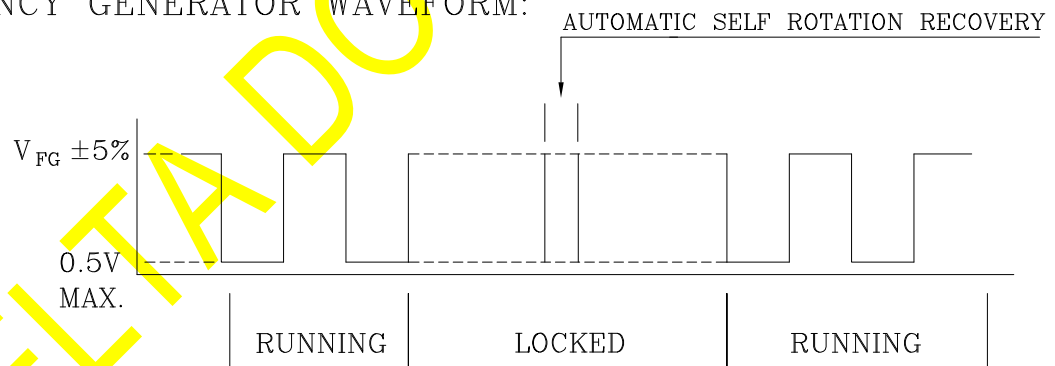
CAUTION: THE FG SIGNAL LEAD WIRE MUST BE KEPT AWAY FROM  
" + " LEAD WIRE & " - " LEAD WIRE.

### B. SPECIFICATION:

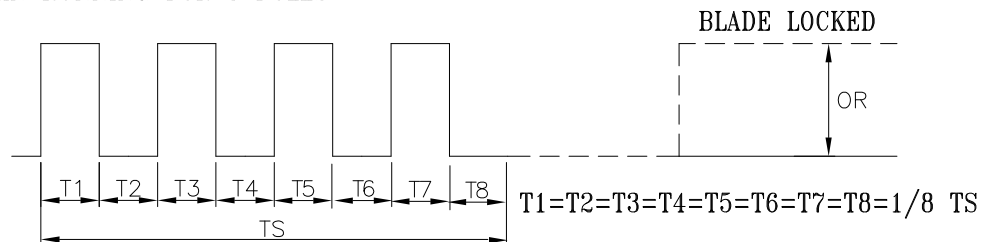
$$V_{FG} = 80V \text{ MAX.} \quad I_c = 10mA \text{ MAX.}$$

