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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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SPECIFICATION FOR APPROVAL  
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Customer:

Description:	EC FAN		
Customer P/N:		REV:	
Delta Model NO.:	GTB036FUC21R	Safety Model NO.:	GTB036FUC21
Sample Rev:	X04	Issue NO:	
Sample Issue Date:		Quantity:	

1. SCOPE:

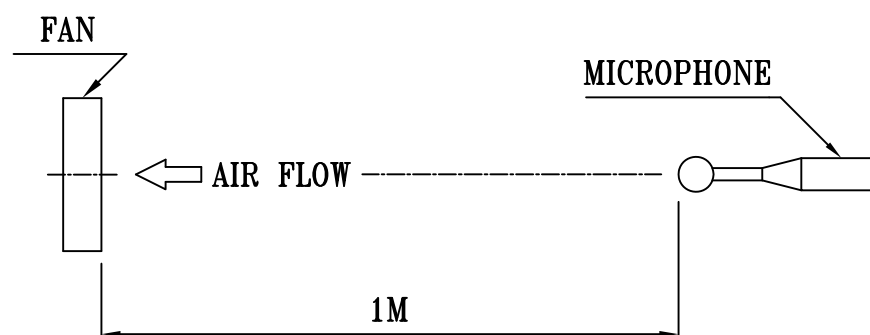
THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THIS CENTRIFUGAL FAN.

2. NOMINAL DATA:

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

ITEM	DESCRIPTION
NOMINAL VOLTAGE	1 $\phi$ 230 VAC 50/60Hz
NOMINAL VOLTAGE RANGE	1 $\phi$ 200 - 277 VAC
INPUT POWER @ FREE-AIR	412 W
INPUT POWER @ MAX. LOAD	510 W
INPUT CURRENT (MAX.)	3.62 A
SPEED	2100 R.P.M.(REF.)
MAX. AIR FLOW (AT ZERO STATIC PRESSURE)	3668 ( MIN. 3301) M/H <sup>3</sup> 2159 ( MIN. 1943) CFM
MAX. AIR PRESSURE (AT ZERO AIR FLOW)	668.80 ( MIN. 541.73) Pa 2.685 ( MIN. 2.175) inchH <sub>2</sub> O
ACOUSTICAL NOISE (AVG.) @ FREE-AIR	77.5 (MAX 82.5) 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: GTB036FUC21R

