

General Specifications

Motor Type: DC Brushless Motor

Motor Protection:

Auto Restart/Polarity Protection
(Motor withstands reverse connection for positive and negative leads.)

Insulation Resistance:

10M Ω or over with a DC500V Megger

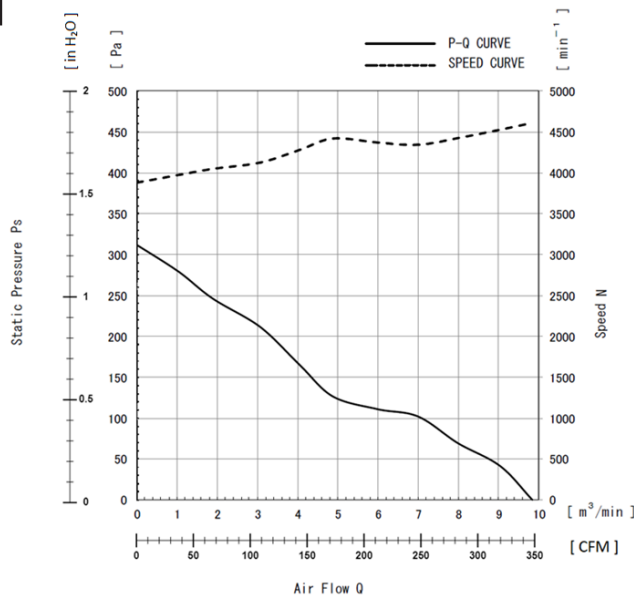
Dielectric Withstand Voltage:

AC 700V 1s or 500V 1min

Allowable Ambient Temperature Range:

-10°C ~ +70°C (Operating)
-40°C ~ +70°C (Storage)
(non-condensing environment)

Characteristics Curves



IP Rated Fan Benefits & Applications

IP 68/69K

NMB offers the industry's highest Ingress Protection (IP) rated cooling fans. IP69K fans provide dust tight protection, and safeguard against powerful, high temperature, water jets for outdoor applications and other harsh environments. NMB fans are designed with NMB precision machined ball bearings with stainless steel outer ring and stainless steel or ceramic balls, assuring long life and high reliability.

Benefits

- IP69K rating per IEC 60529 standard
- Long life and high reliability with NMB precision ball bearings
- Open Collector Tacho Signal output for fan speed

Applications

- Outdoor Applications
- Factory Automation
- Food Processing
- Refrigeration
- LED Lighting
- Inverters
- Telecomm
- Horticulture

Life Expectancy L10

25°C 100,000 Hours

Specifications

MODEL	Rated Voltage	Operating Voltage	Current		Input Power		Speed (min ⁻¹)*1	Max. Air Flow		Max. Static Pressure		Noise (dB)*1	Mass (g)
	(V)	(V)	Avg	Max	Avg	Max		(CFM)	(m³/min)	(inH ₂ O)	(Pa)		
	(V)	(V)	(A)*1	(A)*1	(W)*1	(W)*1		(CFM)	(m³/min)	(inH ₂ O)	(Pa)		
17250VE-48R-GT-00	48	38.0~52.8	0.90	1.10	43.20	52.80	4600	346.08	9.8	1.25	312	62.0	950

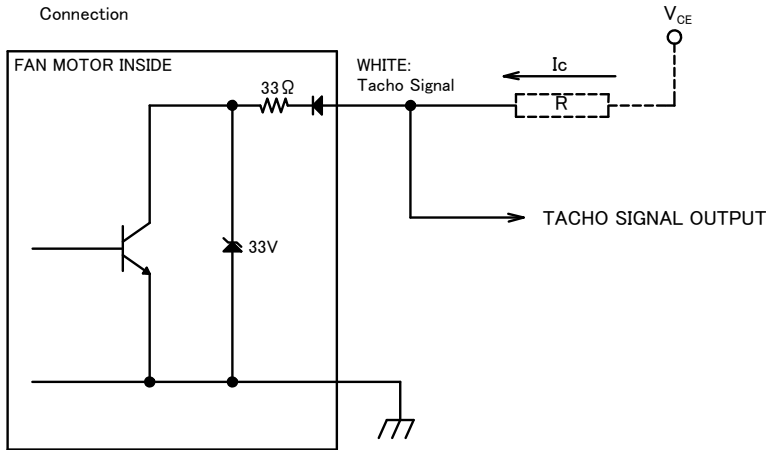
*1: Values in Free Air

TACHO Specifications

TACHO SIGNAL

1. OUTPUT CIRCUIT : OPEN COLLECTOR)
2. SPECIFICATION
 $V_{CE} \text{ max} : +30\text{VDC}$
 $I_c \text{ max} : 5\text{mA}$ [$V_{CE(sat)/max} = 2\text{V}$]
 $T_a = 25^\circ\text{C}$

Connection

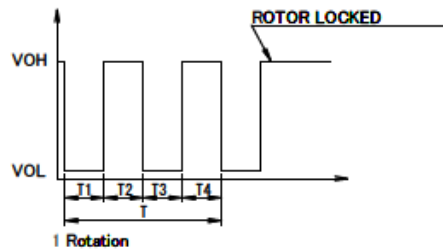


TACHO SIGNAL CIRCUIT

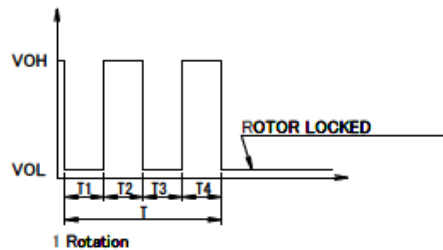
3. OUTPUT WAVEFORM: RATED VOLTAGE

OUTPUT SIGNAL VOLTAGE

3-1 Case-1



3-2 Case-2

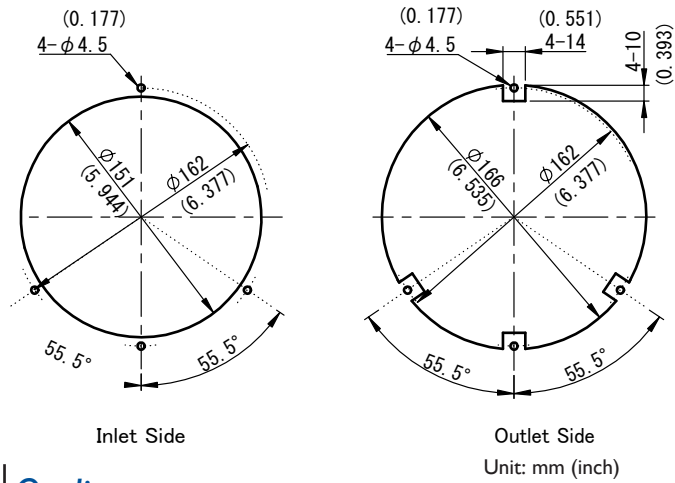


- 1) When the rotor is locked at V_{OH} position of signal, signal keeps V_{OH} position.
- 2) When the rotor is locked at V_{OL} position of signal, signal keeps V_{OL} position.
- 3) $T = T_1 + T_2 + T_3 + T_4 = 60^\circ / m = 1 \text{ rotation}$

$m : \text{min}^{-1}$

Tacho Duty Cycle = $50\% \pm 10\%$

Panel Cut-Outs



Materials

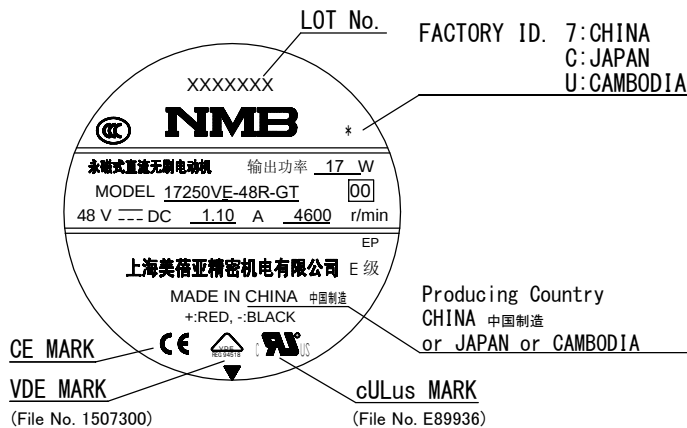
Casing : Aluminum (Black Paint)
 Impeller : Plastic (Black)
 Bearing : Ball Bearing
 Lead Wire : UL3443 AWG22, 24 or UL10368 AWG22, 24

AWG 22: (+) : Red (-) : Black

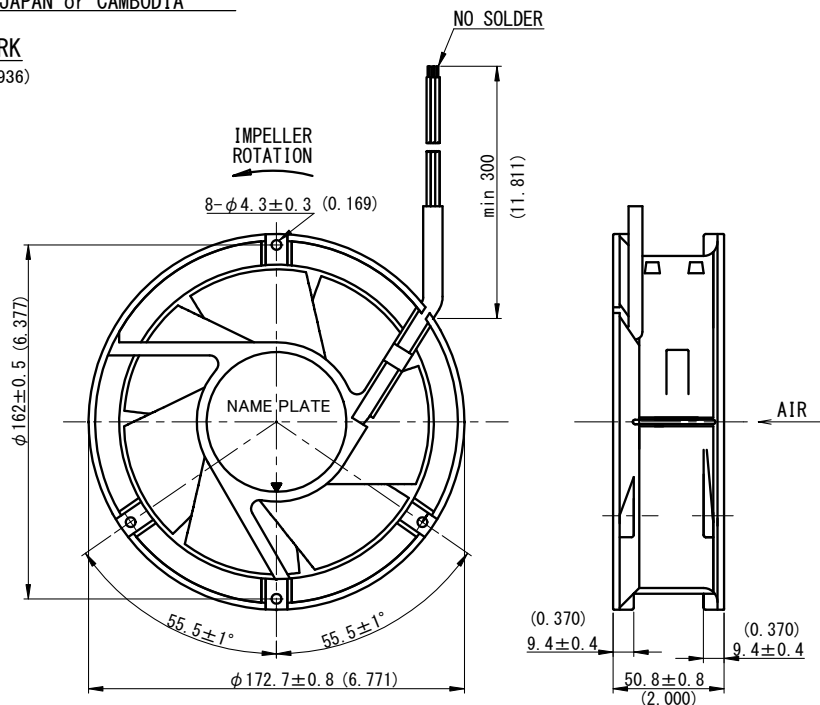
AWG 24: Tach: White

Outline

Name Plate



Unit: mm (inch)



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