

**\*\*\* PRELIMINARY REVISION FOR REFERENCE \*\*\***

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## SPECIFICATION FOR APPROVAL

Customer:

Description: GT FAN

Customer P/N:

REV:

Delta Model NO.: GTW040FUC15RS

Safety Model NO.:

Sample Rev: X04

Issue NO:

Sample Issue Date:

Quantity:

## 1. SCOPE:

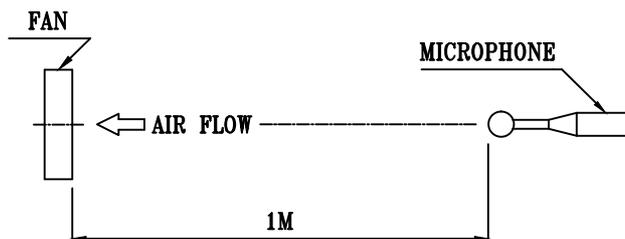
THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THIS AXIAL FAN .

## 2. NOMINAL DATA:

UNLESS SPECIFIED, ALL READINGS AND TESTS ARE BASED ON 25 DEG C, 65% RH.

ITEM	DESCRIPTION
NOMINAL VOLTAGE	1 $\phi$ 230 VAC 50/60Hz
NOMINAL VOLTAGE RANGE	1 $\phi$ 200 - 277 VAC
INPUT POWER @ FREE-AIR	330 W
INPUT POWER @ MAX. LOAD	420 W
INPUT CURRENT (MAX.)	3.0 A
SPEED	1650 R.P.M.(REF.)
MAX. AIR FLOW (AT ZERO STATIC PRESSURE)	5350 ( MIN. 4815) M <sup>3</sup> /H 3147 ( MIN. 2832) CFM
MAX. AIR PRESSURE	179 ( MIN. 145) Pa 0.71 ( MIN. 0.58) inchH <sub>2</sub> O
ACOUSTICAL NOISE (AVG.) @ FREE-AIR	72.7 (MAX 77.7) dB(A) @1m

- 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 NOMINAL 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.

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PART NO:

DELTA MODEL: GTW040FUC15RS

**3. FEATURES:**

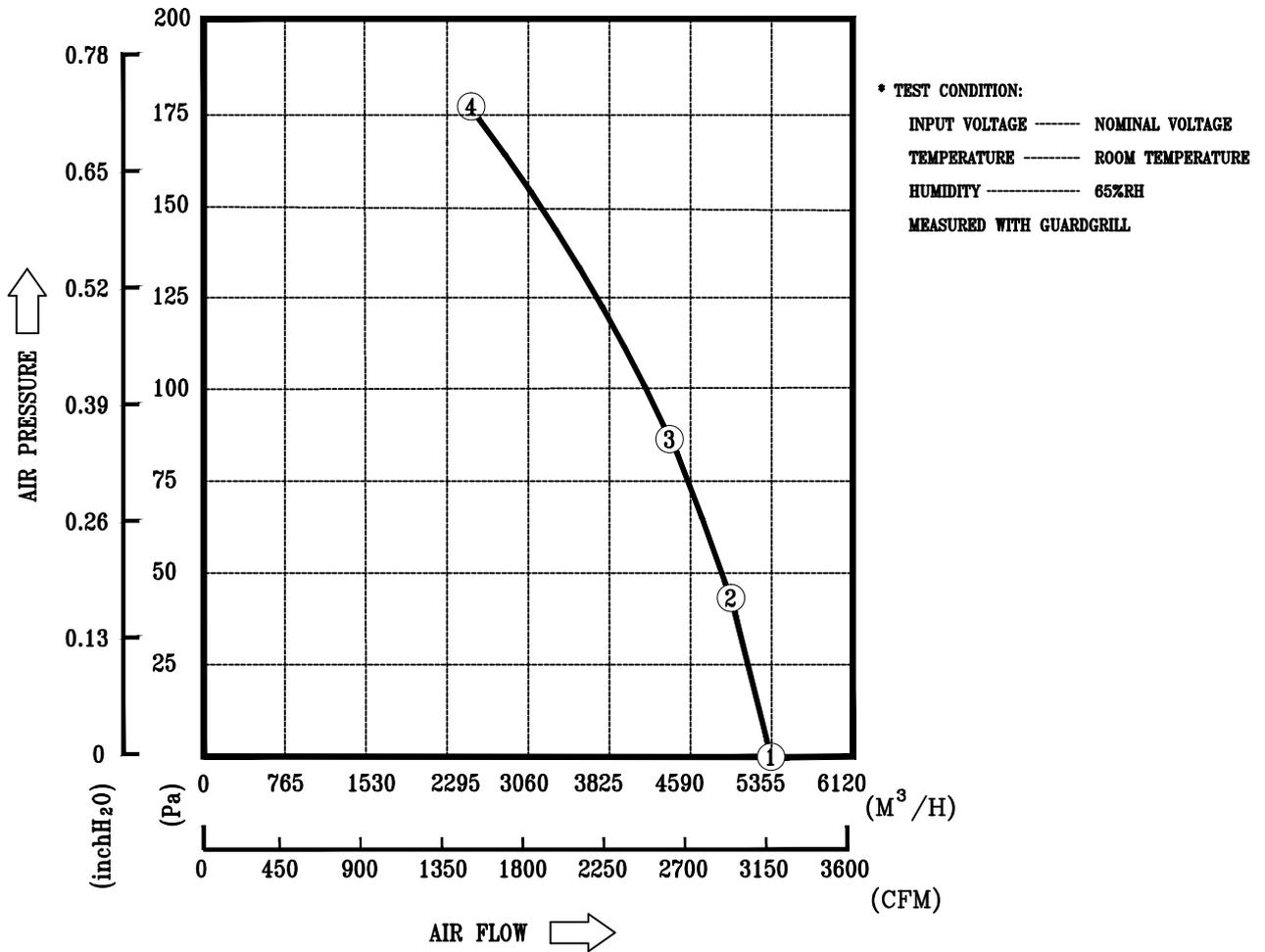
DIRECTION OF ROTATION	CLOCKWISE, SEEN ON ROTOR
BEARING SYSTEM	BALL BEARINGS
WEIGHT	9.7 K.G. (REF.)
MATERIAL OF ELECTRONICS HOUSING	DIE-CAST ALUMINUM
MATERIAL OF IMPELLER	PPE+30%GF
ELECTRICAL LEADS	LEAD WIRE
MOTOR PROTECTION	OVER TEMPERATURE PROTECTED
LEAKAGE CURRENT	<= 3.5 mA
INSULATION CLASS	B
TYPE OF PROTECTION	IP54
PROTECTION CLASS	I
POWER FACTOR CORRECTION	PASSIVE
OPERATING TEMPERATURE	-25~+60 °C (REF.)
STORAGE TEMPERATURE	-40~+70 °C (REF.)
EMC	EN61000-6-1 / EN61000-6-3 / EN61000-3-2/3
SAFETY	cUL & TUV
LIFE EXPECTANCE	* 60,000 HOURS CONTINOUS OPERATION AT 40 °C WITH 15 ~ 65 %RH.
FUNCTIONS	- CONTROL INPUT 0-10VDC or PWM PATTERN - OUTPUT +10VDC(±10%), max. 10mA - RS485 CONTROL BUS - ALARM RELAY, LOCKED ROTOR PROTECTION, SOFT START - VOLTAGE/CURRENT MONITORING

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4. P & Q CURVE:



MEASURED DATA:

	P	Q	N	P1	I	Lp
	[Pa]	[M <sup>3</sup> /H]	[R.P.M.]	[W]	[A]	[dB(A)]
1	0	5350	1650	320	1.99	72.7
2	43	4908	1650	337	2.09	
3	83	4428	1650	358	2.22	
4	179	2371	1650	407	2.53	

