

LWBE3G355-102NS-20

Ningbo Longwell Electric Technology CO.,LTD

NO.100, Ditang District ,Yuyao,Zhejiang Province,China 315400

Phone 86 574 6218 9863

Fax 86 574 6218 9863

sales@zjlongwell.com

www.longwellfans.com

Model No.:	LWBE3G355-102NS-20
Version Number:	A0
Make :	Zhong
Review :	Jiang
Approvd :	Yao
Date:	2023.08.29

技术专用
朗伟电器

Version number	Notes Remarks	Reason content	Revised by	Date

LWBE3G355-102NS-20

Nominal Data

Project1	Unit	Rating
Nominal Voltage :	[VAC]	230
Voltage Range :	[VAC]	176~264
Frequency :	[Hz]	50/60
Speed :	[rpm]	1800
Current :	[A]	3.1
Power input :	[W]	474
Air flow (Max) :	[m3/h]	3554
	[CFM]	2115
Static pressure (Max) :	[Pa]	618
Noise level LpAin:	dB(A)	76
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

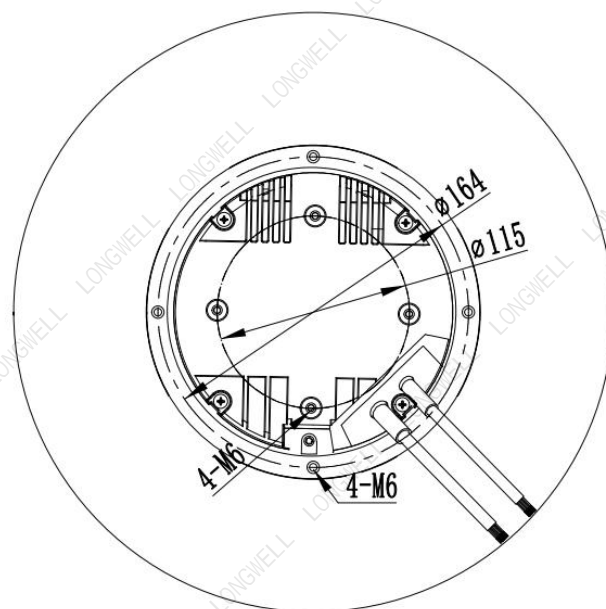
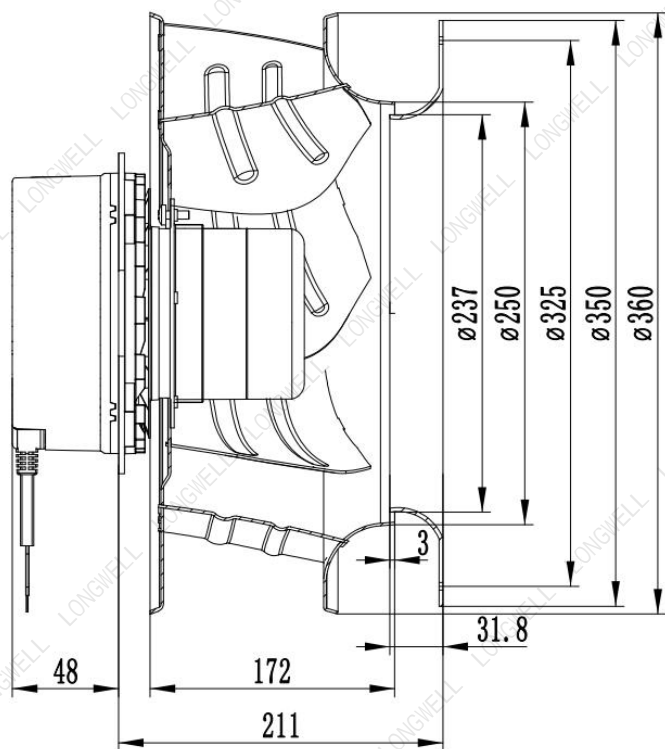
Service environment	Operating temperature: -25~60℃; Operating humidity: 0 ~ 85 % RH Storing temperature: -25 ~ 70℃; Storing humidity: 0 ~ 95 % RH Applicable altitude range: < 1000m
Life Expectance	40,000Hours(L10), At 40℃ room, humidity 15%~65%RH.
Balancing	According to JB/T 9101-1999 requirements G6.3
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	6 kg

Electrical Protection

Speed Control	Control input 0~10VDC
VSP Control	Control signal VSP voltage range 1 ± 0.1 VDC~ 9.5 ± 0.2 VDC (During normal operation, when the VSP voltage is below 1.0 ± 0.1 VDC, the motor switches from operating mode to standby mode)
Signal Output	Tach output: 4 Pulse/R; FG internal open circuit output, external pull-up resistor R, pull-up voltage V+
Auxiliary power output	Output 10VDC, Max Current 10 mA
Protection	Current limiting protection 、 Over-temperature protection、 Over-current protection Locked-rotor protection、 Input power supply lacks phase protection
Soft start	Delay time <30 seconds to full speed
Insulation resistance	Test voltage 500 VDC, resistance value ≥ 50 MΩ. Test site: Test between all leads of the motor and the motor housing.

