SPECIFICATION FOR APPROVAL

Customer			
Description	DC FAN		
Part No.		**Rev.**	
Delta Model No.	TFA0948AE-EP	**Rev.**	00
Sample Issue No.			
Sample Issue Date.	Jun 28, 12		

PLEASE SEND ONE COPY OF THIS SPECIFICATION BACK AFTER YOU SIGNED APPROVAL FOR PRODUCTION PRE-ARRANGEMENT.

APPROVED BY : _____

DATE : _____

DELTA ELECTRONICS (THAILAND) PUBLIC COMPANY LIMITED.
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3. MECHANICAL:

3-1. DIMENSIONS	SEE DIMENSIONS DRAWING
3-2. FRAME	PLASTIC UL: 94V-0
3-3. IMPELLER	PLASTIC UL: 94V-0
3-4. BEARING SYSTEM	TWO BALL BEARINGS
3-5. WEIGHT	250 GRAMS
3-6. SALT FOG TEST COMPLY	GR-487

4. ENVIRONMENTAL:

4-1. OPERATING TEMPERATURE	-33 TO +70 DEGREE C
4-2. STORAGE TEMPERATURE	-40 TO +75 DEGREE C
4-3. OPERATING HUMIDITY	5 TO 90 % RH
4-4. STORAGE HUMIDITY	5 TO 90 % 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

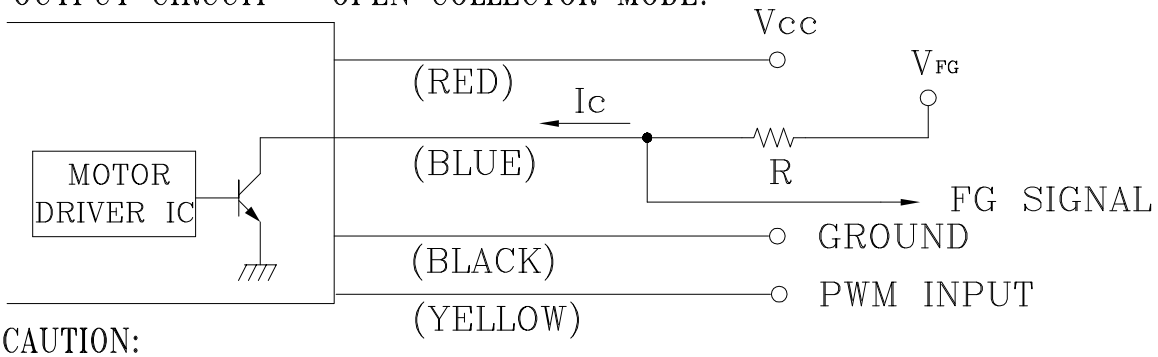
7-1. PRODUCTS WILL BE PRODUCED IN CHINA OR THAILAND OR TAIWAN.

PART NO:

DELTA MODEL: TFA0948AE-EP

10. FREQUENCY GENERATOR (FG) SIGNAL:

1. OUTPUT CIRCUIT - OPEN COLLECTOR MODE:



CAUTION:

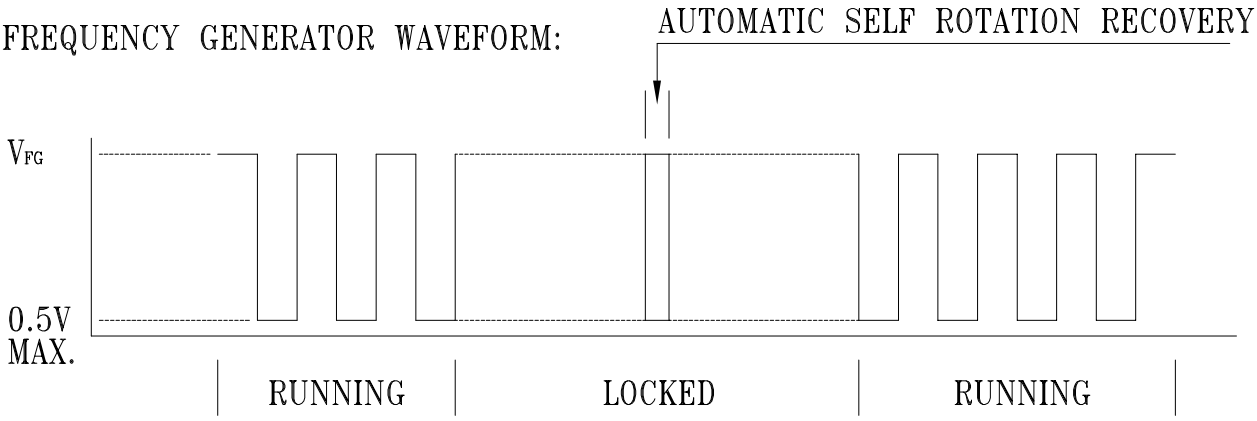
THE LEAD WIRE OF FG SIGNAL CAN NOT TOUCH
THE LEAD WIRE OF POSITIVE OR NEGATIVE.