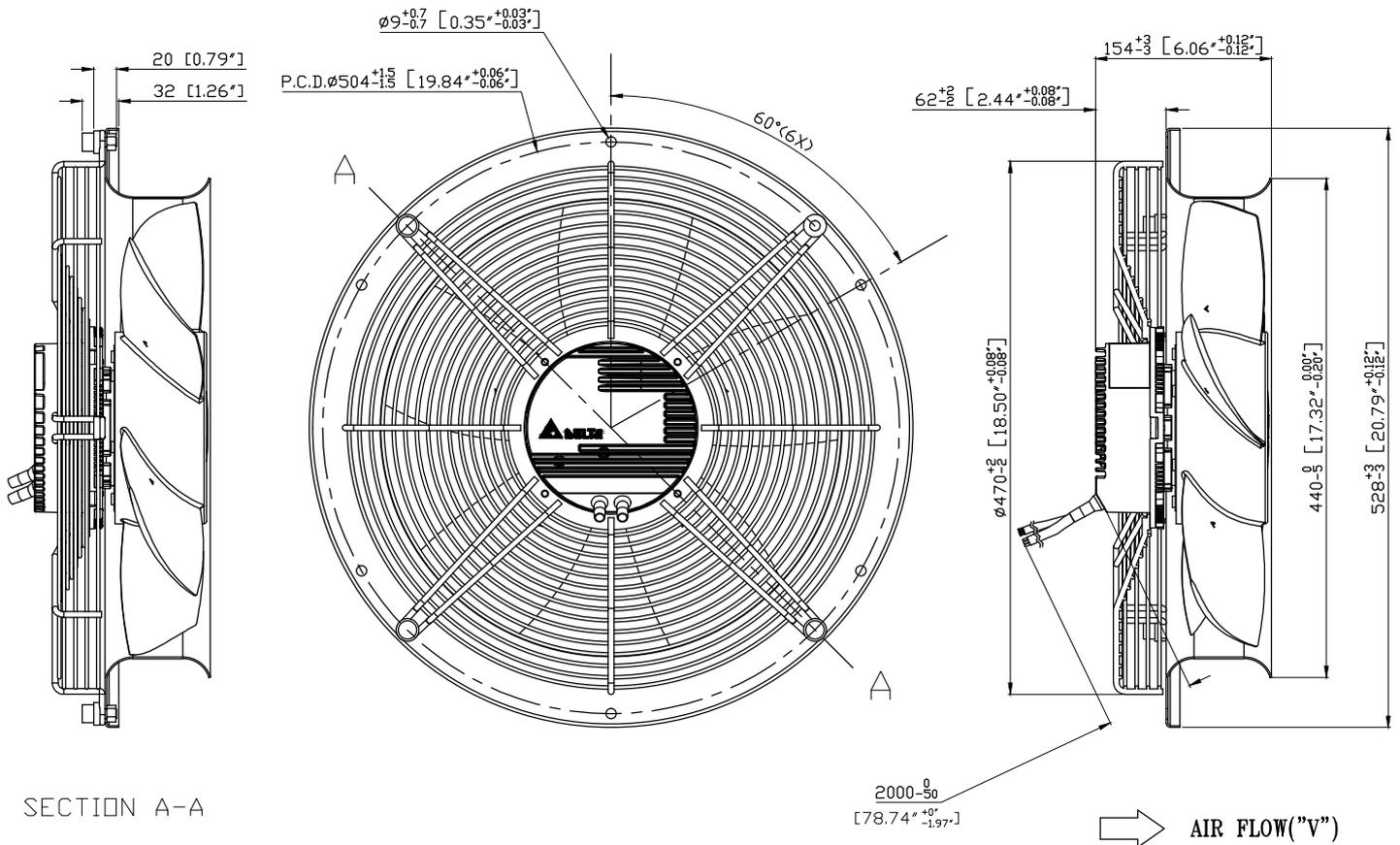
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DELTA MODEL: GTW040FUC15RS

5. DIMENSION DRAWING:

LABEL 1



UNIT: mm [INCH]

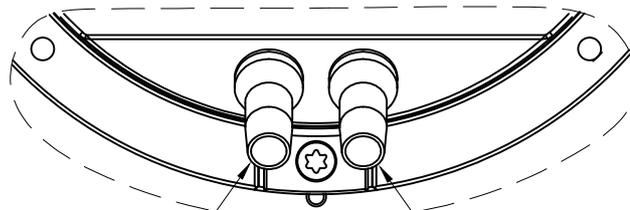
NOTE:

1. THIS PRODUCT IS RoHS COMPLIANT.

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**6. DEFINITION OF CABLE:**

CABLE 1

CABLE 2

CABLE	COLOR	FUNCTIONS
1	BROWN	L
1	BLUE	N
1	GREEN/YELLOW	EARTH
2	RED/PINK	+10V
2	BLUE/WHITE	PWM
2	BLACK	GND
2	GREEN/RED	RS485-
2	GREEN/WHITE	RS485+
2	PINK/BLACK	RELAY 1
2	GREEN/BLACK	RELAY 2

