

LWBE3G190-072NS-16

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Model No.:	LWBE3G190-072NS-16
Version Number:	A0
Make :	Zhong
Review :	Jiang
Approvd :	Yao
Date:	2023.11.16

技术专用
朗伟电器

Version number	Notes Remarks	Reason content	Revised by	Date

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Nominal Data

Project1	Unit	Value
Nominal Voltage	[VAC]	230
Voltage Range	[VAC]	176~264
Frequency	[Hz]	50/60
Speed	[rpm]	4230±5%
Rated Current	[A]	1.16±10%
Rated Power	[W]	104±10%
Maximum Input Power	[W]	150±10%
Air Flow (Max)	[m3/h]	851
	[CFM]	501
Static Pressure (Max)	[Pa]	798
Noise Level (LpAin)	dB(A)	70
Max.Ambient Temp	°C	60
Min.Ambient Temp	°C	-25
Insulation Class		Class F
Protection Type		IP54
Work System		S1

Technical Features

Production Reference Standard	GB12350 《Safety requirements of small power motors》 JB/T10563 《technical specification for general purposes centrifugal fans》 EN60335-1 《Household and similar electrical appliances-safety》 ISO5801-1997 《Industrial fans-performance testing using standardized airways》 GB/T2888 《Methods of Noise Measurement for Fans Blowers Compressors and Roots Blowers》
Certification	CE ETL (UL 507:2017 Ed.10+R:27May2020, CSA C22.2#113:2018 Ed.11)
Environmental Protection	RoHS, Reach

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Technical Features

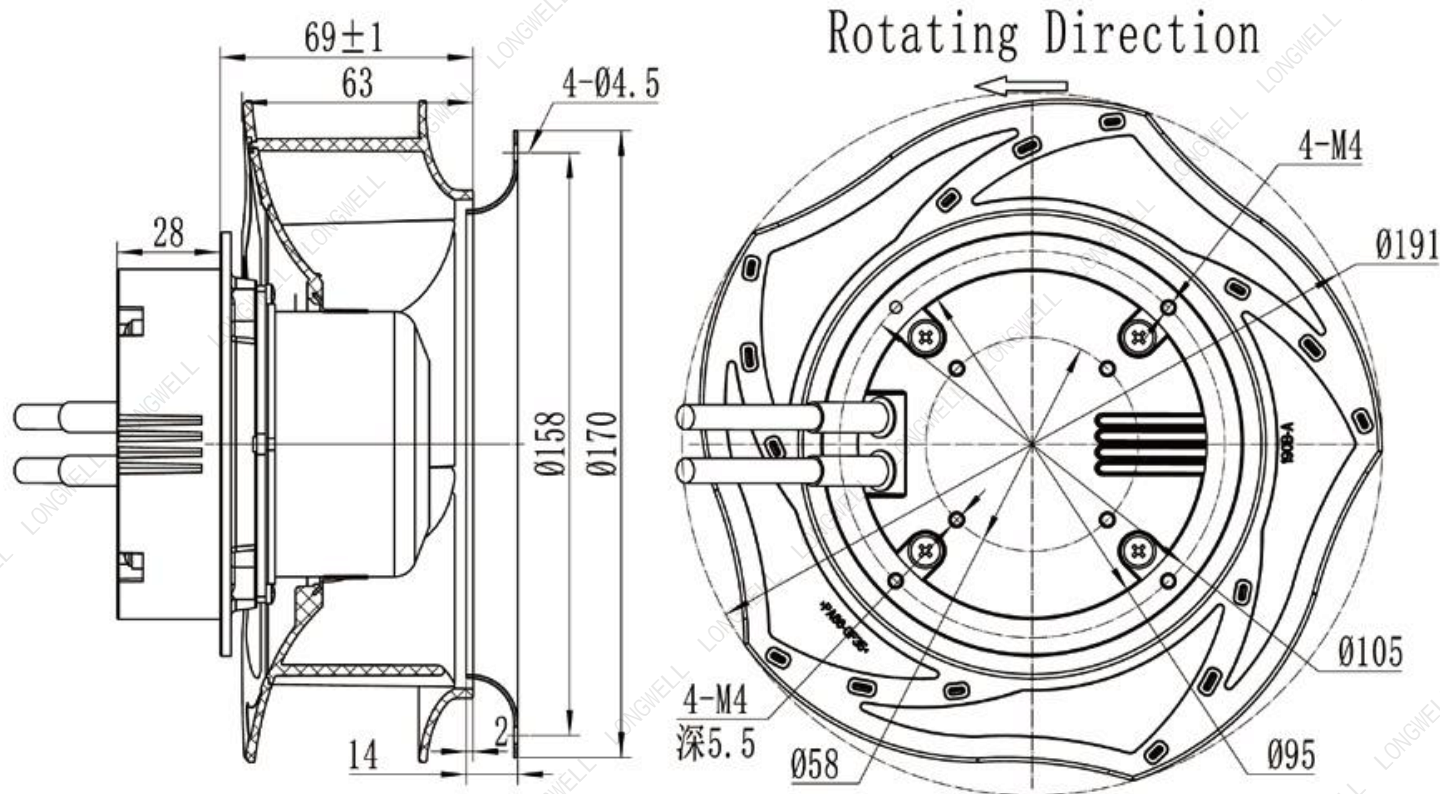
Service Environment	Operating temperature: -25~60℃ ; Operating humidity: 0 ~ 85% RH Storing temperature: -25 ~ 70℃ ; Storing humidity: 0 ~ 95% RH Applicable altitude range: < 1000m
Life Expectance	40,000Hours(L10). At 40℃ room, humidity 15%~65%RH
Balancing	According to JB/T 9101-1999 requirements G6.3
Vibration Of The Fan	Test method accord with JB/T 8689
Installation Method	Horizontal or vertical installation
Material	PA6+GF (Impeller)
Bearing	Maintenance-free deep groove ball bearings
Weight	/