$$V_{CE} = 0.5V \text{ MAX.} \quad R \geq V_{FG}/I_c$$

### C. FREQUENCY GENERATOR WAVEFORM:



FAN RUNNING FOR 8 POLES



$N = \text{R.P.M}$

$TS = 60/N(\text{SEC})$

\*VOLTAGE LEVEL AFTER BLADE LOCKED

\*8 POLES

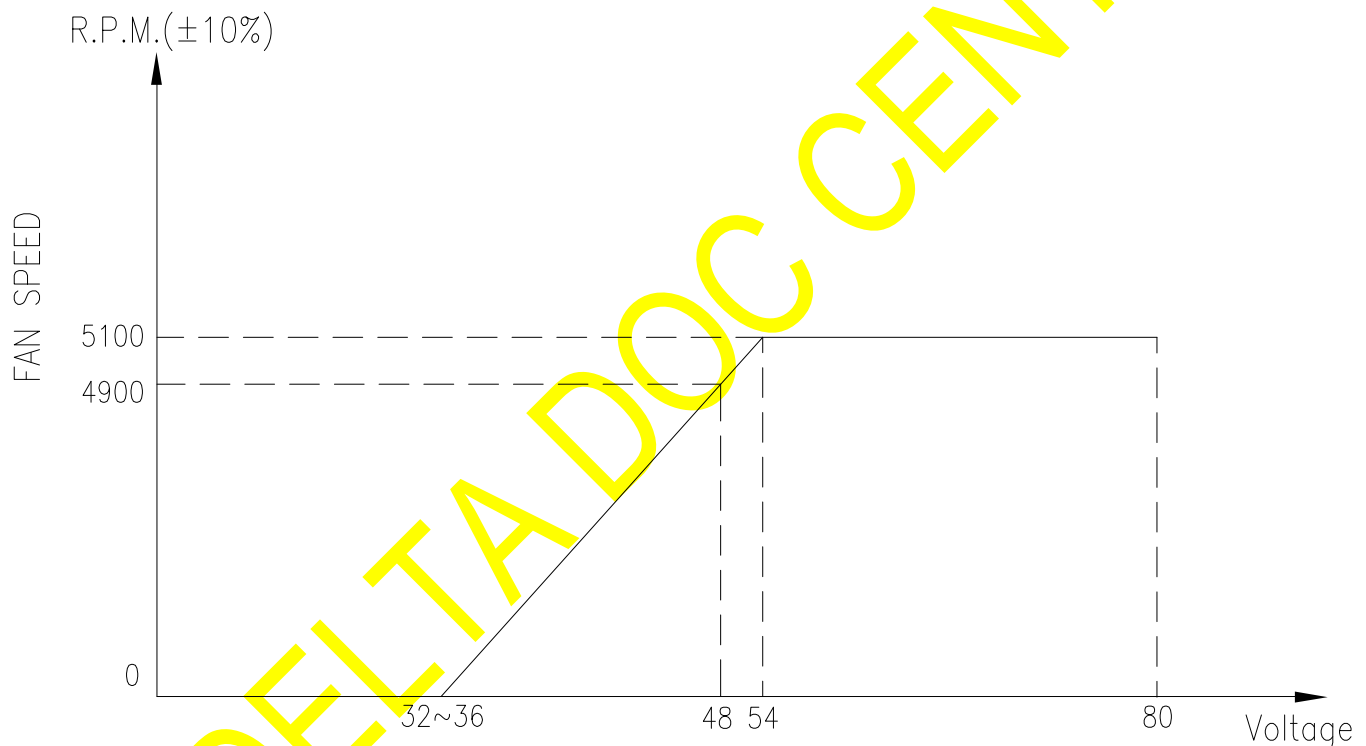


PART NO:

DELTA MODEL: EHB1548SHG-C126

13. 54~80V FAN SPEED KEEP IN 5100R.P.M

Hi-voltage speed limit:





## ***Application Notice***

- 1. Delta will not guarantee the performance of the products if the application condition falls outside the parameters set forth in the specification.**
- 2. A written request should be submitted to Delta prior to approval if deviation from this specification is required.**
- 3. Please exercise caution when handling fans. Damage may be caused when pressure is applied to the impeller, if the fans are handled by the lead wires, or if the fan was hard-dropped to the production floor.**
- 4. Except as pertains to some special designs, there is no guarantee that the products will be free from any such safety problems or failures as caused by the introduction of powder, droplets of water or encroachment of insect into the hub.**
- 5. The above-mentioned conditions are representative of some unique examples and viewed as the first point of reference prior to all other information.**
- 6. It is very important to establish the correct polarity before connecting the fan to the power source. Positive (+) and Negative (-). Damage may be caused to the fans if connection is with reverse polarity, if there is no foolproof method to protect against such error specifically mentioned in this spec.**
- 7. Delta fans without special protection are not suitable where any corrosive fluids are introduced to their environment.**
- 8. Please ensure all fans are stored according to the storage temperature limits specified. Do not store fans in a high humidity environment. We highly recommend performance testing is conducted before shipping, if the fans have been stored over 6 months.**
- 9. Not all fans are provided with the Lock Rotor Protection feature. If you impair the rotation of the impeller for the fans that do not have this function, the performance of those fans will lead to failure.**
- 10. Please be cautious when mounting the fan. Incorrect mounting of fans may cause excess resonance, vibration and subsequent noise.**
- 11. It is important to consider safety when testing the fans. A suitable fan guard should be fitted to the fan to guard against any potential for personal injury.**
- 12. Except where specifically stated, all tests are carried out at room (ambient) temperature and relative humidity conditions of 25°C, 65% RH. The test value is only for fan performance itself.**
- 13. Be certain to connect an “4.7μF or greater” capacitor to the fan externally when the application calls for using multiple fans in parallel, to avoid any unstable power.**



## Certification Record

| CUSTOMER   | CLASS  | FILE         |
|--|--|--------------|
| Delta Electronics, Inc.<br>252 Shang Ying Rd, Kuei San<br>Taoyuan Hsien<br>333<br>Taiwan | <a href="#">3812-01</a><br>FANS AND BLOWERS- | 091949_0_000 |
| Refer to Class Description for program details   |  |              |

### CATEGORIES:

- Extra Low Voltage Fans and Ventilators

### Notes:

1. The above categories are components of other certified equipment, where the suitability of the combination is to be determined by CSA International.

- Components, DC Fans, Cat Nos and rating are as follows:

| Cat Nos     | Rated Voltage<br>(V dc) | Rated Current<br>(mA) | Optional Suffixes |
|-------------|-------------------------|-----------------------|-------------------|
| AFB SERIES: |                         |                       |                   |
| AFB02505HA  | 5                       | 180                   | STD R00 F00       |
| AFB02505HB  | 5                       | 120                   | STD F00           |
| AFB02505HHB | 5                       | 230                   | STD F00           |
| AFB02505LA  | 5                       | 60                    | STD R00 F00       |
| AFB02505LB  | 5                       | 50                    | STD F00           |
| AFB02505MA  | 5                       | 100                   | STD R00 F00       |
| AFB02505MB  | 5                       | 80                    | STD F00           |
| AFB02505HHA | 5                       | 240                   | -                 |
| AFB02512HA  | 12                      | 100                   | STD R00 F00       |
| AFB02512HHA | 12                      | 120                   | STD R00 F00       |
| AFB02512LA  | 12                      | 50                    | STD R00 F00       |
| AFB02512MA  | 12                      | 60                    | STD R00 F00       |
| AFB0305HK   | 5                       | 210                   | STD F00           |
| AFB0305LLA  | 5                       | 60                    | -                 |
| AFB0305LA   | 5                       | 110                   | -                 |
| AFB0305LK   | 5                       | 90                    | STD F00           |
| AFB0305MA   | 5                       | 170                   | -                 |
| AFB0305MK   | 5                       | 170                   | STD F00           |
| AFB0305HA   | 5                       | 240                   | -                 |
| AFB03505LA  | 5                       | 90                    | -                 |
| AFB03505MA  | 5                       | 150                   | -                 |
| AFB03505HA  | 5                       | 210                   | -                 |

|                |    |      |                |
|----------------|----|------|----------------|
| AFC0948DE-SP08 | 48 | 700  | 0 to 9, A to Z |
| AFC0912DF      | 12 | 3000 | 0 to 9, A to Z |
| FHB1248GHE     | 48 | 940  | 0 to 9, A to Z |
| FHB1248UHE     | 48 | 1090 | 0 to 9, A to Z |
| FHB1248DHE     | 48 | 1540 | 0 to 9, A to Z |
| EHB1548HHG     | 48 | 730  | 0 to 9, A to Z |
| EHB1548VHG     | 48 | 860  | 0 to 9, A to Z |
| EHB1548SHG     | 48 | 1060 | 0 to 9, A to Z |
| EHB1548EHG     | 48 | 1440 | 0 to 9, A to Z |
| EHB1748HHG     | 48 | 730  | 0 to 9, A to Z |
| EHB1748VHG     | 48 | 860  | 0 to 9, A to Z |
| EHB1748SHG     | 48 | 1060 | 0 to 9, A to Z |
| EHB1748EHG     | 48 | 1440 | 0 to 9, A to Z |
| AFB1524LG      | 24 | 1080 | 0 to 9, A to Z |
| AFB1524MG      | 24 | 1440 | 0 to 9, A to Z |
| AFB1524HG      | 24 | 2100 | 0 to 9, A to Z |
| AFB1525HHG     | 24 | 2520 | 0 to 9, A to Z |
| AFB1548LG      | 48 | 600  | 0 to 9, A to Z |
| AFB1548MG      | 48 | 740  | 0 to 9, A to Z |
| AFB1548HG      | 48 | 960  | 0 to 9, A to Z |
| AFB1548HHG     | 48 | 1330 | 0 to 9, A to Z |
| KHB1748MT      | 48 | 430  | 0 to 9, A to Z |
| KHB1748HT      | 48 | 680  | 0 to 9, A to Z |
| KHB1748HHT     | 48 | 880  | 0 to 9, A to Z |
| KFB1748VHT     | 48 | 1360 | 0 to 9, A to Z |
| KFB1748SHT     | 48 | 1740 | 0 to 9, A to Z |
| KHB1048MS      | 48 | 280  | 0 to 9, A to Z |
| KHB1048HS      | 48 | 350  | 0 to 9, A to Z |
| KHB1048HHS     | 48 | 440  | 0 to 9, A to Z |
| KHB1048VHS     | 48 | 530  | 0 to 9, A to Z |
| KHB1348LW      | 48 | 510  | 0 to 9, A to Z |

|              |    |      |                |
|--------------|----|------|----------------|
| PFB0848EHE   | 48 | 280  | 0 to 9, A to Z |
| PFB0848GHE   | 48 | 320  | 0 to 9, A to Z |
| PFB0848UHE   | 48 | 650  | 0 to 9, A to Z |
| PFC0848DE    | 48 | 650  | 0 to 9, A to Z |
| AFB04512LB   | 12 | 110  | 0 to 9, A to Z |
| AFB04512MB   | 12 | 120  | 0 to 9, A to Z |
| AFB04512HB   | 12 | 170  | 0 to 9, A to Z |
| AFB0512LB-A  | 12 | 110  | 0 to 9, A to Z |
| AFB0512MB-A  | 12 | 120  | 0 to 9, A to Z |
| AFB0512HB-A  | 12 | 170  | 0 to 9, A to Z |
| AFB1212MF    | 12 | 400  | 0 to 9, A to Z |
| AFB1212HF    | 12 | 650  | 0 to 9, A to Z |
| AFB1212HHF   | 12 | 800  | 0 to 9, A to Z |
| AFB1212VHF   | 12 | 1200 | 0 to 9, A to Z |
| AFB1212SHF   | 12 | 1650 | 0 to 9, A to Z |
| AFB1212EHF   | 12 | 2300 | 0 to 9, A to Z |
| AFB1224MF    | 24 | 250  | 0 to 9, A to Z |
| AFB1224HF    | 24 | 400  | 0 to 9, A to Z |
| AFB1224HHF   | 24 | 500  | 0 to 9, A to Z |
| AFB1224VHF   | 24 | 650  | 0 to 9, A to Z |
| AFB1224SHF   | 24 | 900  | 0 to 9, A to Z |
| PFB0948EHE   | 48 | 260  | 0 to 9, A to Z |
| PFB0948GHE   | 48 | 420  | 0 to 9, A to Z |
| PFB0948UHE   | 48 | 800  | 0 to 9, A to Z |
| PFC0948DE    | 48 | 800  | 0 to 9, A to Z |
| AFB0612VHF   | 12 | 770  | 0 to 9, A to Z |
| AFB0612SHF   | 12 | 1000 | 0 to 9, A to Z |
| AFB0612EHF   | 12 | 1260 | 0 to 9, A to Z |
| AFB0612GHF   | 12 | 1620 | 0 to 9, A to Z |
| GFB0412SHG-A | 12 | 1320 | 0 to 9, A to Z |

## UL Online Certifications Directory

### GPWV2.E132003 Fans, Electric - Component

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### Fans, Electric - Component

[See General Information for Fans, Electric - Component](#)

#### DELTA ELECTRONICS INC

E132003

31-1 SHIEN PAN RD

KUEI SAN INDUSTRIAL ZONE

TAOYUAN HSIEN, 33370 TAIWAN

**DC Fans**, Model AFB, followed by 0405, followed by HA, HHA, LA or MA, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AFB, followed by 0505, followed by HB, LB or MB, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AFB, followed by 0512, followed by HB, HHB, LB or MB, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AFB, followed by 0605, followed by H, L or M, followed by R00, R05, RR0 or RR05, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AFB, followed by 0805, followed by H, L or M; Model AFB, followed by 0612, 0624, followed by EH, SH VH; Model AFB0612LB, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AFB, followed by 0612, 0624, 0812, 0824, 0912 or 0924, followed by H, HB, HH, HHB, LB, LLB, MB, SHB or VHB, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Models ASB0412MA, ASB0412LA, ASB0405MA; Model ASB, followed by 0405, 0412, followed by HA, HHA, LA or MA, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model ASB, followed by 0505, followed by HB, LB or MB, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model ASB, followed by 0512, 0524, followed by HB, HHB, LB or MB, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model ASB, followed by 0812, 0824, followed by HB, HHB, LB, LLB, MB, SHB or VHB, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model ASB, followed by 0612 or 0624, followed by H, HH, L or M, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model ASB, followed by 0812, followed by L or M; Model ASB, followed by 0912 or 0924, followed by H, L or M, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AUB, followed by 0505, 0512 or 0524, followed by HB, HHB, LB or MB, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AUB, followed by 0612, 0624, followed by H, HH, L or M, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AUB, followed by 0912, 0924, followed by H, HH, L, M or VH, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AUB, followed by 0612 or 0624, followed by L, M, H or HH, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AUB, followed by 0812 or 0824, followed by HB, HHB, LB, LLB, MB, SHB or VHB, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AUB, followed by 0924, followed by L, M, H, HH or VH, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model BFB, followed by 1212, followed by H, HH, L, LL, M or VH, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model BFB, followed by 1224, followed by H, HH, L, LL, M or VH, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model BFB, followed by 1248, followed by H, HH, L, LL, M, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model BFC, followed by 1012, followed by A, B or C, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model DFB, followed by 0405 or 0412, followed by H, L, LL, M, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model DFB, followed by 0612, 0812, 0912, 0824 or 0924 followed by H, L or M, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model DFB, followed by 0612, 0812, 0824, 0912 or 0924, followed by HH, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model DFB, followed by 0424, followed by H, L, LL, M, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model DFB, followed by 0612, 0624, followed by H, HH, L or M, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model DFC, followed by 0612, 0812 or 0912, followed by "A" or "B", followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model DFD, followed by 0612 or 0624, followed by H, HH, L or M, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model SB, followed by 0412, followed by H, L, LL or M, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model SB, followed by 0612, 0624, followed by HH, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model SB, followed by 0612, 0624, 0812, 0824, followed by H, L or M, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model SB, followed by 0612, 0624, followed by HD, LD or MD, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model SB, followed by 0812, 0824, followed by HH, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model SB, followed by 0812, followed by MSA or MSG, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AFC0612D(Y), where (Y) may be A through Z, 0 through 9, "-" or blank.

Model AFB, followed by 02505, followed by HA, HHA, LA or MA, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AFB, followed by 02512, followed by HA, HHA, LA or MA, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AFB, followed by 0305, followed by -HA, -LA, -LLA, MA, followed by (Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank; Model AFB, followed

Model (X)09(Y)(Z), where (X) may be AFB, AUB or ASB, (Y) may be 12 or 24, (Z) may be LD, MD, HD, HHD or VHD.

Model EFC1748DG-S41P.

Models EFC1548DG-S82U(Y), EFC1748DG-(Y), where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Models LFB0612VHD(Y), LFB0612HHD(Y), LFB0612HD(Y), LFB0612MD(Y), LFB0612LD(Y), , BCB0812EHN(Y), BCB0812GHN(Y), BCB0812UHN(Y), BCB1012UH(Y), BCB1012GH(Y), BCB1012EH(Y), BCB1012UHF(Y), BCB1012GHF(Y), BCB1012EHF(Y), LFB0712H(Y), LFB0712M(Y), LFB0712L(Y), LFC0712D(Y), FFB1724SHG(Y), FFB1724VHG(Y), FFB1724HHG(Y), FFB1748(Z)HG(Y), FFB0812(Z)H, FFB1212(X)H, FFB1224(X)H, FFB1224XHE-M(Y) , FFB1248(X)H Series, where (X) may be H, V, S or E, (Z) may be S, V or H, (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Models AFB0705(Y), AFB0712(X)D, AFB0724(X)D Series, where (X) may be L, M, H, HH or VH, (Y) may be H, M or L.

Models GFB0412SHE, GFB0612(X)HG, GFB0624(Y)HG, GFB0912(X)HG, GFB0924(Y)HG, GFB0948(Y)HG Series, where (X) may be H, V or S, (Y) may be H or V.

Models FFB1424(X)HG, FFB1448(X)HG Series, where (X) may be H, V or S.

Models PFB0412EHN(Y), PFB0412SHN(Y), PFB0412VHN(Y), PFB0412HHN(Y), FFB0412SHN-SE03(Y), GFB0412EHS-A(Y), GFB0412SHS-A(Y), GFB0412SHE(Y), GFB0612(X)HG, GFB0624(W)HG, GFB0912(X)HG, GFB0924(W)HG, GFB0948(W)HG, GFB1224SHG, GFB1212VHG, GFB1248SHG(Y) Series, where (X) may be H, V or S, (W) may be H or V, (Y) may be xxxxx where x may be A through Z, 0 through 9, "-" or blank.

Models BFB05512(X)A, KFB0412HA(Y) Series, where (X) may be HH, H or M, (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Models GFB12(Z)(X)W, GFC12(Z)(X)CW Series, where (Z) may be 12, 24 or 48, (X) may be VH, HH, H or M, (Z) may be 12, 24 or 48.

Models FFC0848CE, FFC0912CE.

Models EFC12(X)DF, EFC12(X)D, AFC12(X)D Series, where (X) may be 12, 24 or 48.

Models EFB08(X)(Z)B(Y), EFC0812DB(Y) Series, where (X) may be 12 or 24, (Z) may be HH, H, M or L, (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Models KHB1048MS(Y), KHB1048HS(Y), KHB1048HHS(Y), KHB1048VHS(Y), KFB0505HHA(Y), KHB1348(X)W(Y), KFB1348(X)T, KFB1748HHT, KFB1748EHS(Y), KFB1748SHS(Y), KFB1724EHS(Y), KFB1724SHS(Y), KHB1748HHT-A(Y), KHB1748HT-A(Y), KHB1748MT-A(Y), KHB1748HHT(Y), KHB1748HT(Y), KHB1748MT(Y), KHB1748VHS(Y), KHB1748HHS(Y), KHB1748HS(Y) Series, where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank, where (X) may be H, M or L.

Models FFC0848CE, FFC0912CE.

Models EFC12(X)DF, EFC12(X)D, AFC12(X)D Series, where (X) may be 12, 24 or 48.

Model EFB08(X)(Z)B(Y), EFC0812DB(Y) Series, where (X) may be 12 or 24, (Z) may be HH, H, M or L, (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Models FFB0412SHN, FFB03812VHN(Y), FFB03812HHN(Y), FFB03812HN(Y), FFB03812MN(Y) and FFB03812LN(Y) Series, where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Models AFC1548D, AFB1548EH, AFC1748D, AFB1748EH, AFB0712VHB, AFB0712HHB-P117; Models AHB1348(Z)E(Y), AHB1548(Z)G(Y), AHB1748(Z)G(Y), EHB1548(X)G(Y), EHB1748(X)G(Y), AHB1548EH/SH/VH(Y), AHB1748EH/SH/VH(Y) and AFC1512DG-5C34(Y) Series, where (X) may be EH, SH, VH or HH, (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank, (Z) may be VH, SH, EH or GH.

Models AFC0948DE-SP08(Y), AFC0912DE(Y), AFB0912EHE(Y), AFB0912GHE(Y), AFB0912UHE(Y), AFC0912DF(Y), FFC0612DE(Y) Series, where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Models BUB0512(X)D(Y), BFB0612MB, BFB0605HA(Y), BFB0705HA(Y), BFB0612HB, BFB0612MB-N(Y), BFB0612HB-N(Y), BFB1112L(Y), BFB1112M(Y), BFB1112H(Y), KSB0405HHA(Y), KSB0505HHA(Y) Series, where (X) may be VH, HH, H, M or L; (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Model AFB07(X)(Y) Series, where (X) may be 12 or 24, (Y) may be SH, VH, HH, H, M or L.

Models FHB1748HHG(Y), FHB1748HG(Y), FHB1748MG(Y), FHB1448EHE(Y), FHB1448SHE(Y), FHB1448VHE(Y), FHB1448HHE(Y),

Models BUB0512HHB(Y), BUB0512HB(Y), BUB0512MB(Y), BUB0512LB(Y) Series, where (Y) may be xxxxx, x may be A through Z, 0 through 9, "-" or blank.

Model AFB02512VHB-5B05(Y) Series, where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Models AFC0912D-A(X) Series, AUB0712HH-5B22, AUB0712HH-5G85, where (X) may be blank, F00 or R00.

Models AUC0812DD(Y) Series, where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Models KFB1248EHS(X) and KFB1248GHS(X) Series, where (X) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Model KDB04505HA(Y) series, where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Models KFB1248EHS(X) and KFB1248GHS(X) Series, where (X) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Model KDB0505HB(Y) series, where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Models KDB04505HA(Y) series, where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Model BFB0712HB-SM.

Models PHB2048MT(Y), PHB2048LT(Y) Series, where (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.

Model KDB0505HB-5K86.

Models DSB0624(A)(Y), KHB1248(B)S(Y) Series, where (A) may be VH or HH; (B) may be EH, SH or VH; (Y) may be xxxxx, where x may be A through Z, 0 through 9, "-" or blank.



Marking: Company name or "E132003" or trademark and model designation.

Last Updated on 2006-03-20

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# Übereinstimmungserklärung

*Statement of Compliance*

**Ausgestellt für:**

**Delta Electronics Inc.**

*Issued to:*

186 Ruey Kuang Road Neihu, 114 Taipei, Taiwan

**Fertigungsstätte(n):**

*Place(s) of manufacture:*

1. Delta Electronics Yueyun Central Road, 523308 Dong Guan, China
2. Delta Electronics Ltd. Wujiang City, China
3. Delta Electronics (Thailand), Amphur, Bangpakong 04, Thailand

**Erzeugnis:**

*Product:*

**Fan for IT equipments ( building in )**

Type: EHB1548HHG/VHG/SHG/EHG

Type: EHB1748HHG/VHG/SHG/EHG

**Prüfnorm(en):**

*Standard(s) used:*

DIN EN 60950-1 (VDE 0805 Teil 1):2003-03; EN 60950-1 (ed.1) :2001-12

IEC 60950-1(ed.1) + corr.1

Das betreffende Erzeugnis ist in Übereinstimmung mit der(den) genannten Norm(en). Das Erzeugnis kann deshalb unter Berücksichtigung des voraus-gegangenen Schriftverkehrs mit dem(der)

*The subject product complies with the referenced Standard(s). The product is therefore eligible to bear the*



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**Ausgestellt durch:** VDE Prüf- und Zertifizierungsinstitut, Fachgebiet FG13

*Issued by department*

**Aktenzeichen:**

*Reference No.*

1164100-2611-0009

**Datum:**

*Date issued*

30.11.2004

**Unterschrift:**

*Signature*

Günter Straube

