

LWBE3G630-188NT-09

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Model No.:	LWBE3G630-188NT-09
Version Number:	A0
Make :	Zhong
Review :	Jiang
Approvd :	Yao
Date:	2023.06.25

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	Rating
Nominal Voltage :	[VAC]	380
Voltage Range :	[VAC]	380~480
Frequency :	[Hz]	50/60
Speed :	[rpm]	1780
Current :	[A]	8.1
Power input :	[W]	5600
Air flow (Max) :	[m3/h]	21950
	[CFM]	12912
Static pressure (Max) :	[Pa]	1597
Noise level (LpA):	dB(A)	/
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
Environmental protection	RoHS、Reach

Technical Features

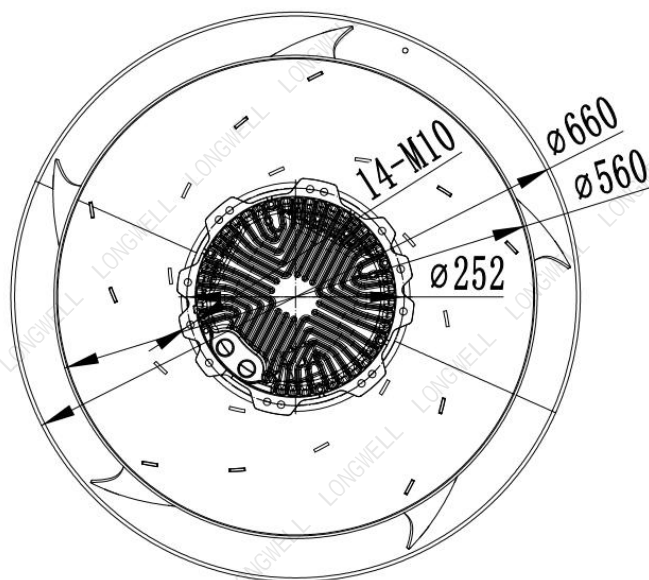
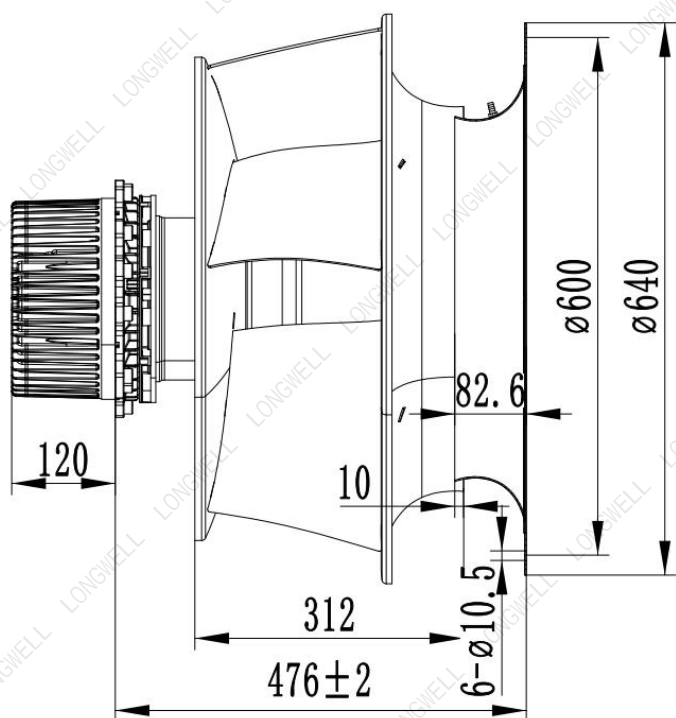
Service environment	Operating temperature: -25~60℃; Operating humidity: 0 ~ 85 % RH Storing temperature: -25 ~ 70℃; Storing humidity: 0 ~ 95 % RH Applicable altitude range: < 1000m
Life Expectance	40,000Hours(L10), At 40℃ room, humidity 15%~65%RH.
Balancing	According to JB/T 9101-1999 requirements G6.3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

Electrical Protection

Speed Control	Control input 0~10VDC/PWM/RS485
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)
PWM Control	PWM signal: frequency 1K ~ 10KHz, amplitude 10 ~ 12V, duty cycle 0% ~ 100% .
Signal Output	Tach output: 15 Pulse/R; FG internal open circuit output, external pull-up resistor R, pull-up voltage V+
Auxiliary power output	Output 10VDC, Max Current ≤ 22 mA
Protection	Current limiting protection 、 Over-temperature protection、 Over-current protection Locked-rotor protection' 、 Input power supply lacks phase protection
Soft start	Delay time <35 seconds to full speed
Serial Communication	LWRS485-03

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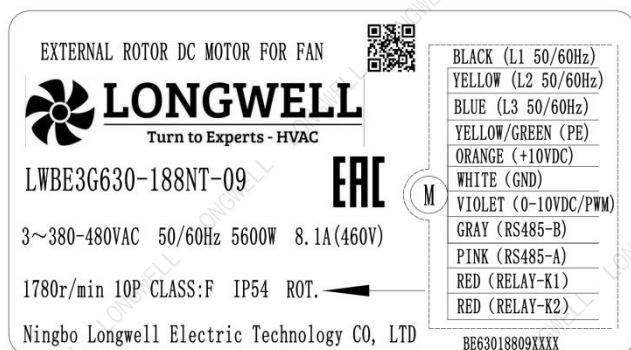
Product Drawing



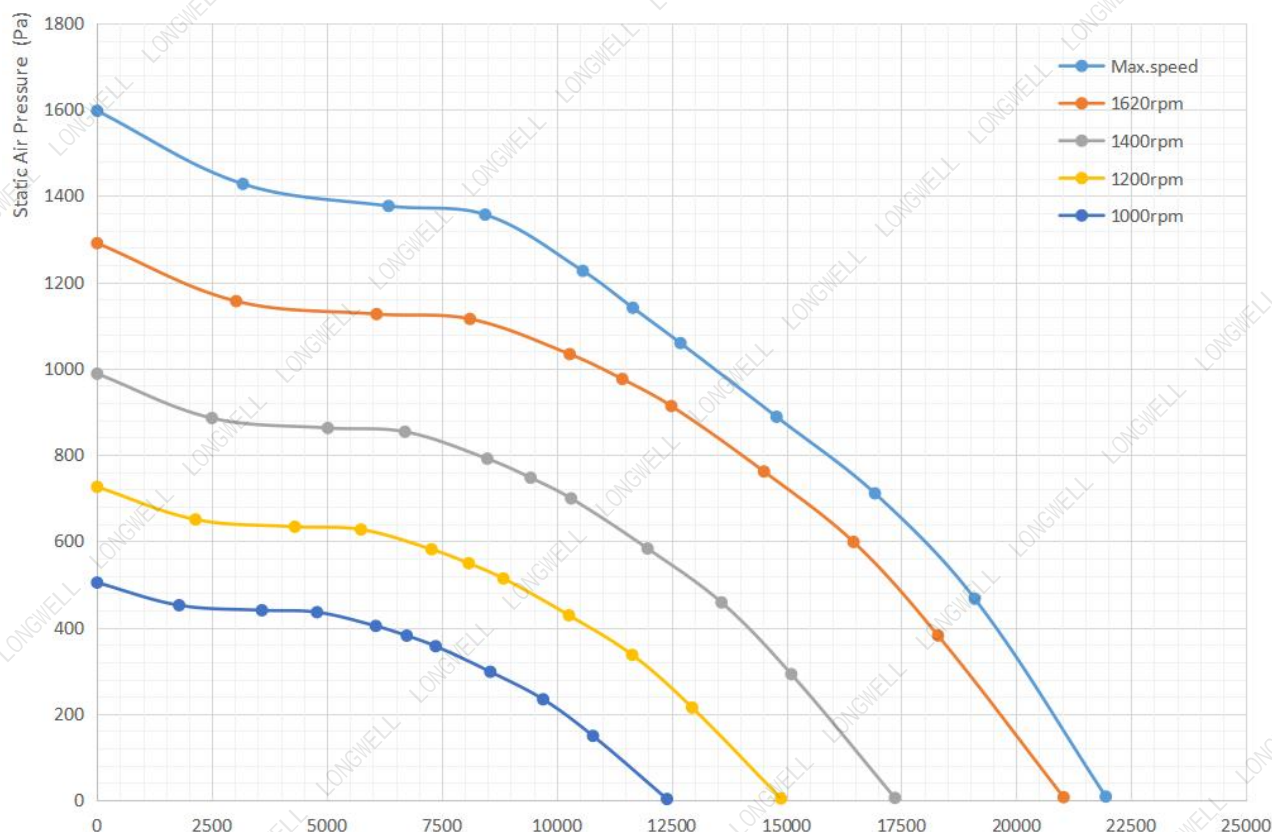
Wiring Diagram

L	Color	Function	Functional description
L1	Yellow/Green	PE	Ground lead
	Black	L1	Three-phase power supply terminal Voltage
	Yellow	L2	
	Blue	L3	
L2	Pink	RS485A	Bus connection RS485; RSA;MODBUS RTU
	Gray	RS485B	Bus connection RS485; RSB;MODBUS RTU
	Violet	Speed Control	Speed regulation signal input terminal,0-10VDC voltage /PWM
	Orange	+10VDC	Fixed voltage output 10VDC, $\leq 10\text{mA}$
	White	GND	Ground reference end of control signal
	RED	RELAY-K1(COM)	The normally closed terminal of the relay is closed with COM during normal operation or not powered on, when the fan fails, it is disconnected from COM.
	RED	RELAY-K2(NC)	Status relay, normally turn-off; break with error

Label



Charts :Air Flow (P-Q)



VSP	Speed(RPM)	Power input(W)	Airflow(m³ /h)	Static pressure(Pa)
10V	1780	3790	21950	8
	1780	4802	19098	467
	1780	5365	16926	711
	1780	5545	14785	888
	1780	5570	12694	1059
	1780	5600	11658	1141
	1780	5488	10570	1226
	1780	5280	8444	1357
	1780	4723	6342	1377
	1780	4086	3172	1428
	1780	3652	0	1597

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VSP	Speed(RPM)	Power input(W)	Airflow(m ³ /h)	Static pressure(Pa)
8V	1620	2799	21032	7
	1620	3547	18300	381
	1620	4143	16460	598
	1620	4402	14512	761
	1620	4460	12496	913
	1620	4391	11429	976
	1620	4245	10285	1033
	1620	3933	8114	1115
	1620	3495	6081	1126
	1620	2978	3026	1156
	1620	2652	0	1290
7V	1400	1875	17361	5
	1400	2376	15106	292
	1400	2775	13587	458
	1400	2949	11979	583
	1400	2988	10315	699
	1400	2941	9434	747
	1400	2844	8490	791
	1400	2635	6698	854
	1400	2341	5019	862
	1400	1995	2498	885
	1400	1777	0	988
6V	1200	1181	14881	4
	1200	1496	12948	215
	1200	1748	11646	337
	1200	1857	10268	428
	1200	1882	8841	514
	1200	1852	8086	549
	1200	1791	7277	581
	1200	1659	5741	627
	1200	1474	4302	633
	1200	1256	2141	650
	1200	1119	0	726

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VSP	Speed(RPM)	Power input(W)	Airflow(m ³ /h)	Static pressure(Pa)
5V	1000	683	12401	3
	1000	866	10790	149
	1000	1011	9705	234
	1000	1075	8556	297
	1000	1089	7368	357
	1000	1072	6739	381
	1000	1036	6064	404
	1000	960	4784	435
	1000	853	3585	440
	1000	727	1784	452
	1000	648	0	504

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 :

13.09.2023

Product Data Confirm :

Speed Control System :

☐ PWM ☐ 0-10V ☐ Rs485

Accessories:

☐ Air Inlet Cone ☐ Pressure nozzle ☐ Custom wire length

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