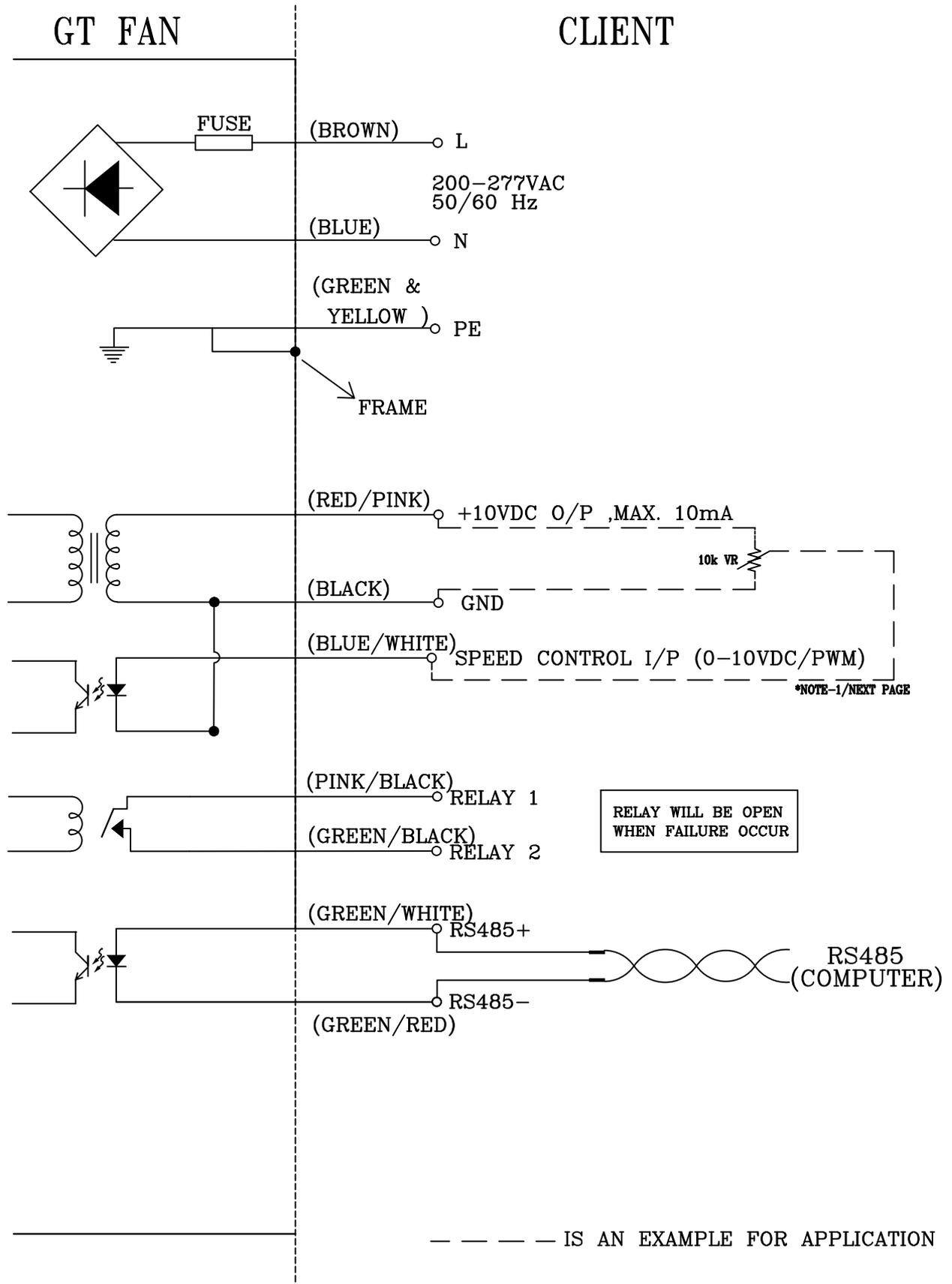
CABLE LENGTH: 2000mm

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DELTA MODEL: GTW040FUC15RS

7. LEAD WIRE CONNECTION:



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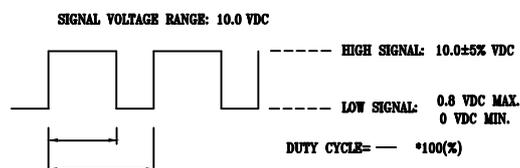
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**8. FUNCTION CONTROL: VOLTAGE CONTROL****\*NOTE-1: SPEED CONTROL SIGNAL****A. VOLTAGE CONTROL**

- CONTROL VOLTAGE RANGE SHALL BE 0-10 VDC.
- VOLTAGE AT 10VDC THE FAN WILL SPIN AT MAXIMUM SPEED.
- VOLTAGE HIGHER THAN 1.5 VDC, THE FAN WILL START UP.
- VOLTAGE LOWER THAN 0.5 VDC, THE FAN WILL STOP.

**B. PWM CONTROL**

- THE AMPLITUDE VOLTAGE SHALL BE 10VDC. (100Hz~100kHz)



- PWM DUTY HIGHER THAN 15 % , THE FAN WILL START UP.
- PWM DUTY LOWER THAN 5 % , THE FAN WILL STOP.

- THE SPEED COMPARISON WITH CONTROL LEVEL:

VOLTAGE(V)	PWM DUTY(%)	SPEED (R.P.M.) <small>(REF.)</small>
0.0	0	0
9.5	95	1650

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9. CONTROL LEVEL & SPEED CURVE:

