

SPECIFICATION FOR APPROVAL

Customer:

Description:	EC FAN		
Customer P/N:		REV:	
Delta Model NO.:	GTB025FUC19R	Safety Model NO.:	GTB025FUC19
Sample Rev:	X02	Issue NO:	
Sample Issue Date:		Quantity:	

1. SCOPE:

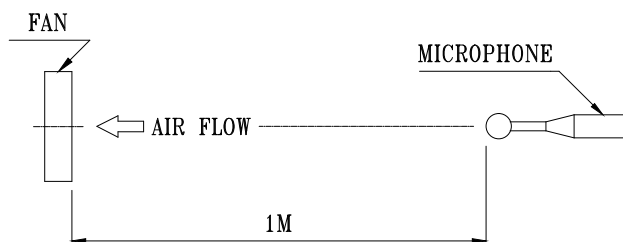
THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THIS CENTRIFUGAL FAN.

2. NOMINAL DATA:

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

ITEM	DESCRIPTION		
NOMINAL VOLTAGE	1 ϕ	230	VAC 50/60Hz
NOMINAL VOLTAGE RANGE	1 ϕ	200 - 277	VAC
INPUT POWER @ FREE-AIR		450	W
INPUT POWER @ MAX. LOAD		530	W
INPUT CURRENT (MAX)		3.50	A
SPEED		3050	R.P.M. (REF.)
MAX. AIR FLOW (AT ZERO STATIC PRESSURE)		2440	(MIN. 2196) M ³ /H
		1436	(MIN. 1292) CFM
MAX. AIR PRESSURE (AT ZERO AIR FLOW)		806.1	(MIN. 652.9) Pa
		3.236	(MIN. 2.621) inchH ₂ O
ACOUSTICAL NOISE (AVG.) @ FREE-AIR		79.0	(MAX 84.0) dB(A)

- 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.

PART NO:

DELTA MODEL: GTB025FUC19R

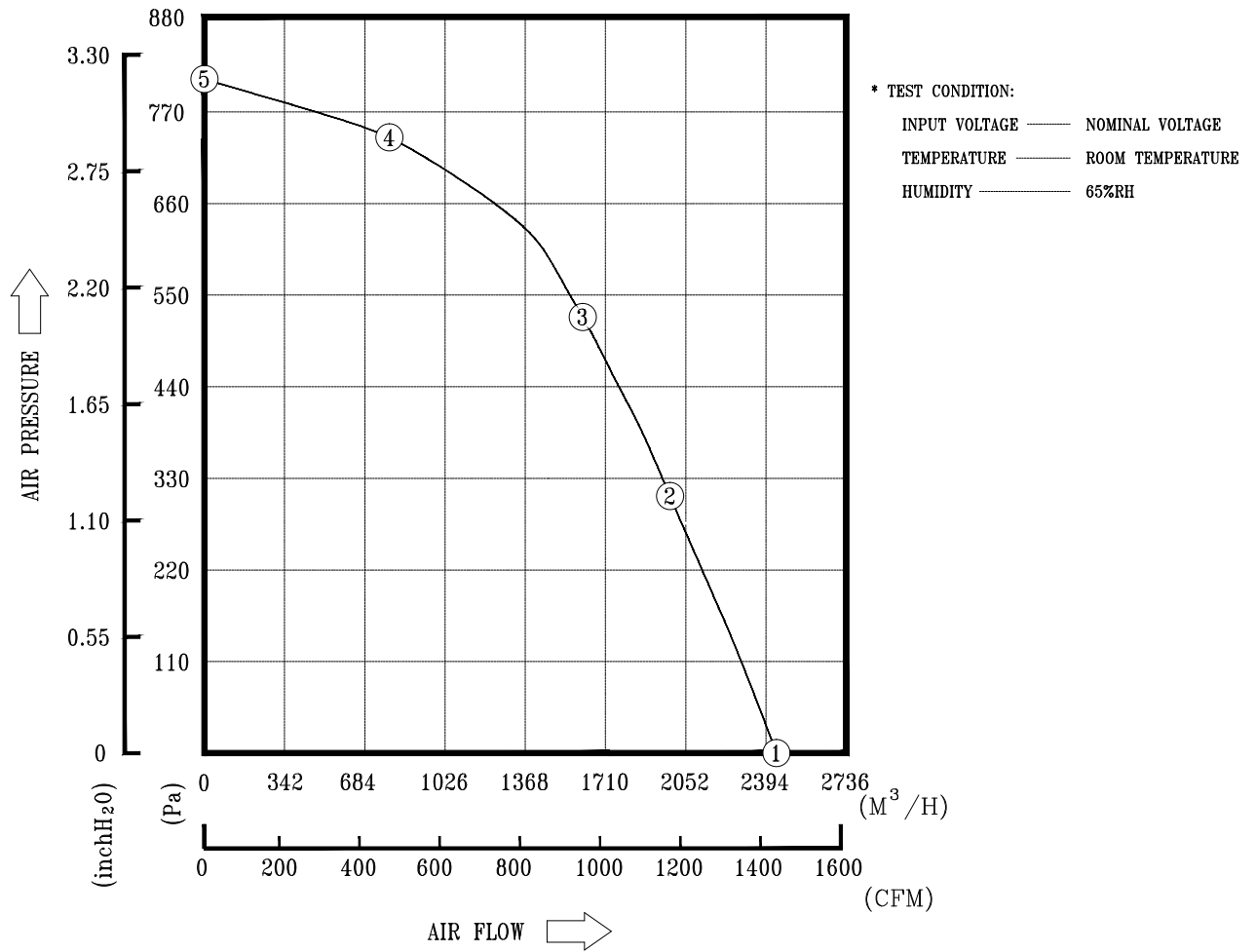
3. FEATURES:

DIRECTION OF ROTATION	CLOCKWISE, SEEN ON ROTOR
BEARING SYSTEM	BALL BEARINGS
WEIGHT	5.1 K.G. (REF.)
MATERIAL OF ELECTRONICS HOUSING	DIE-CAST ALUMINUM
MATERIAL OF IMPELLER	ALUMINUM SHEET
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	EN61000-6-1/3 , EN61000-3-2/3
SAFETY	UL , 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

PART NO:

DELTA MODEL: GTB025FUC19R

4. P & Q CURVE:



MEASURED DATA:

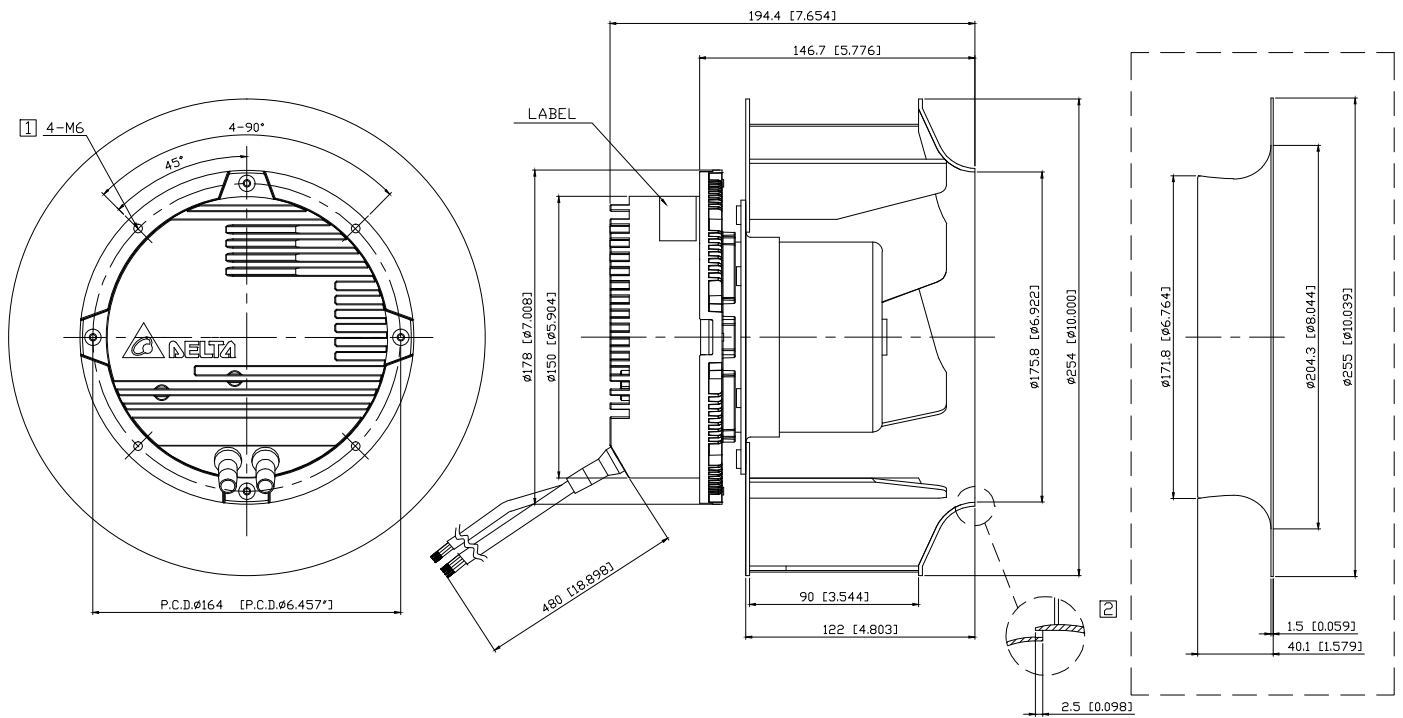
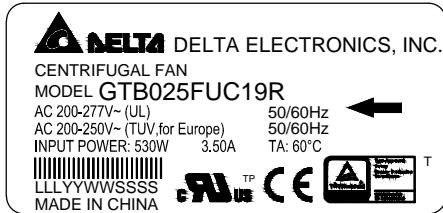
	P	Q	N	P1	I	Lp
	[Pa]	[M ³ /H]	[R.P.M.]	[W]	[A]	[dB(A)]
1	0	2440	3044	401	2.49	79.0
2	294.0	2003	3043	485	3.01	
3	493.9	1670	3042	509	3.16	
4	743.8	780.9	3043	394	2.45	
5	805.6	0	3042	204	1.27	

PART NO:

DELTA MODEL: GTB025FUC19R

5. DIMENSION DRAWING:

LABEL



UNIT: mm [INCH]

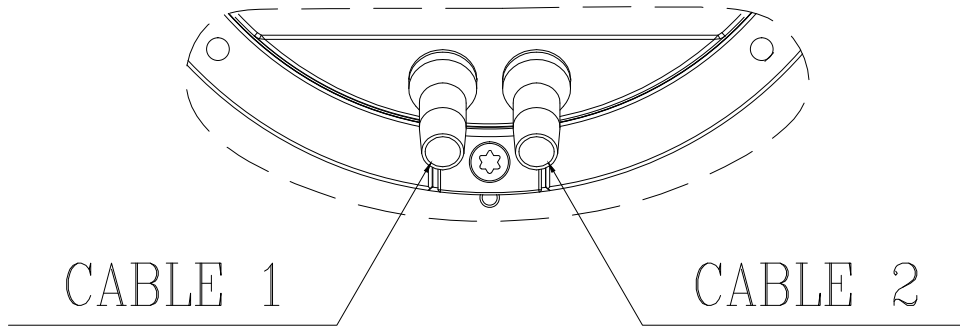
NOTE:

- ① DEPTH OF SCREW: 6~8mm.
- ② ACCESSORY: INLET NOZZLE, ALL THE PERFORMANCE DATA ARE MEASURED WITH IT.
- 3. THIS PRODUCT IS RoHS COMPLIANT.

PART NO:

DELTA MODEL: GTB025FUC19R

6. DEFINITION OF CABLE:

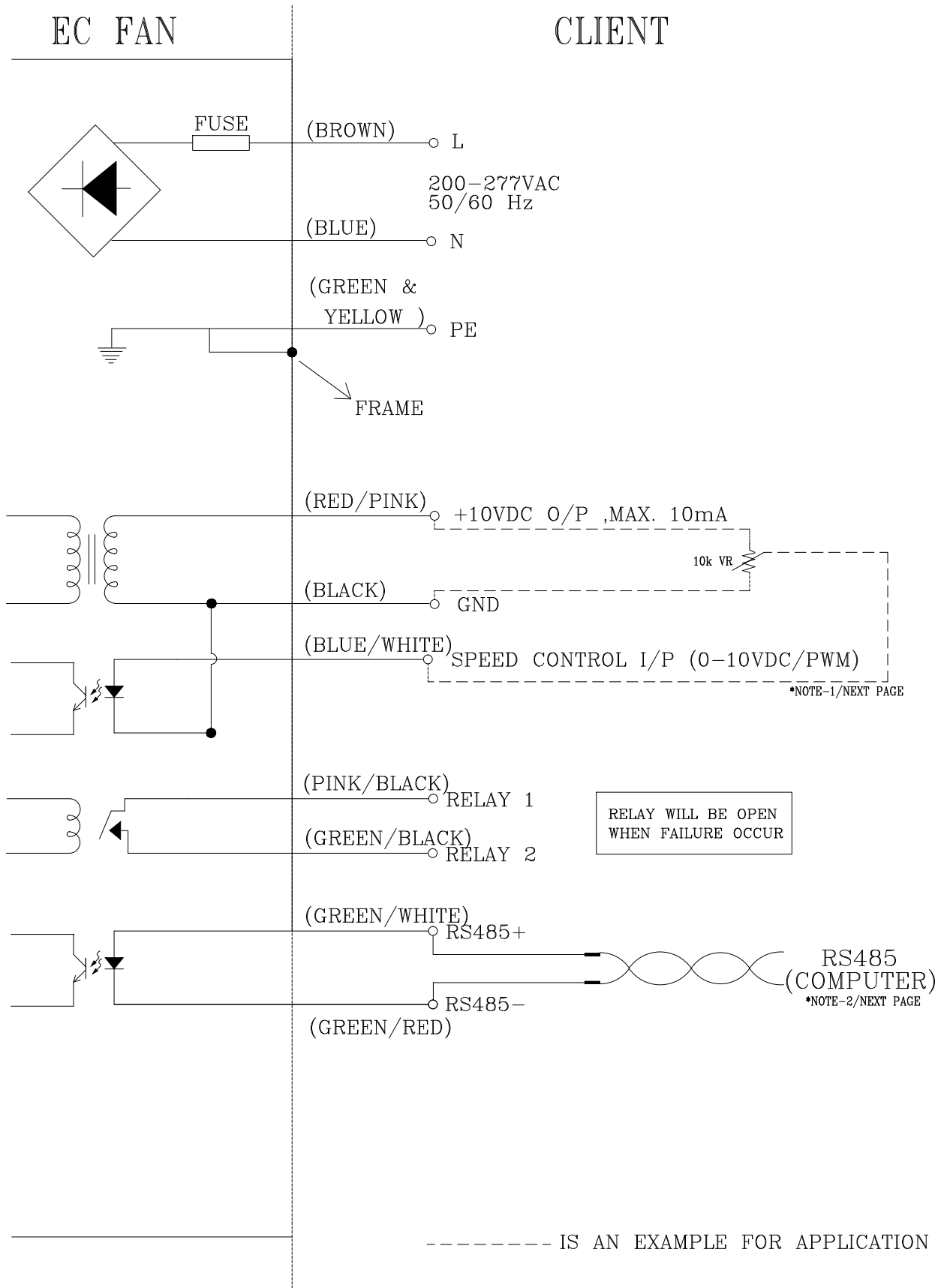


CABLE	COLOR	FUNCTIONS
1	BROWN	L
1	BLUE	N
1	GREEN/YELLOW	EARTH
<hr/>		
2	RED/PINK	+10V
2	BLUE/WHITE	PWM
2	BLACK	GND
2	GREEN/RED	RS485-
2	GREEN/WHITE	RS485+
2	PINK/BLACK	RELAY 1
2	GREEN/BLACK	RELAY 2

PART NO:

DELTA MODEL: GTB025FUC19R

7. LEAD WIRE CONNECTION:



PART NO:

DELTA MODEL: GTB025FUC19R

8. FUNCTION CONTROL: VOLTAGE CONTROL

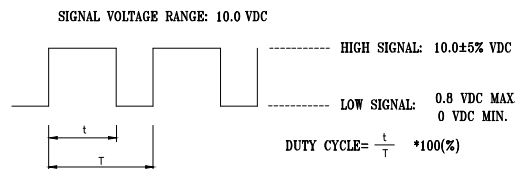
*NOTE-1: SPEED CONTROL SIGNAL

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.) (REF.)
0.0	0	0
9.5	95	3050

9. FUNCTION CONTROL: RS485 CONTROL

*NOTE-2: RS485 CONTROL FUNCTION

- SELECT THE CONTROL MODE OF SPEED, FIXED SPEED OR FIXED PWM DUTY.
- SPEED AND POWER CONSUMPTION FEEDBACK.
- ALLOW MULTIPLE FANS CONTROL AND STATUS PATROL.

PART NO:

DELTA MODEL: GTB025FUC19R

9. CONTROL LEVEL & SPEED CURVE:

