



Specification For Approval

Customer : _____
Description : _____ EC FAN _____
Customer Part No. : _____ N/A _____ Rev : _____
Delta Model No. : _____ GTW025FUC16 _____ Rev : 01 _____
Safety Model No. _____ GTW025FUC16 _____
Sample Issue No. : _____
Sample Issue Date : _____ 10/26/2026 _____

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

Approved by : _____

Date : _____

Electronically Commutated (EC) Fan

Axial Fan

253 x 253 x 158 mm



GTW025FUC16 Delta Datasheet
sales@fansco.com
www.fansco.com



Technical features

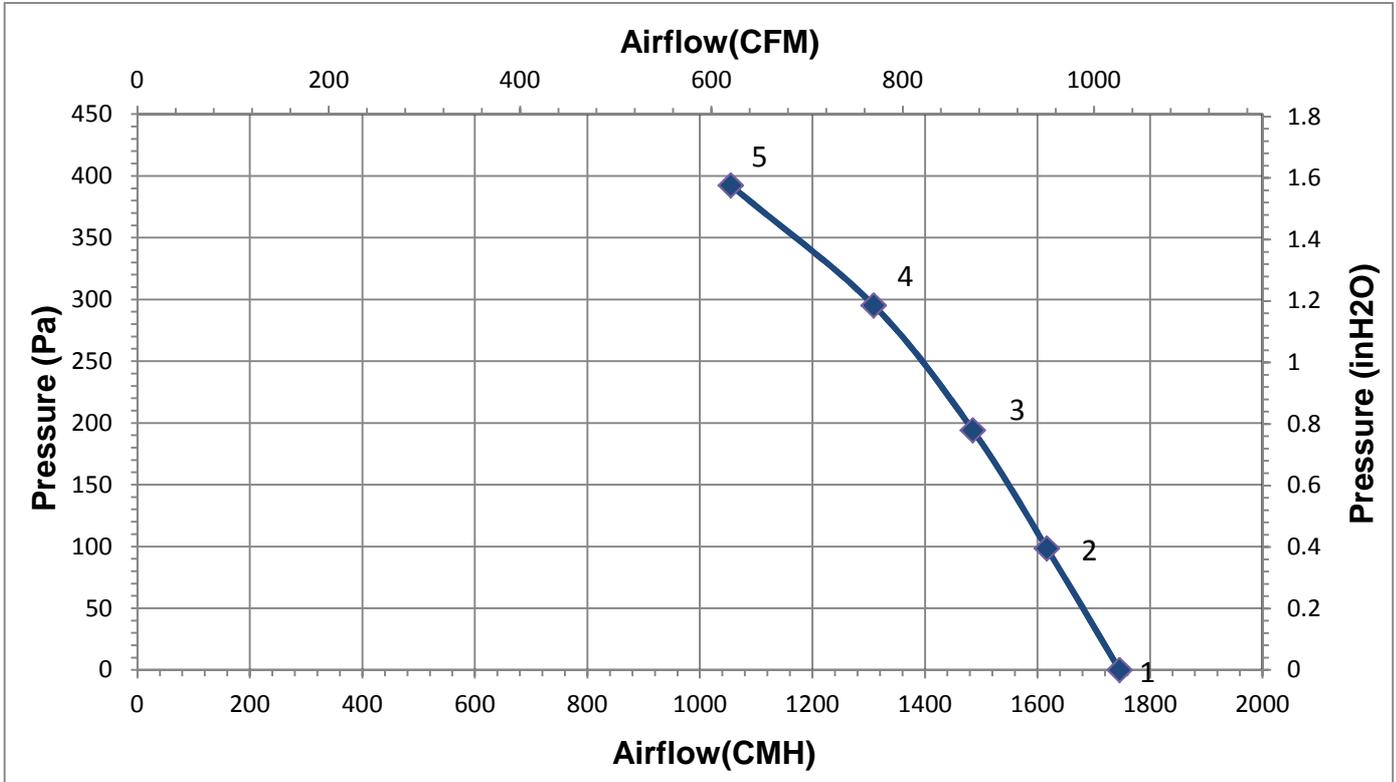
| Input Side | |
|--|--------------------|
| Nominal Voltage | 1~ 230Vac 50/60Hz |
| Input Source | 1~ 200Vac - 277Vac |
| Power @ Free air | 288 W |
| Power @ Max. load | 360 W |
| Output Side | |
| Speed (RPM) | 3800 |
| Qmax. (CMH / CFM) | 1746 / 1028 |
| Pmax. (Pa / inAq) | 392.4 / 1.575 |
| Noise (dB-A) @ Qmax | 76.5 |
| Functions | |
| Control input 0-10VDC or PWM pattern. | |
| Passive power factor correction | |
| Alarm relay, Lock rotor protection, Soft start | |
| Fan speed signal output | |
| | |
| | |
| | |
| | |
| | |

| Physical | |
|-----------------------------|-----------------------------------|
| Rotation Direction | CCW, seen on rotor |
| Material (Impeller / Frame) | Plastic / Steel |
| Bearing system | ball bearings |
| Weight (kg) | 7.5 |
| Electrical leads | Lead Wire |
| Environmental | |
| Operating temperature range | -25 ~ +60 °C |
| Storage temperature range | -40 ~ +70 °C |
| 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 expectancy | 60,000 hrs at 40 °C / 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:

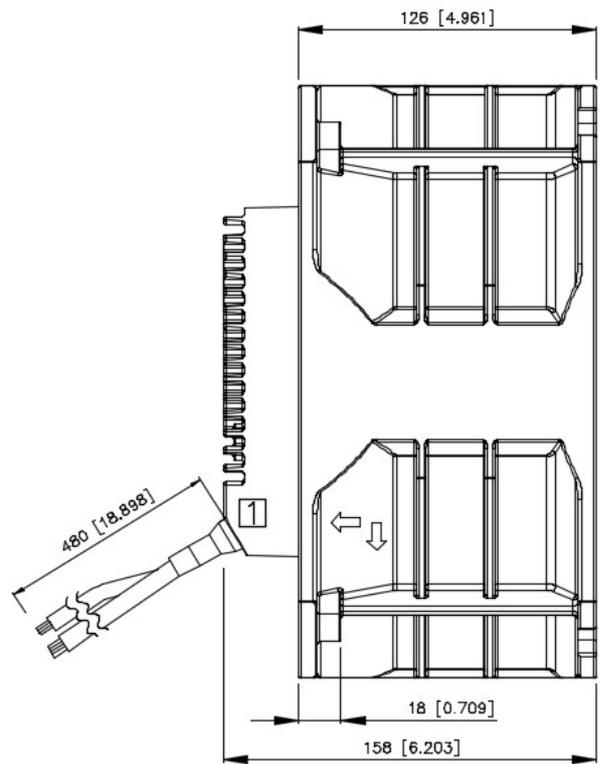
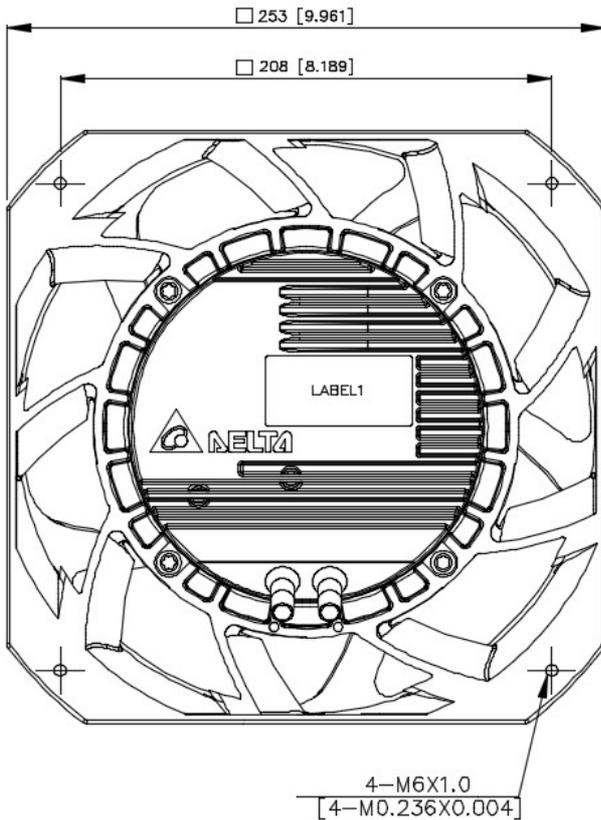
- Input Voltage: Nominal Voltage
- Temperature : Room Temperature
- Humidity : 65%RH
- Measured without Fanguard
- Noise (Lp) is measured at a distance of one meter from the outlet side.

Dimension drawing

Label :



Fan :

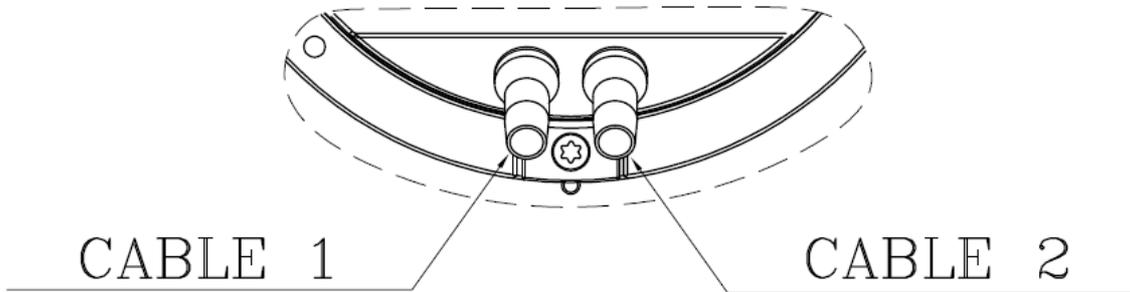


UNIT: mm [INCH]

Note:

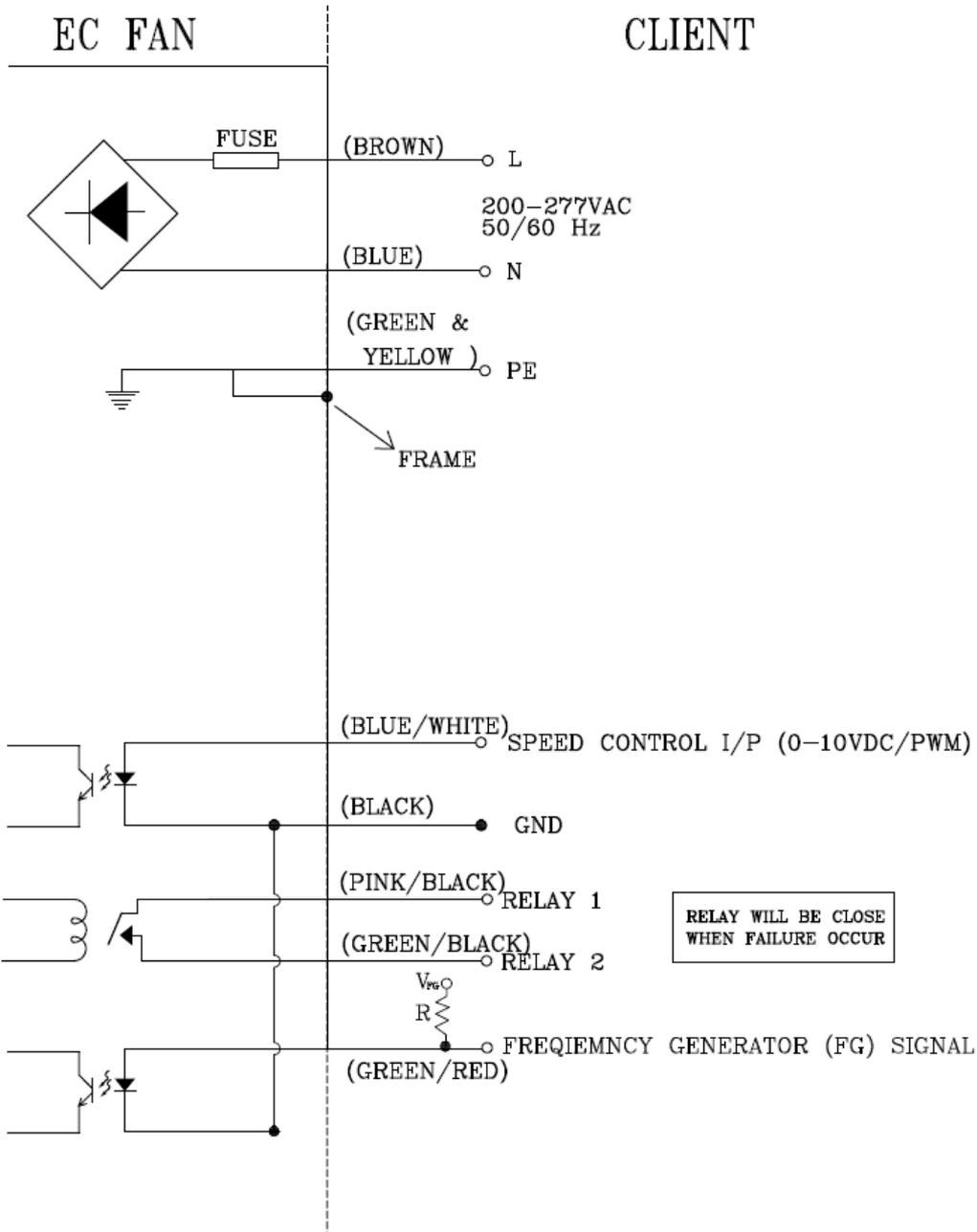
- 1. CABLE DIAMETER : ϕ 4.5~ ϕ 7.5mm

Definition of terminal block



| Cable | Color | Functions |
|-------|----------------|----------------------------------|
| 1 | Brown | Line/ AC main (1~ 200-277VAC) |
| 1 | Blue | Neutral/ AC main (1~ 200-277VAC) |
| 1 | Green / Yellow | Protective Earth |
| 2 | Red/Pink | ----- |
| 2 | Blue/White | Speed control(0-10VDC/PWM) |
| 2 | Black | GND |
| 2 | Green/Red | Frequency Generator Signal (FG) |
| 2 | Green / White | ----- |
| 2 | Pink / Black | Relay 1 |
| 2 | Green / Black | Relay 2 |

Lead wire connection:





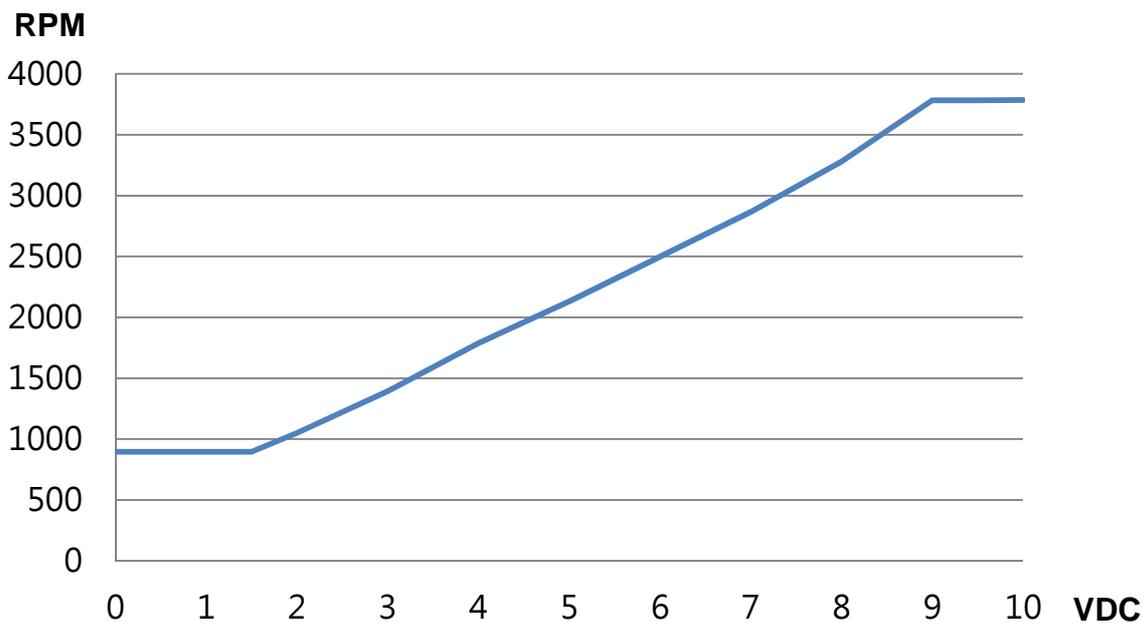
| Speed setting | |
|---|---|
| <p>Full Speed</p> <p>Red/Pink</p> <p>Blue/White</p> | <p>Short Red/Pink & Blue/White</p> <p>Fan will run full speed.</p> |
| <p>Voltage Control</p> <p>0-10V DC Source</p> <p>Blue/White</p> <p>Black</p> | <p>Use voltage source support 0~10VDC voltage</p> <p>DC+ : connector Blue/White</p> <p>DC - : connector Black</p> <p>-Voltage lower than 1.5V, fan will be to initial mode. (900 RPM)</p> |
| <p>PWM Control</p> <p>PWM Generator</p> <p>Blue/White</p> <p>Black</p> | <p>PWM duty control</p> <p>PWM amplitude is 10VDC(±5%)</p> <p>Frequency Range is 100Hz ~ 100kHz</p> <p>-PWM duty lower than 15% , fan will be to initial mode. (900 RPM)</p> |

| Signal function | | | | | | | |
|-------------------------------|---|-------------|------------------------|-----------------------|------------------------|-----|------|
| <p>Voltage control</p> | <p>The speed comparison will control level</p> <table border="1"> <thead> <tr> <th>Voltage (V)</th> <th>Speed (RPM) (REF)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>900</td> </tr> <tr> <td>9.5</td> <td>3800</td> </tr> </tbody> </table> | Voltage (V) | Speed (RPM) (REF) | 0 | 900 | 9.5 | 3800 |
| Voltage (V) | Speed (RPM) (REF) | | | | | | |
| 0 | 900 | | | | | | |
| 9.5 | 3800 | | | | | | |
| <p>FG</p> | <p>$V_{CE(sat)} = 0.7V \text{ MAX.}$ $V_{FG} = 20.0V \text{ MAX.}$</p> <p>$I_C = 2mA \text{ MAX.}$ $R \geq V_{FG} / I_C$</p> <p>Frequency generator waveform</p> <p> $V_{FG} \pm 5\%$ $0.7V \text{ MAX.}$ </p> <p> RUNNING BLADE LOCKED RUNNING </p> <table border="1"> <tr> <td>$N=R.P.M$</td> <td>1 PULSE PER REVOLUTION</td> </tr> <tr> <td>$TS=60/N(\text{SEC})$</td> <td>$T1=T2=1/2 \text{ TS}$</td> </tr> </table> | $N=R.P.M$ | 1 PULSE PER REVOLUTION | $TS=60/N(\text{SEC})$ | $T1=T2=1/2 \text{ TS}$ | | |
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Control Voltage VS. RPM Curve

| Voltage(V) | PWM Duty(%) | Speed R.P.M.(ref.) |
|------------|-------------|--------------------|
| 0.0 | 0 | 900 |
| 9.5 | 95 | 3800 |



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 | % |