

## General Data

No.	Name	Parameter
1.1	Max Air Flow	3600 m <sup>3</sup> /h A type air outlet wind tunnel)
1.2	Max Static Pressure	100Pa A type air outlet wind tunnel)
1.3	Rated Speed	1550 r/min
1.4	Input Power	170W
1.5	Rated Voltage	230VAC
1.6	Operating Voltage	200~277 VAC
1.7	Start Voltage	≤199VAC
1.8	Rated Current	≤1.2A
1.9	Noise Level	≤65dB(A)
1.10	Direction	CCW (seen on rotor of motor)
1.11	Insulation Class	F
1.12	Withstand voltage	1500VAC 50Hz 10mA 60 s Voltage:1500VAC 50Hz Tripping current:10mA Time: 60 s
1.13	Insulation Resistance	500VDC ≥50MΩ Voltage:500VDC Resistance: ≥50MΩ
1.14	Electrical Protection	Undervoltage protection Overvoltage protection Overcurrent protection Locked rotor protection Automatic restart capability Soft start
1.15	Speed Control	0~10VDC & PWM

1.16	Grounding Resistance	$\leq 0.1\Omega$
1.17	IP Class	IP44
1.18	Signal Feedback	FG 1 FG sign:open-drain output, external pull-up resistor 1 pulses / R
1.19	Vibration	$\leq 4.6\text{mm/s}$
1.20		+10VDC
1.21	RoHS	RoHS All the material meets RoHS standard.

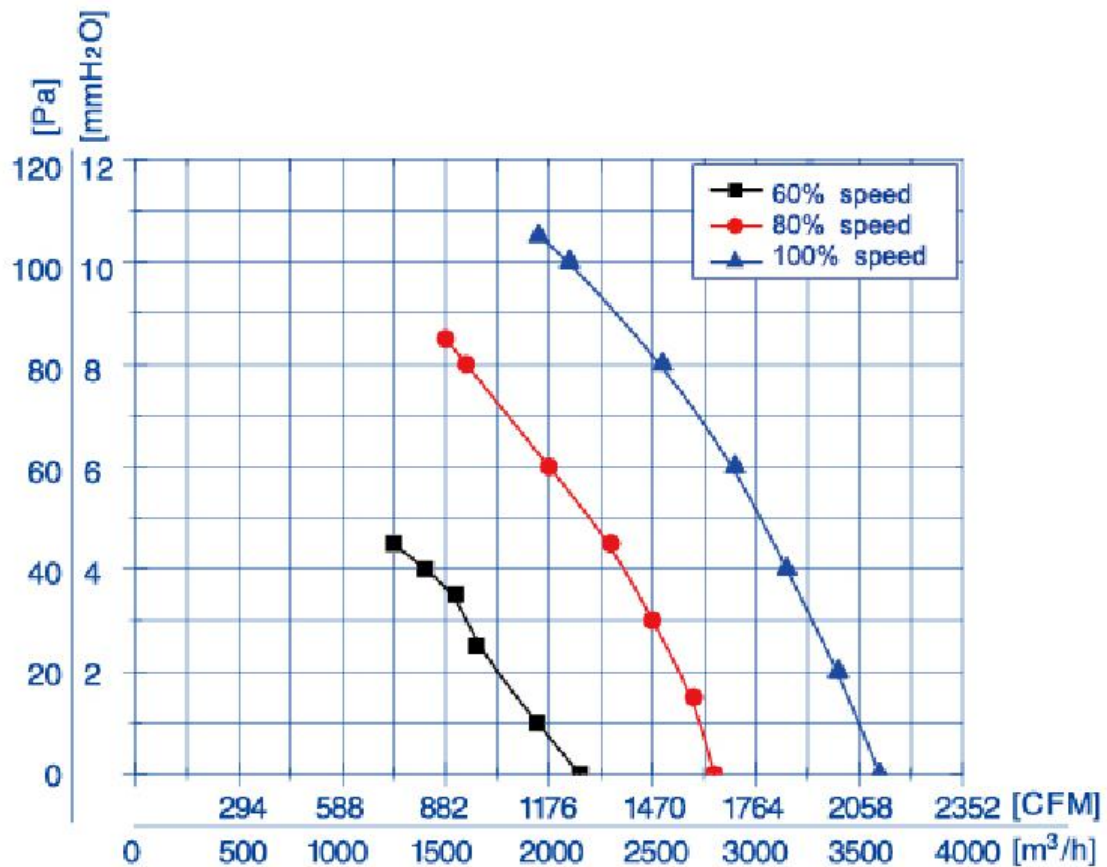
### Mechanical

No.	Name	Parameter
2.1	Dimension	$\Phi 458.5\text{mm} \times 138\text{mm}$ see dimension drawing)
2.2	Material of Blades	PP+25%GF
2.3	Number of Blades	5
2.4	Impeller Plate	/
2.5	Impeller Color	Black
2.6	Surface coat	Spray
2.7	Bearing	Ball bearings
2.8	Lead Wire	3×AWG#20
2.9	Control wire	4×AWG#20
2.10	Weight	4.4Kg
2.11	Package	Carton with shock- absorption material, put on pallet

## Operating Environment

No.	Name	Parameter
3.1	Operating Temperature	-25°C to 60°C
3.2	Storage Temperature	-40°C to 75°C
3.3	Operating Humidity	5% to 90% RH
3.4	Storage Humidity	5% to 95% RH

Performance curve



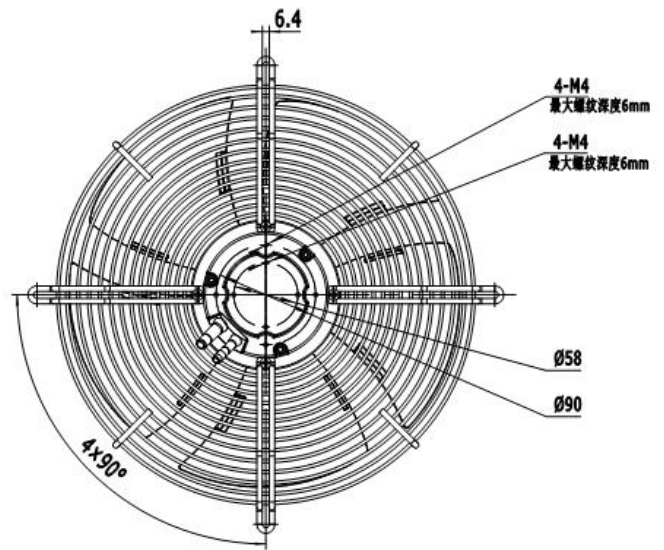
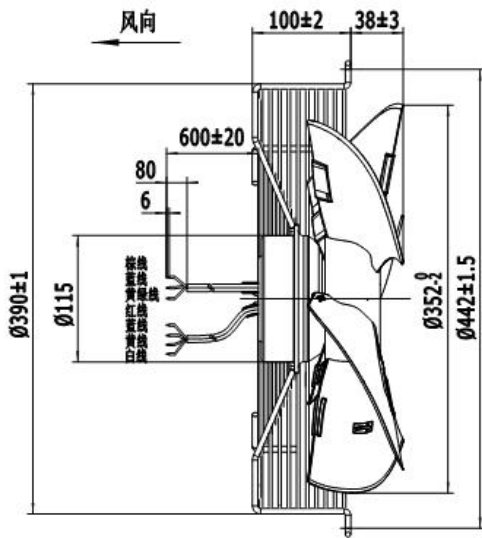
Testing Condition:

Input Voltage----230VAC

Temperature----Room temperature

Humidity----65%RH

### Outline Drawing

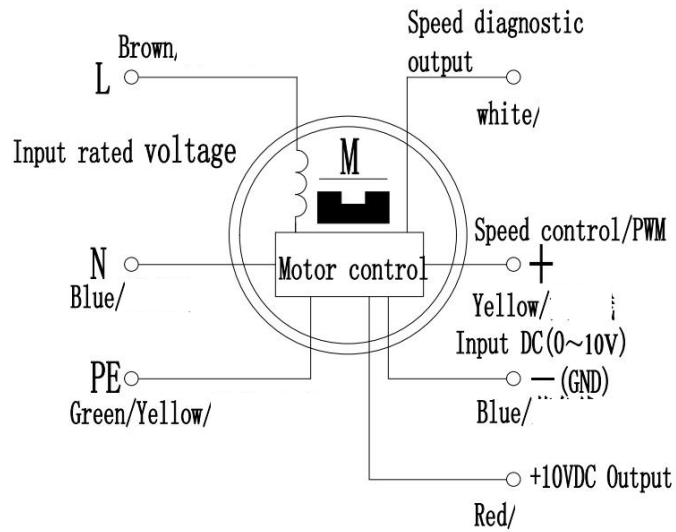


#### Note:

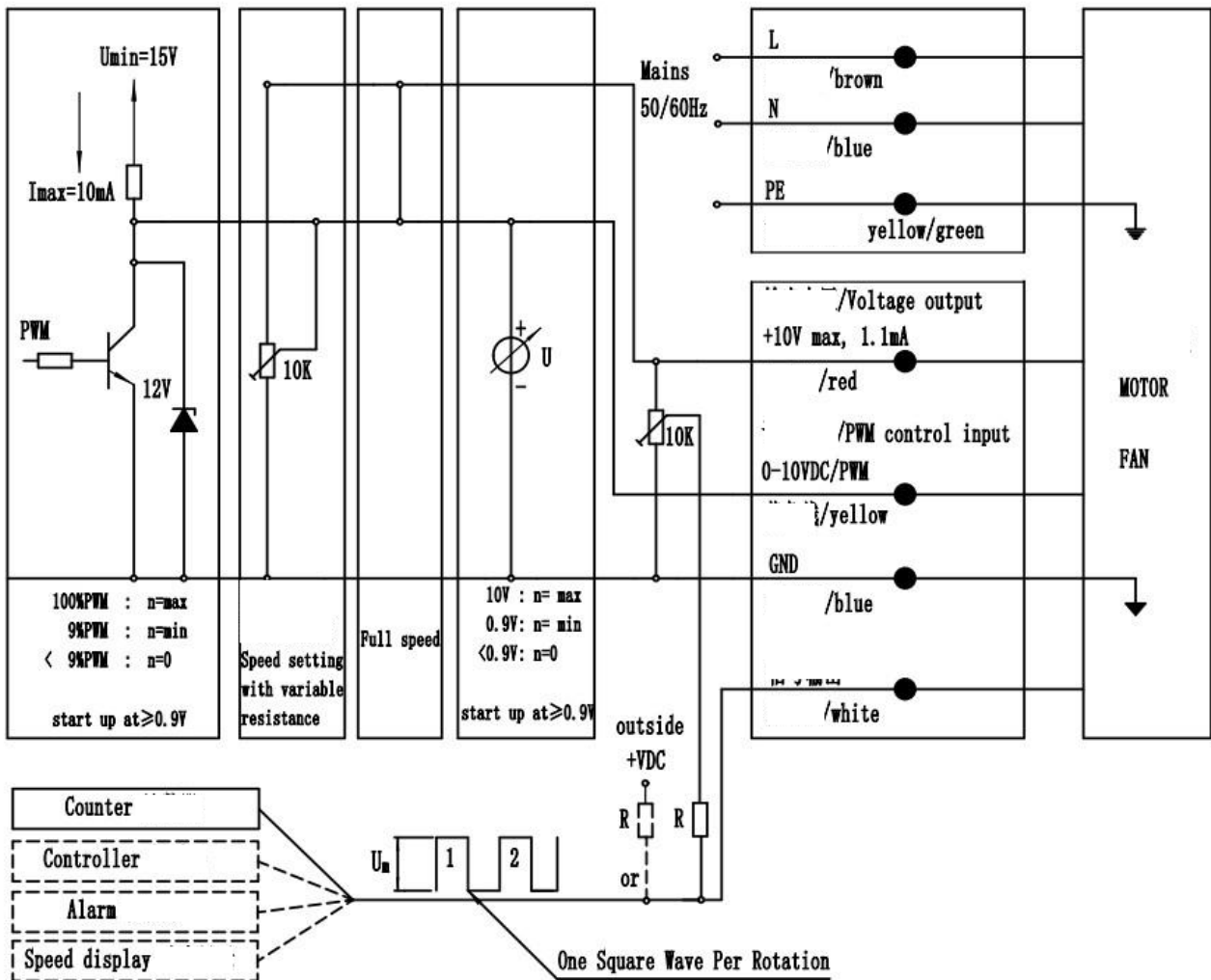
1. Lead wire:  $3 \times \text{AWG}\#20$   
 Brown: L  
 Blue: N  
 Yellow/Green: PE
2. Control wire:  $4 \times \text{AWG}\#20$   
 Red: +10VDC Output  
 Yellow: 0~10VDC/PWM  
 White: FG speed diagnostic output  
 Blue: GND
3. 4XM4 installation screws, max. depth 6mm;
4. Attachment: No.

