Specification For Approval

Customer : _____

Description : EC FAN

Customer Part No. : _____ Rev : _____

Delta Model No. : GTW025FUC16R Rev : 01

Safety Model No. : GTW025FUC16

Sample Issue No. : _____

Sample Issue Date : 03/06/2017

Please send one copy of this specification back after you signed approval for production pre-arrangement

Approved by : _____

Date : _____

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Taoyuan City, 33341, Taiwan FAX : +886-3-359-1991

Smarter. Greener. Together.

GTW025FUC16R

Electronically Commutated (EC) Fan

Axial Fan

253 x 253 x 158 mm

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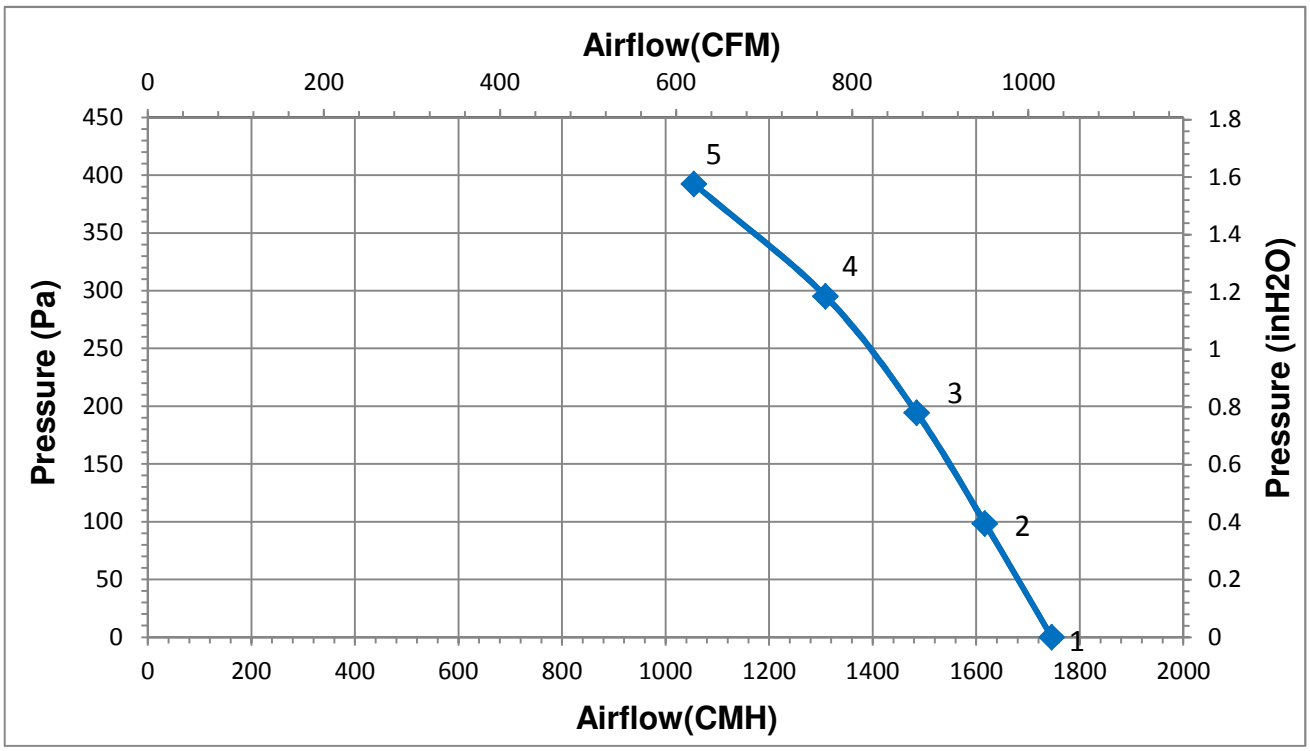
Technical features

Input Side	
Nominal Voltage	1~ 230Vac 50/60Hz
Input Source	1~ 200Vac - 277Vac
Power @ Free air	288 W
Power @ Max. load	360 W
Output Side	
Speed (RPM)	3800
Qmax. (CMH / CFM)	1746 / 1028
Pmax. (Pa / inAq)	392.4 / 1.575
Noise (dB-A) @ Qmax.	76.5
Functions	
Passive power factor correction	
Control input 0~10VDC / PWM pattern.	
Output +10V_{DC} (±10%), max. 10mA.	
RS485 control bus	
Alarm relay, Locked rotor protection, Soft start.	
Voltage / Current monitoring.	

Physical	
Rotation Direction	CCW, Seen on rotor
Material (Impeller / Frame)	Plastic/ Die-cast aluminum
Bearing system	Ball bearings
Weight (kg)	7.5
Electrical leads	Lead wire
Environmental	
Operating temperature range	-25 ~ +60 ℃
Storage temperature range	-40 ~ +70 ℃
Safety	
Safety	UL, cUL, TUV
IP Level	IP54
EMC	EN61000-6-1/3 , EN61000-3-2/3
Protection class	I
Insulation class	B
Leakage current	<= 3.5 mA
Motor protection	Over temperature protected
Life expectance	60,000 hrs at 40 ℃ / 15 ~ 65 %RH

NOTE : Delta reserves the right to change specifications and other product information without prior notice.

P & Q curves



Measure data:

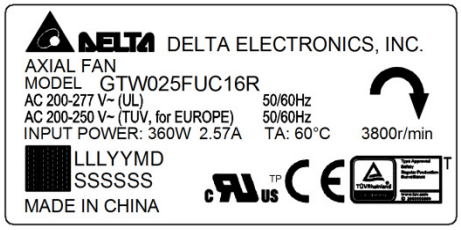
	P [Pa]	Q [CMH]	N [R.P.M.]	P1 [W]	I [A]	Lp [dB(A)]
1	0.0	1746	3800	288	1.93	76.5
2	98.4	1617	3800	290	1.99	
3	194.2	1485	3800	314	2.02	
4	295.2	1309	3800	317	2.10	
5	392.4	1055	3800	310	2.06	

Test Condition :

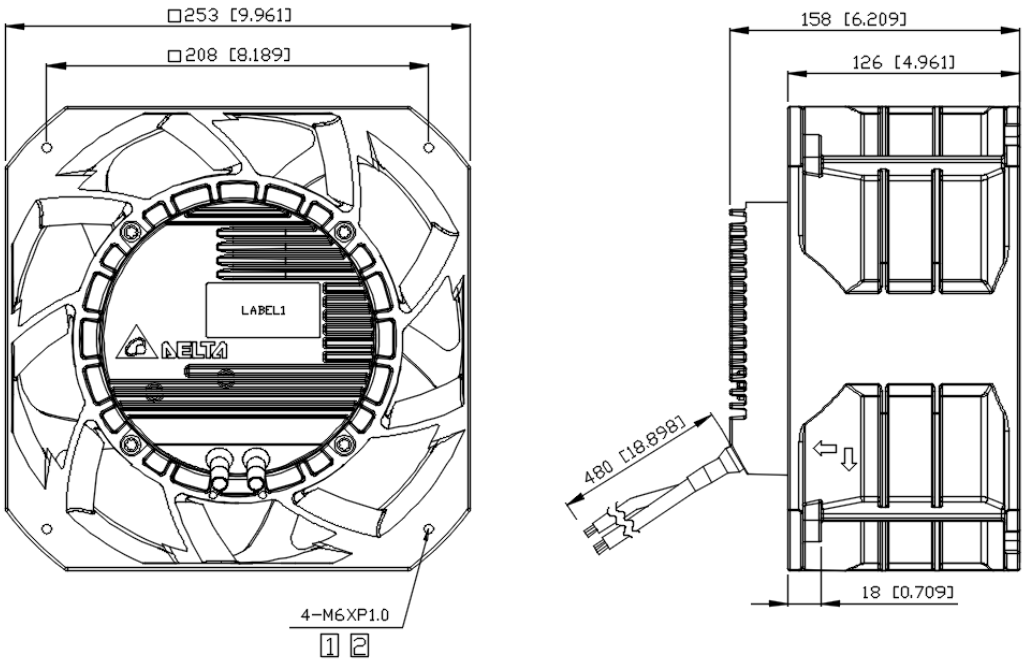
- Input Voltage: Nominal Voltage
- Temperature : Room Temperature
- Humidity : 65%RH
- Measured with inlet cone.
- Noise (Lp) is measured at a distance of one meter from the inlet side.

Dimension drawing

Label :



Fan :



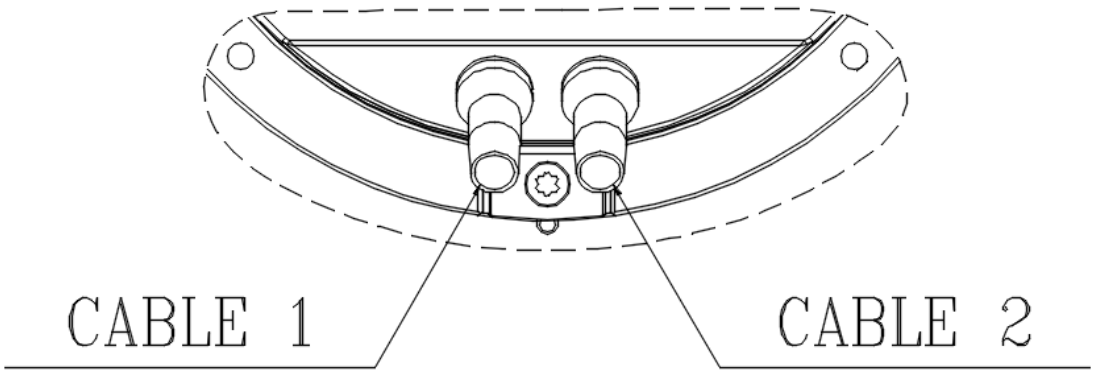
UNIT : mm[INCH]

Note:

1 M6 thread, through hole 18mm. Screw length min. 20mm.

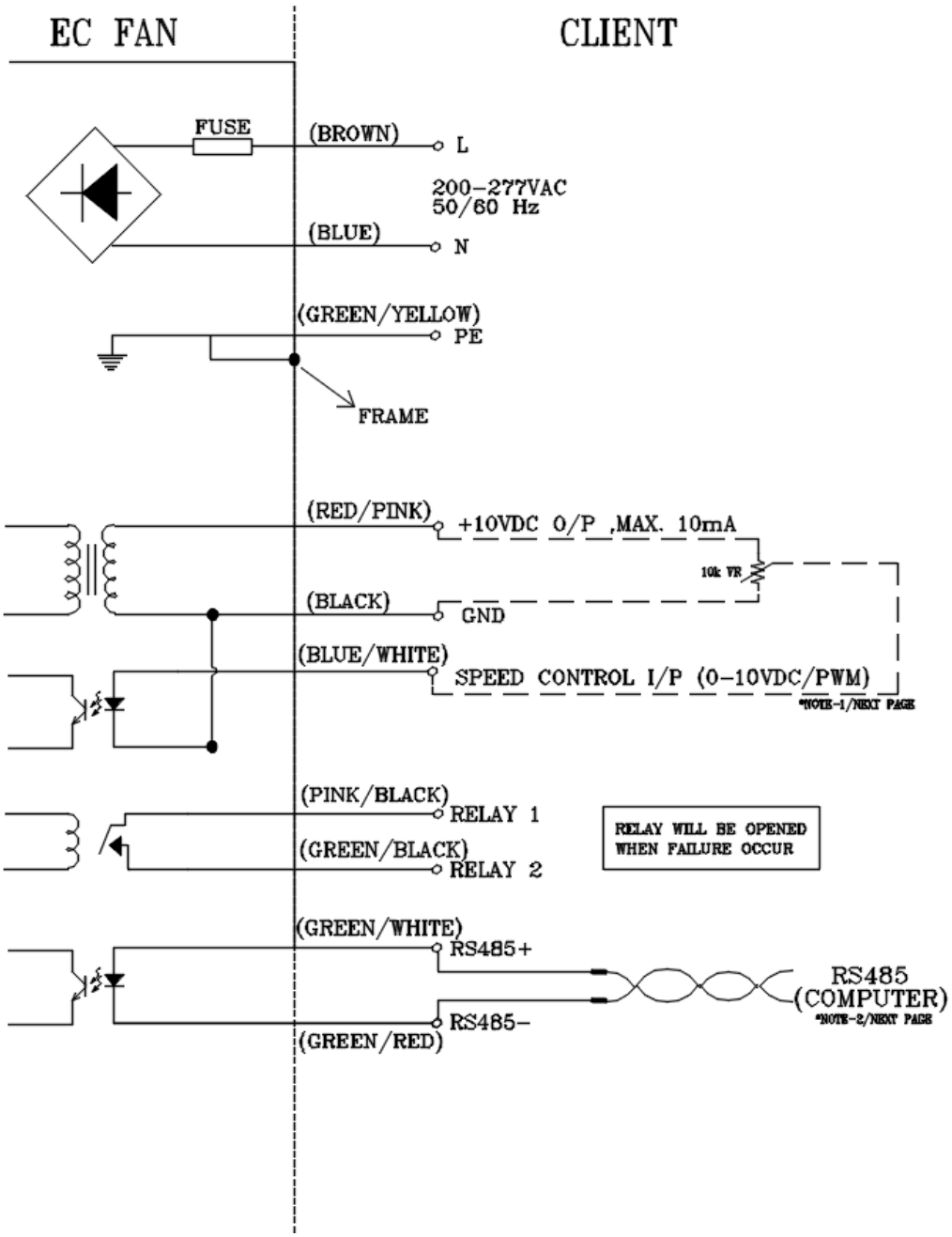
2 M6 screw tightening torque 58±1 Kgf-cm.

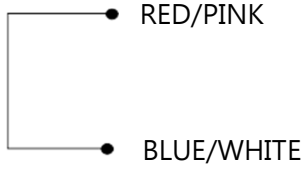
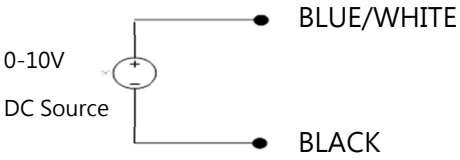
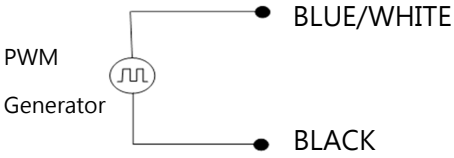
Definition of terminal block



Cable	Wire Type	Color	Functions
1	UL2464 18#AWG /3C TS –LF-	Brown	Line/ AC main (1~200-277VAC)
		Blue	Neutral/ AC main (1~200-277VAC)
		Green/Yellow	Protective Earth
2	UL 2464 MULTI-CONDUCT OR JACKETED CABLE	Red/Pink	+10VDC
		Blue/White	Speed control(0-10VDC/PWM)
		Black	GND
		Green/Red	RS485-
		Green / White	RS485+
		Pink / Black	Relay 1
		Green / Black	Relay 2

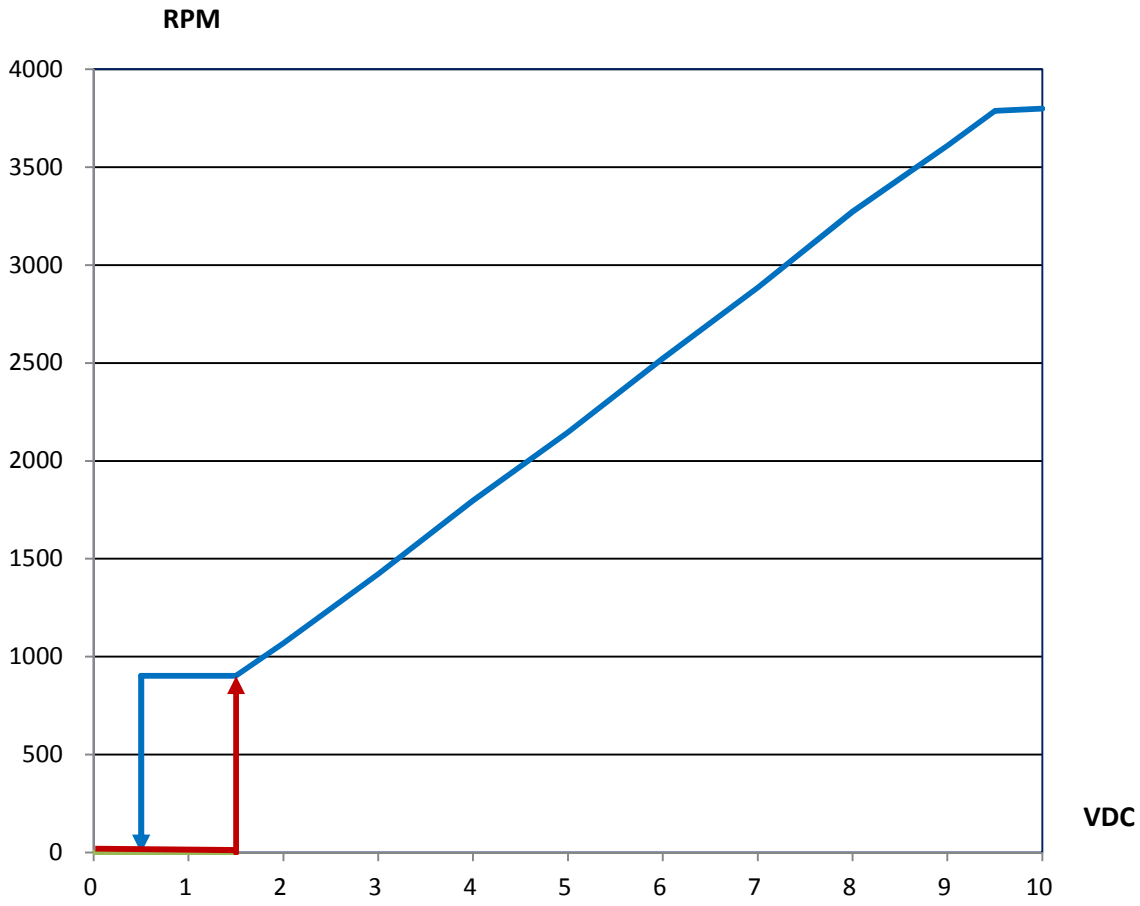
Lead wire connection:



Speed setting	
Full Speed  	**Short RED/PINK & BLUE/WHITE** Fan will run full speed.
Voltage Control  	**Use voltage source support 0~10VDC voltage** DC+ : connector BLUE/WHITE DC - : connector BLACK -Voltage higher than 1.5VDC, fan start up. -Voltage lower than 0.5VDC , fan stop
PWM Control  	**PWM duty control** PWM amplitude is 10VDC(±5%) Frequency Range is 100Hz ~ 100kHz -PWM duty higher than 15%, fan start up。 -PWM duty lower than 5%, fan stop。

Signal function	
RS485 control function	**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.
Voltage control	The speed comparison will control level Voltage (V) / PWM (%) / Speed (RPM) (REF) 0 / 0 / 0 9.5 / 95 / 3800
Alarm state	**Relay 1 and Relay 2 Will be Open with Failure.**

Control Voltage VS. RPM Curve



Voltage(VDC) , PWM duty (%)

Voltage	0	0.5	1	1.5	2	3	4	5	6	7	8	9	10	VDC
PWM duty	0	5	10	15	20	30	40	50	60	70	80	90	100	%