2. SPECIFICATION:

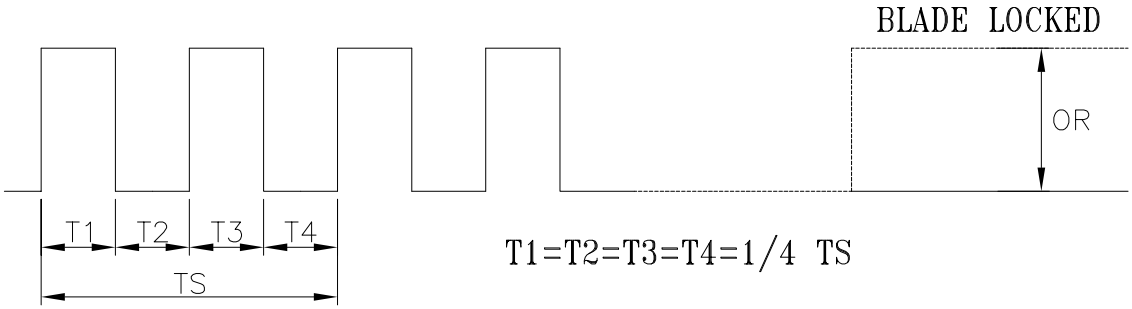
V_{CE} (sat)=0.5V MAX. V_{FG} =57VDC MAX.

I_C =5mA MAX. $R \geq V_{FG}/I_C$

3. FREQUENCY GENERATOR WAVEFORM:



FAN RUNNING FOR 4 POLES



T1=T2=T3=T4=1/4 TS

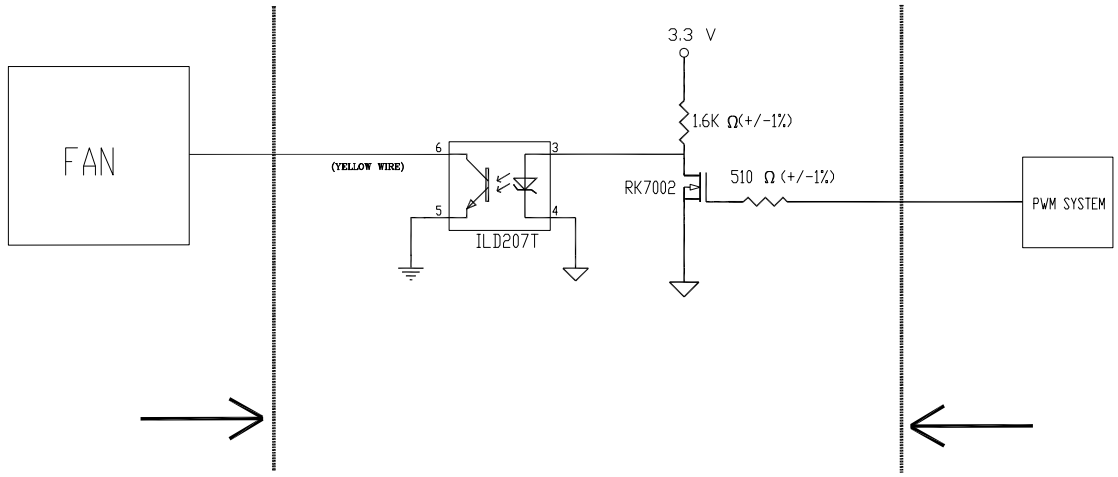
N=R.P.M

TS=60/N(SEC)

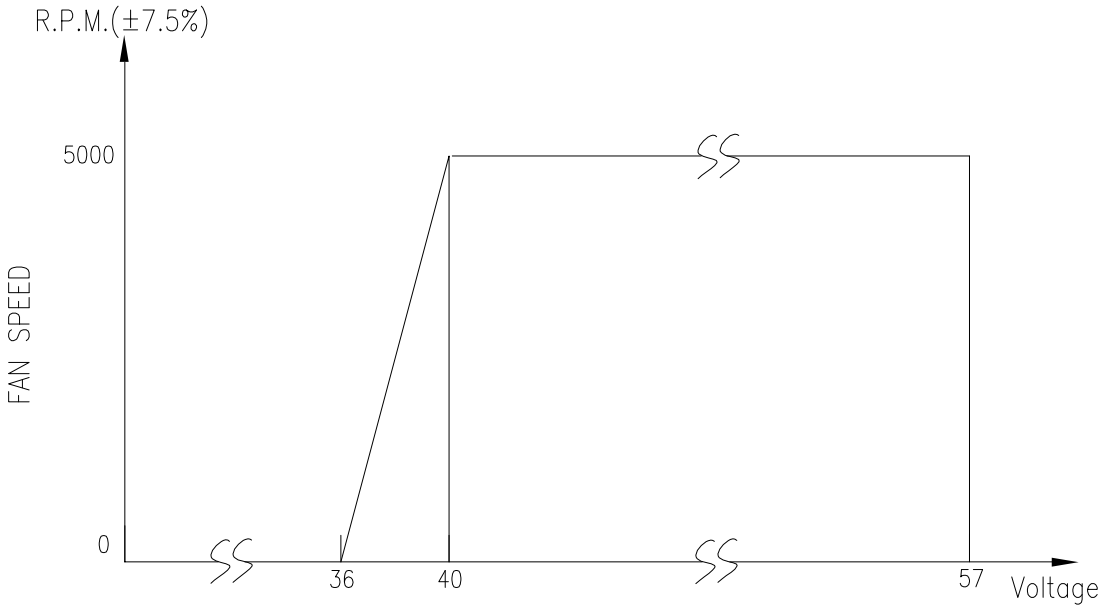
*VOLTAGE LEVEL AFTER BLADE LOCKED

*4 POLES

11. PWM SYSTEM CONNECT WITH OPTOCOUPLER CONTROL ONE FAN:



12. 40.0V~57.0V FAN SPEED KEEP IN 5000R.P.M



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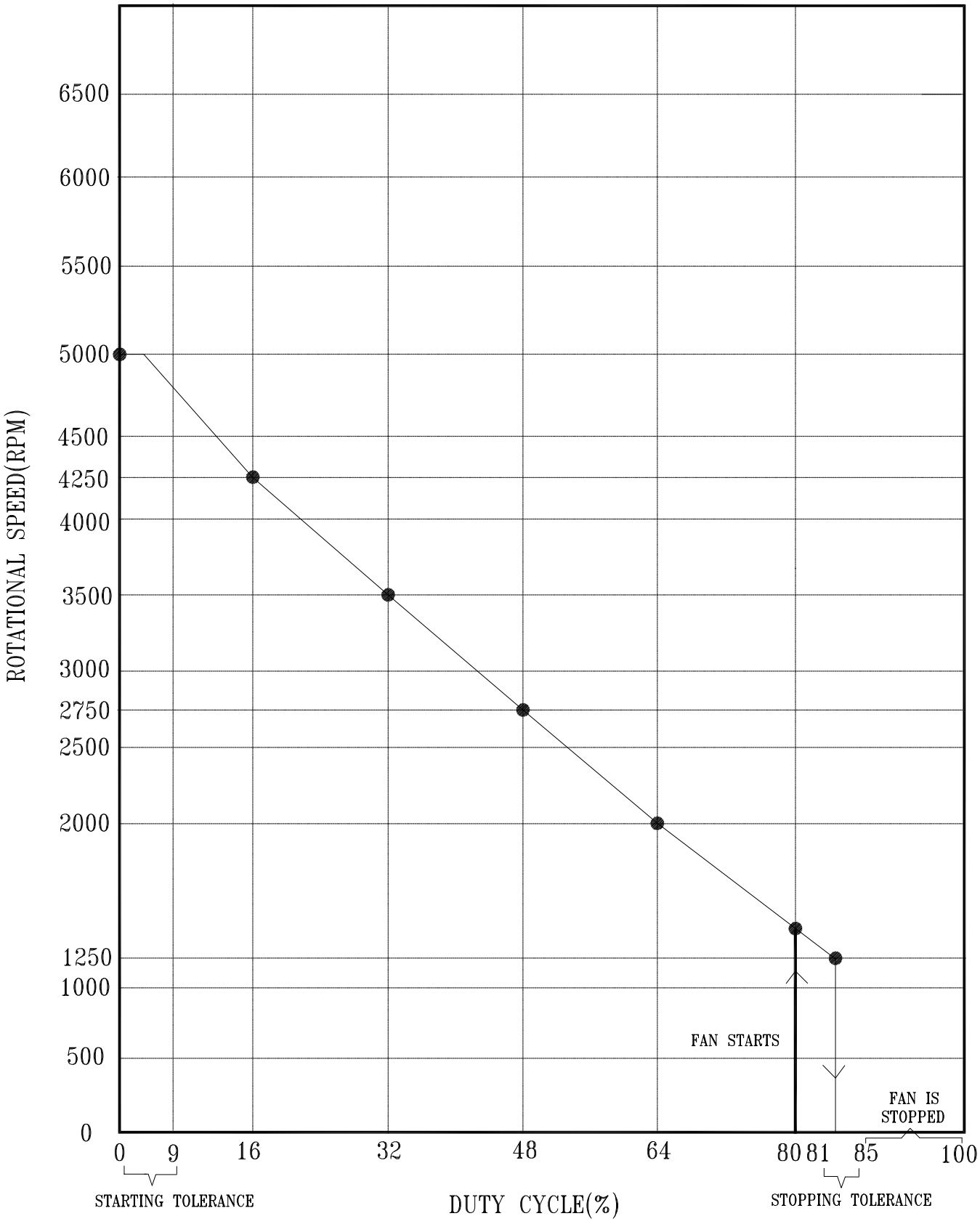
15. DUTY CYCLE & SPEED CURVE:



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^{0}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.