### Connection Diagram

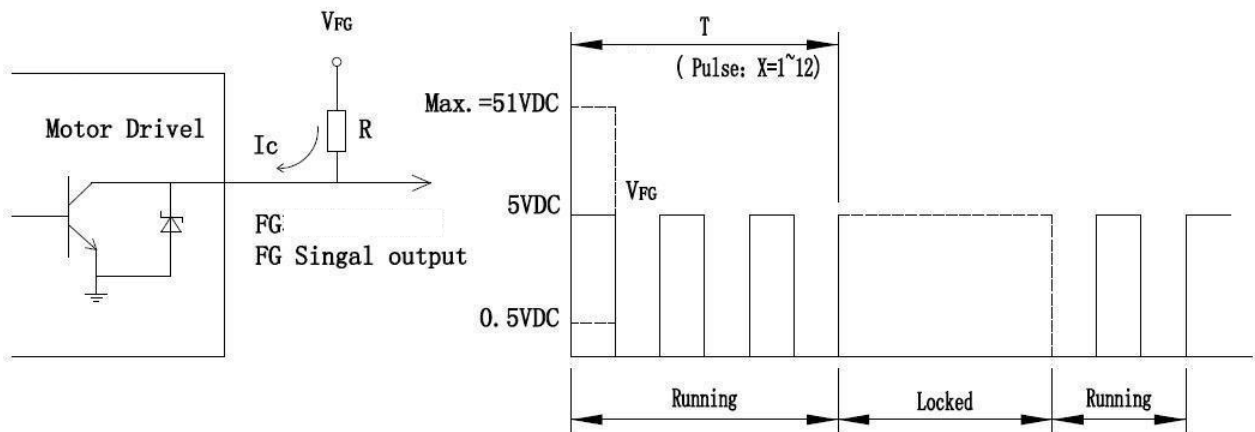
Motor connection diagram:



Interface Circuit:

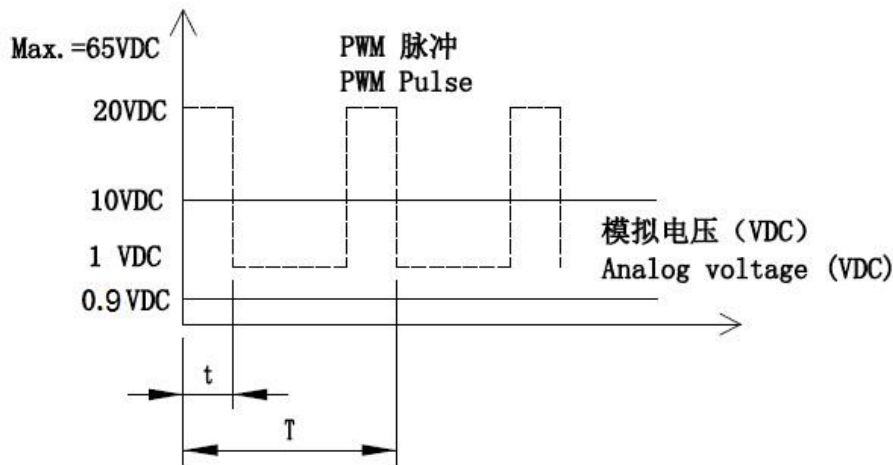


### FG signal connection diagram:



1. Output type: Open Collect.
2. R Design requirement:  
 $R \geq V_{FG}/I_c$ ,  $I_c=10\text{mA (Max.)}$ .  
 Normal:  $V_{FG}=5\text{VDC}$ ,  $R=1\text{k}\Omega$ .
3. The Max. pull-up voltage.  
 $V_{FG} = 51\text{VDC (Max.)}$ .
4. Pulse number: 1 PPR .
5. Frequency and Speed calculation:  
 $n=\text{RPM}$   
 $T=60/n$  (s)  
 $F=(1/T)*X=(n/60)*X$  (Hz)  
 $n=(60*F)/X$  ( r/min )

### Speed control signal diagram:



1. The speed control signal of support for 0.9~10VDC  
 Analog voltage pulse with PWM compatible.
2. Only need to full speed, speed wire (Yellow) can be directly connected with +10V (Red).

3. The maximum speed of voltage support up to 65VDC, 10VDC or more is running at full speed.

When adjust the speed using PWM, The voltage amplitude is 10VDC, adjusting the duty cycle from 0 to 100% for speed adjustment.