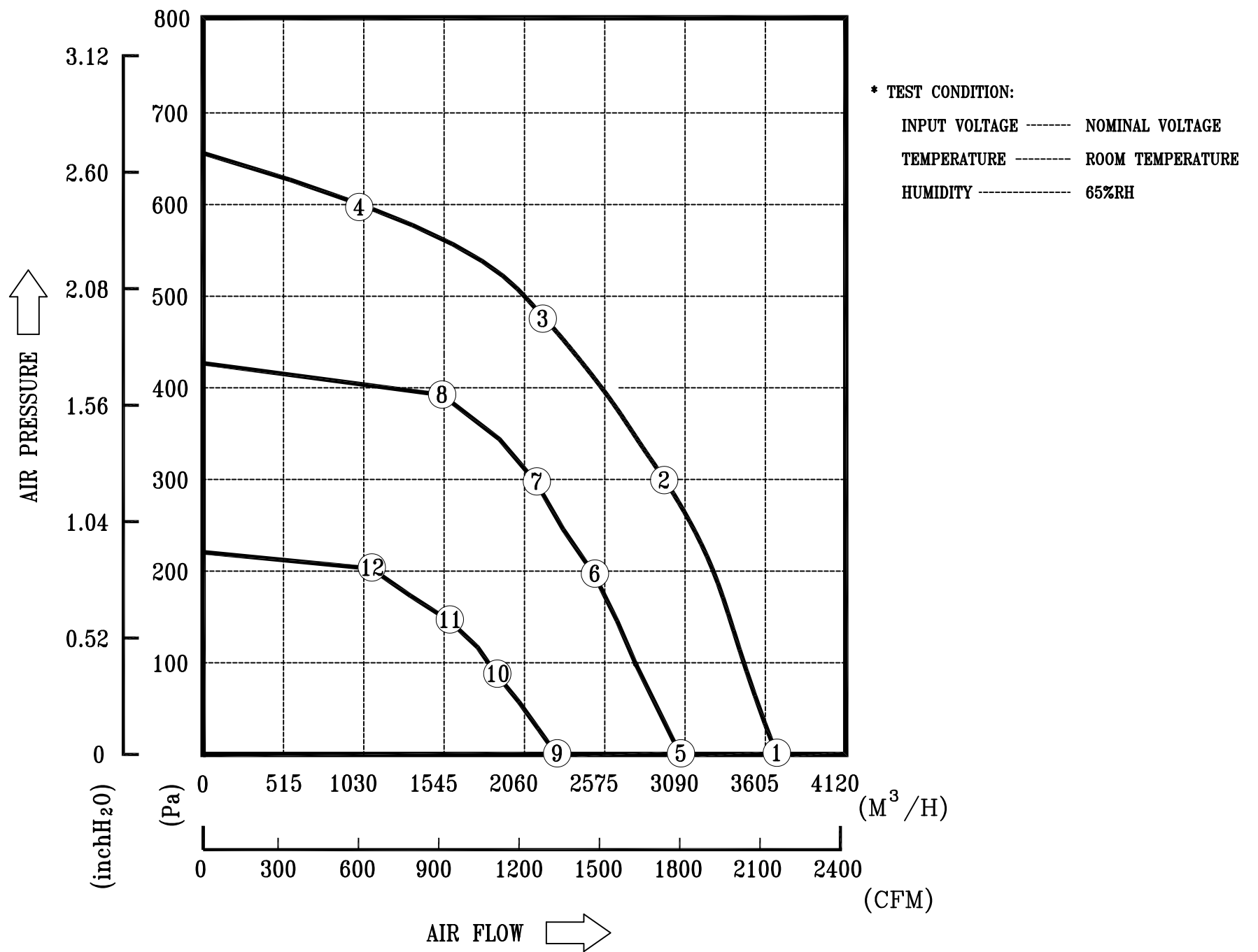
3. FEATURES:

DIRECTION OF ROTATION	CLOCKWISE, SEEN ON ROTOR
BEARING SYSTEM	BALL BEARINGS
WEIGHT	5.5 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	$\leq 3.5 \text{ mA}$
INSULATION CLASS	B
TYPE OF PROTECTION	IP54
PROTECTION CLASS	I
POWER FACTOR CORRECTION	PASSTIVE
OPERATING TEMPERATURE	$-25 \sim +60 \text{ }^\circ\text{C}$ (REF.)
STORAGE TEMPERATURE	$-40 \sim +70 \text{ }^\circ\text{C}$ (REF.)
EMC	EN61000-6-1 / EN61000-6-3 / EN61000-3-2/3
SAFETY	UL, cUL & TUV
LIFE EXPECTANCE	* 60,000 HOURS CONTINOUS OPERATION AT $40 \text{ }^\circ\text{C}$ WITH $15 \sim 65 \text{ \%RH}$ .
FUNCTIONS	- CONTROL INPUT 0-10VDC or PWM PATTERN - OUTPUT +10VDC( $\pm 10\%$ ), 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:

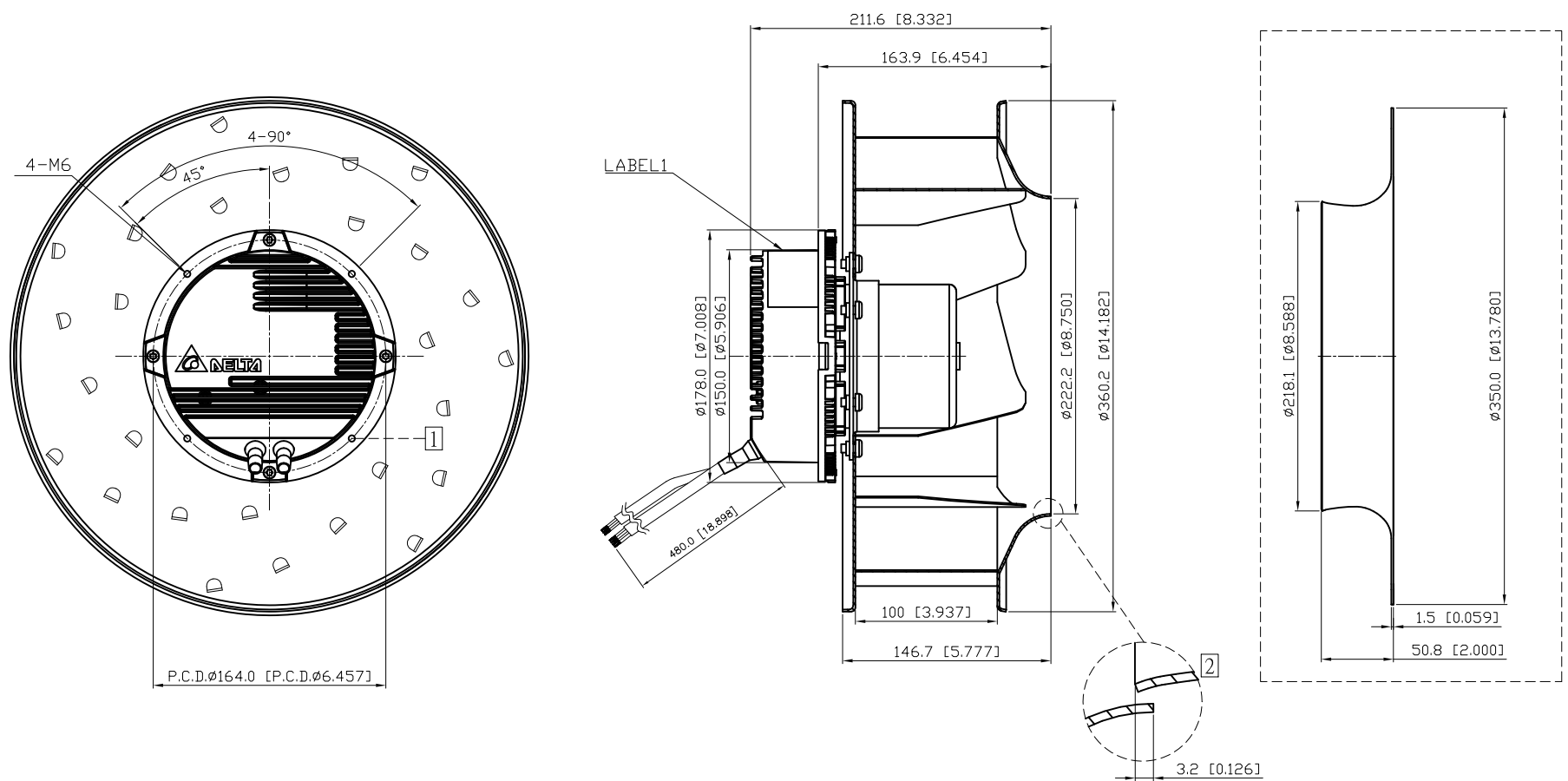
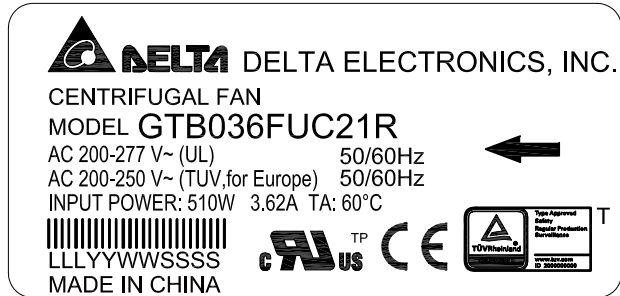
	P	Q	N	P1	I	Lp
	[Pa]	[M³/H]	[R.P.M.]	[W]	[A]	[dB(A)]
1	0	3670	2150	412	2.56	77.5
2	300.1	2982	2130	500	3.11	
3	488.5	2176	2030	505	3.14	
4	585.7	1650	2056	495	3.07	
5	0	3059	1724	223	1.43	73.0
6	195.2	2508	1750	288	1.84	
7	295.3	2135	1741	309	1.98	
8	390.4	1531	1757	307	1.96	
9	0	2278	1260	92	0.67	65.5
10	89.1	1882	1260	110	0.80	
11	147.7	1577	1260	121	0.88	
12	204.0	1077	1260	120	0.87	

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5. DIMENSION DRAWING:

LABEL 1



UNIT: mm [INCH]

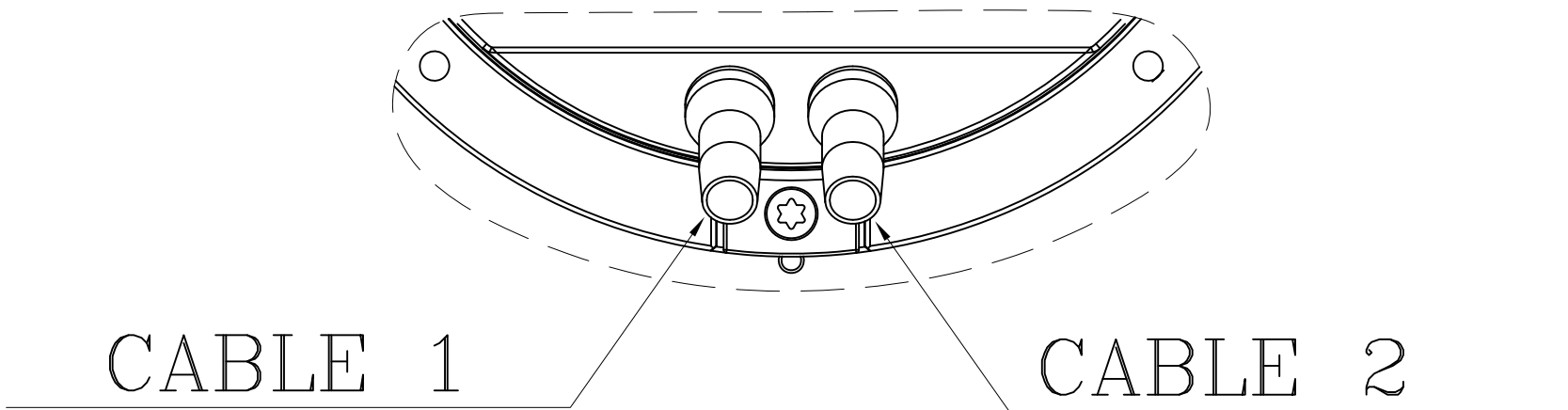
NOTE:

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

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6. DEFINITION OF CABLE:

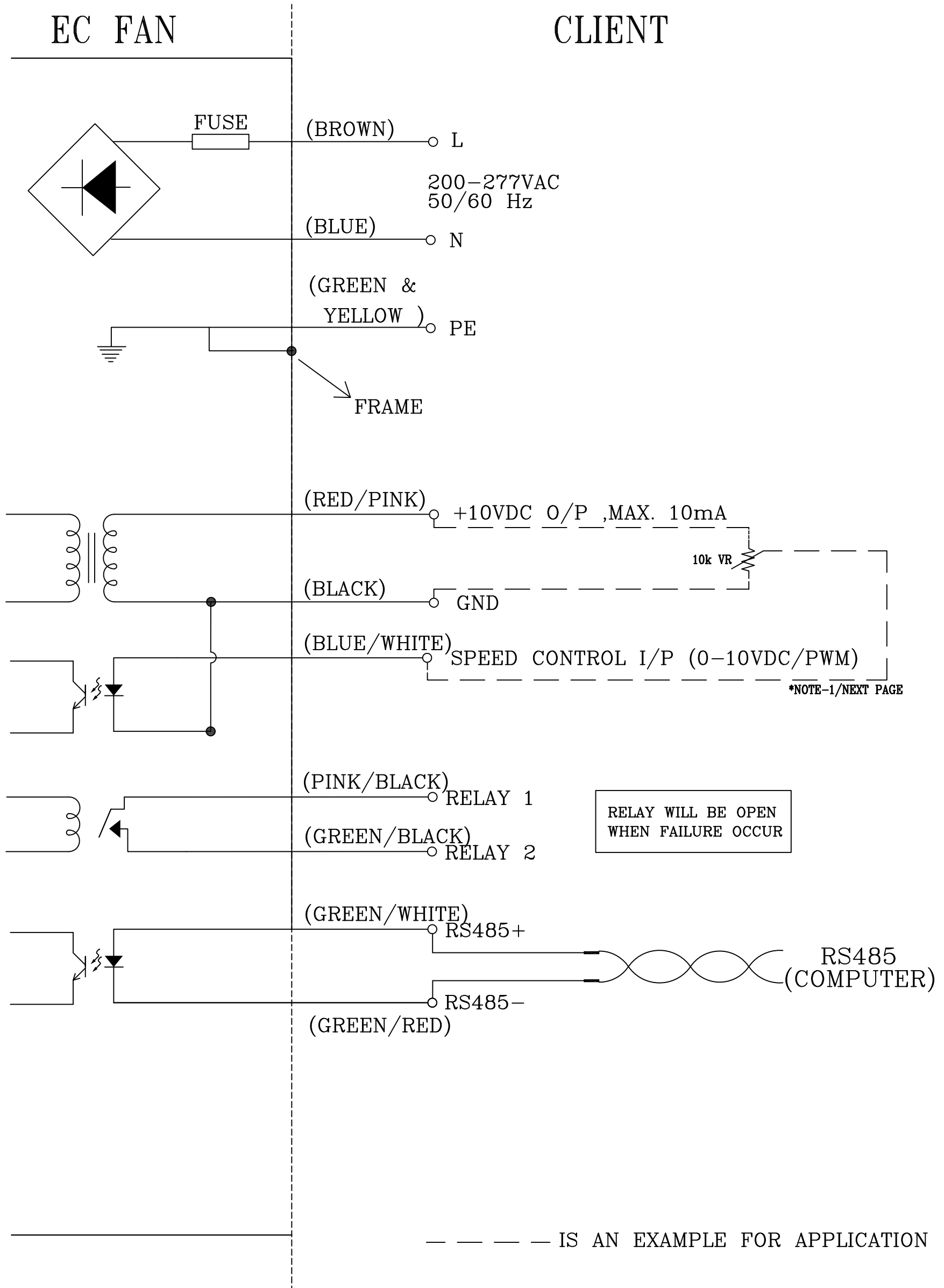


CABLE	COLOR	FUNCTIONS
1	BROWN	L
1	BLUE	N
1	GREEN/YELLOW	EARTH
2	RED/PINK	10V+
2	BLUE/WHITE	PWM
2	BLACK	GND
2	GREEN/RED	RS485-
2	GREEN/WHITE	RS485+
2	PINK/BLACK	RELAY 1
2	GREEN/BLACK	RELAY 2

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7. LEAD WIRE CONNECTION:



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8. FUNCTION CONTROL: VOLTAGE CONTROL

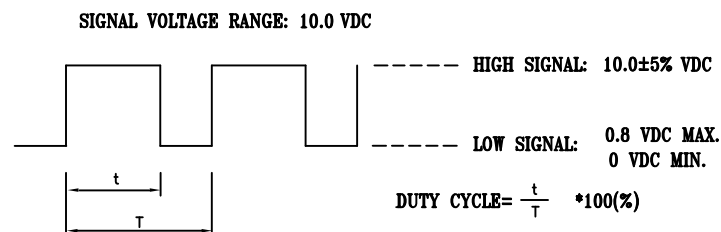
\*NOTE-1: SPEED CONTROL SIGNAL

A. VOLTAGE CONTROL

- CONTROL VOLTAGE RANGE SHALL BE 0-10 VDC.
- VOLTAGE AT 10 VDC 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	2100



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9. CONTROL LEVEL & SPEED CURVE:

