

General Specifications

Motor Type:

DC Brushless Three Phase Motor

Motor Protection:

Overload Protection/ Locked Rotor Protection / Polarity Protection (Motor withstands reverse connection for positive and negative leads.)

Insulation Resistance:

10MΩ or over with a DC 500V Megger

Dielectric Withstand Voltage:

AC 500V 1min

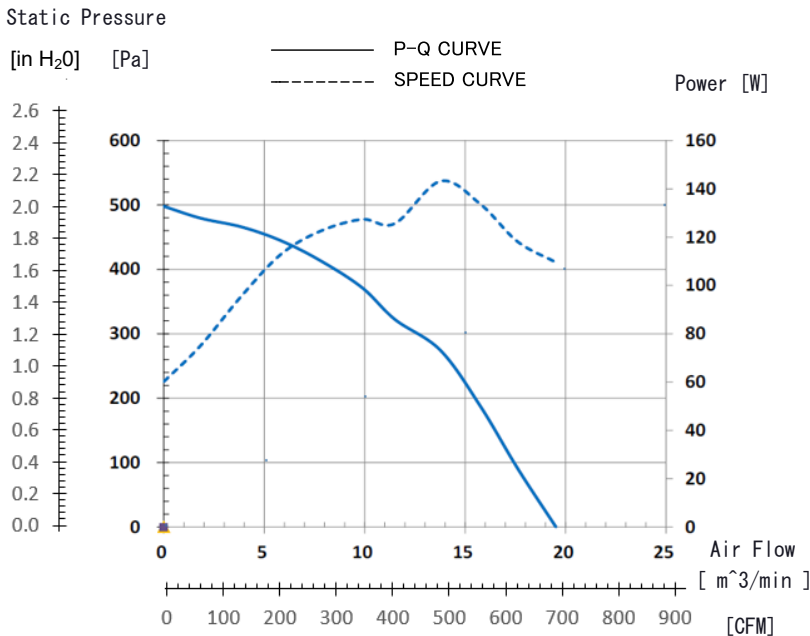
Allowable Ambient Temperature Range:

-30°C ~ + 70°C (Operating)
 -40°C ~ + 80°C (Storage)
 (non-condensing environment)



**For reference only. Please see fan outline for details*

Characteristic Curves



Features

- High performance centrifugal fan with four wires and PWM with tach signal
- Efficient motor technology, high torque, and aerodynamic impeller design
- Energy saving, low vibration, and increased life expectancy
- Outfitted with NMB precision machined ball bearings for long life
- High pressure and air flow that can be used in servers, data centers, or telecommunications

Life Expectancy L10

70,000 Hours at 40°C

**Fan life expectation is based on free air operation at 40°C, rated voltage, and indoor benign lab environment*

**1: Values in Free Air*

Specifications

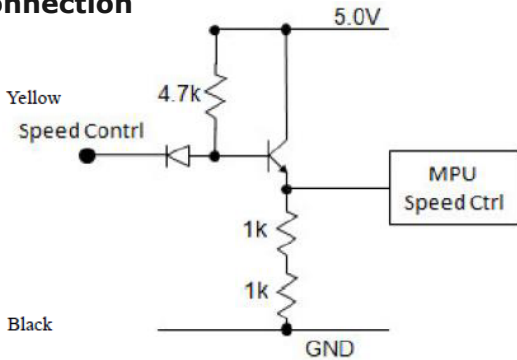
MODEL	Rating Voltage	Operating Voltage	Current		Input Power		Speed	Max. Air Flow		Max. Static Pressure		Noise	Mass
	(V)	(V)	Avg (A)*1	Max (A)*1	Avg (W)*1	Max (W)*1	RPM	(CFM)	(m³/min)	(in H ₂ O)	(Pa)	(dB)*1	(kg)
F225H1-092-D0720	48	36 to 72	2.0	3.3	96	158.4	2650	689	19.5	2.0	498	70	1.8

PWM and Tach Output Centrifugal DC Fan F225H

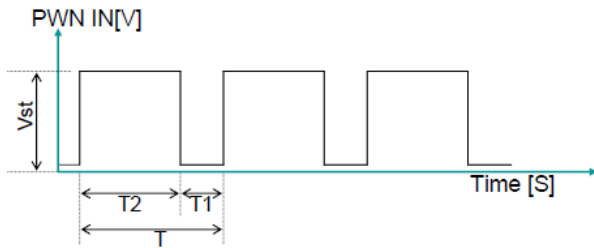


PWM Specifications

Connection



Speed control signal definition



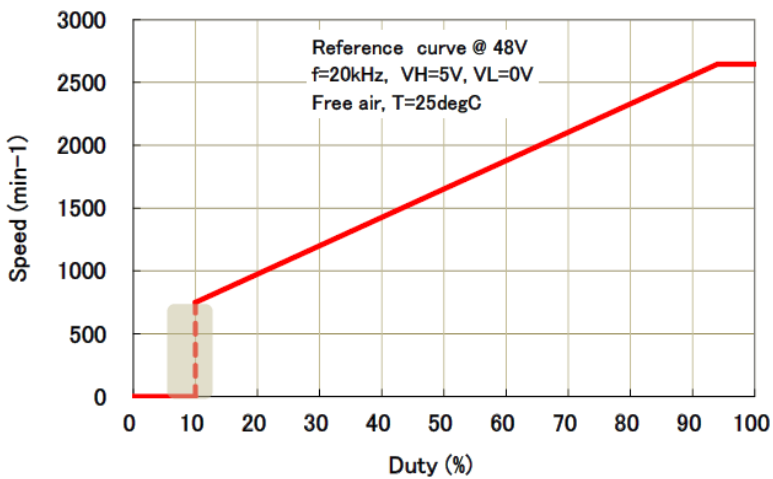
$$\text{Duty Rate} = (T2/T) \times 100 [\%]$$

$$Vst = 5 [V]$$

$$\text{Frequency} = 300 [Hz] \text{ to } 50 [kHz]$$

If the SC signal is open circuit, the fan will rotate SCDuty=100% speed.

PWM Characteristic Curve

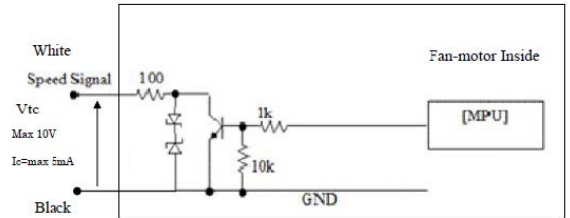


Start up duty: min 20%

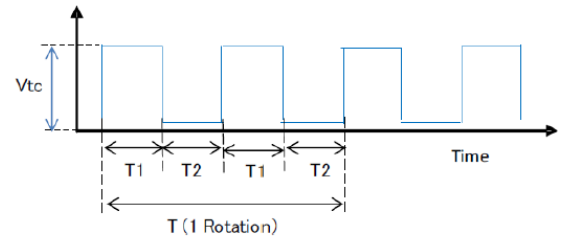
PWM Curve at free air and rated voltage.

TACHO Specifications

Connection



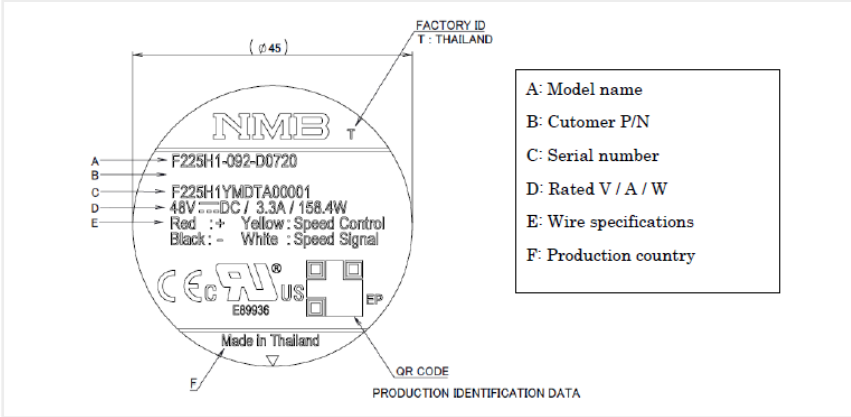
Speed signal



Pulse output / 1 Rotation, $T1 = T2 (50\% \pm 10\% \text{ Duty})$

Outlines

(Name Plate)



Materials

Sleeve Tube: PVC TUBE AH-6 AWG2

Impeller: Plastic (PA66 94V-0)

Bearing: Steel Ball Bearing

Lead Wire: UL1430 AWG18 for Red, Black, White, and Yellow

(+)/Red
(-)/Black
(TACH)/White
(PWM)/Yellow

(Outline)