Electrical Protection

Speed Control	Control input 0~10VDC
VSP Control	Control signal VSP voltage range 1.5 ± 0.1 VDC~ 9.5 ± 0.2 VDC (During normal operation, when the VSP voltage is below 0.9 ± 0.1 VDC, the motor switches from operating mode to standby mode)
Signal Output	Tach output: 3 Pulse/R; FG internal open circuit output, external pull-up resistor 10K, pull-up voltage V+
Auxiliary Power Output	Output 12 ± 0.3 VDC, Max Current: 22mA
Protection	Current limiting protection, Over-temperature protection, Over-current protection Locked-rotor protection,
Soft Start	Delay time <30 seconds to full speed
Serial Communication	N/A

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Product Drawing



NOTE: The default line length is 0.5m.

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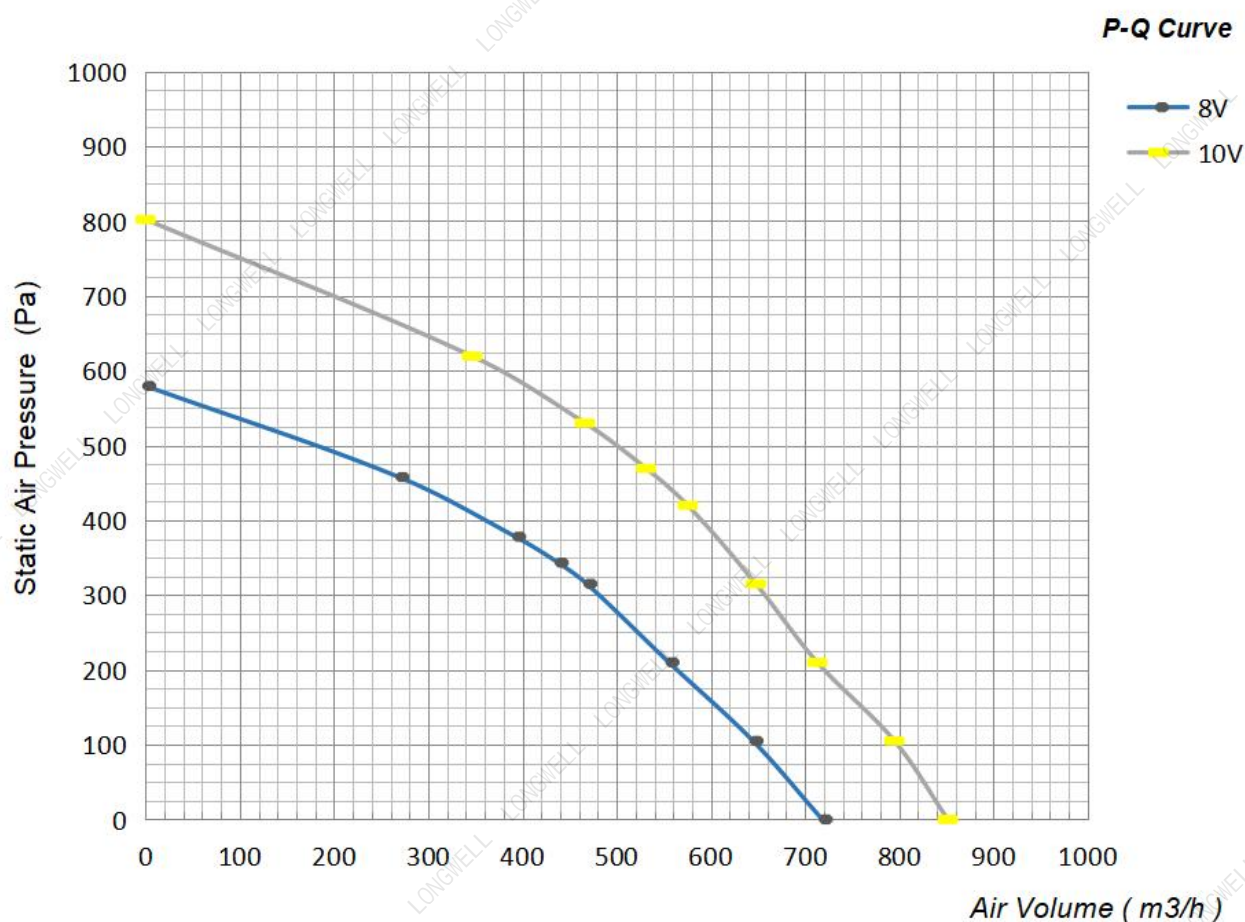
Wiring Diagram

L	Color	Function	Functional description	AWG
L1	Yellow/Green	PE	Ground lead	UL21411 20AWG
	Brown	L	Live lin	
	Blue	N	Naught line	
L2	Yellow	Speed Control	Speed regulation signal input terminal,0-10VDC voltage	UL2464 22AWG
	White	FG	Velocity feedback pulse output 3 Pulse/R	
	Red	+12VDC	Fixed voltage output 12VDC	
	Black	GND	Ground reference end of control signal	

Label

Confirm by sales team when placing sample order or bulk order

Charts :Air Flow (P-Q)



VSP	Voltage (V)	Power Input (W)	Speed (RPM)	Airflow (m³ /h)	Static Pressure (Pa)
10V	230	104	4230	852	0
	230	117	4230	795	105
	230	112	4230	713	210
	230	129	4230	648	315
	230	142	4230	575	420
	230	146	4230	531	469
	230	150	4230	466	530
	230	149	4230	347	620
	230	102	4230	0	802

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VSP	Voltage (V)	Power Input (W)	Speed (RPM)	Airflow (m ³ /h)	Static Pressure (Pa)
8V	230	66	3580	718	0
	230	74	3580	645	105
	230	79	3580	555	210
	230	90	3580	468	315
	230	92	3580	438	343
	230	94	3580	393	378
	230	92	3580	269	458
	230	64	3580	0	580

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Warning:

1. The fan and motor must be used within the prescribed scope of temperature and humidity otherwise it will cause an unexpected damage.
2. Fan is not set wrong connection protection, Provide the right voltage and line sequence according to the nameplate otherwise it will damage the product.
3. Wiring depends on the wiring diagram and please connect the earth ground if required. We don't suggest to use the extension cord .Any wrong connection may cause the damage of the fan.
4. Be careful when moving the fan and do not take the blades as a handle because it will cause the distortion and chatter.
5. Connect the thermostat if required otherwise it would damage the motor because of the over temperature.
6. The length of the mounting screws shall not exceed the requirement, otherwise the fan will be damaged.
7. Do not disassemble the fan arbitrarily. It may hurt the capacity of water tightness and dynamic balance or cause other serious problems.
8. The over current protector is necessary in case the damage from the over current.
9. Install the fan as required, any other installing direction would affect the service life of the product.
10. The fan with inlet ring should be installed follow the requirements or it will affect the performance.
11. Users should use the standard cable when install the fan otherwise it will affect the water tightness.
12. The fan should keep away from the children especially the blade and electric parts .And the children are not allowed to operate the fan alone.
13. Do not connect the white signal cable directly to the red signal cable or the external DC power supply. Otherwise, the fan may be damaged.
14. Please do not perform extraction and insertion of the connector under revolution irrespective of power on and power on and power off , and the fan should not touch or move when running.
15. Do not lift the fan wire when taking the fan, and do not impact the bearing during the handling process.
16. The version change may not be notified, please ask our company for the latest version when necessary.
17. Please be informed that we are not responsible for any damage or accidents caused by violating above rules to install and operate the fan.

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Approval

CUSTOMER APPROVAL

CUSTOMER SIGNATURE:

DATE:

Product Data Confirm:

Speed Control System:

☐ 0-10V

Accessories:

☐ Air Inlet Cone

☐ Pressure nozzle

☐ Custom wire length

Note: Please check and mark the data when you sign the specification sheet