LWBE3G355-102NS-20

Product Drawing



LWBE3G355-102NS-20

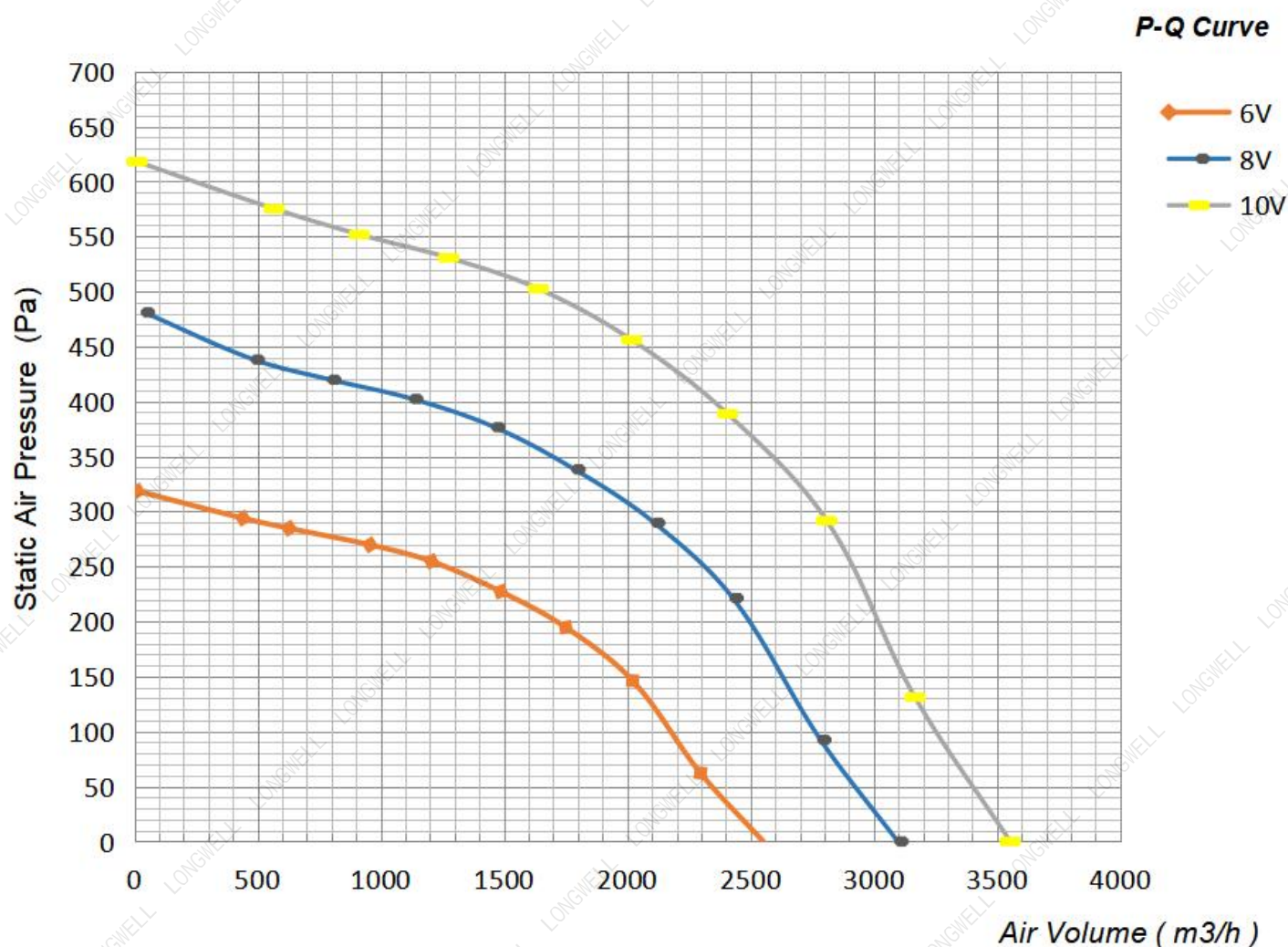
Wiring Diagram

L	Color	Function	Functional description
L1	Yellow/Green	PE	Ground lead
	Brown	L	Live line
	Blue	N	Ground lead
L2	Yellow	Speed Control	Speed regulation signal input terminal,0-10VDC voltage
	White	FG	Velocity feedback pulse output 4 Pulse/R
	Red	+10VDC	Fixed voltage output 10VDC
	Blue	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	Current(A)	Speed(RPM)	Power input(W)	Airflow(m³ /h)	Static pressure(Pa)
10V	1.6	1804	219	11	618
	2.2	1799	316	567	575
	2.5	1799	368	913	552
	2.7	1798	408	1275	531
	2.9	1798	445	1639	502
	3.1	1800	466	2018	456
	3.1	1797	474	2407	389
	2.9	1798	442	2809	292
	2.4	1800	360	3167	131
	2.0	1801	285	3554	0

LWBE3G355-102NS-20

VSP	Current(A)	Speed(RPM)	Power input(W)	Airflow(m ³ /h)	Static pressure(Pa)
8V	1.1	1564	153	40	481
	1.5	1566	209	486	438
	1.7	1569	242	796	420
	1.9	1569	271	1129	402
	2.0	1567	294	1462	377
	2.1	1568	303	1787	338
	2.1	1568	304	2110	290
	2.0	1566	290	2428	221
	1.7	1566	233	2784	92
	1.4	1568	190	3098	0
6V	0.6	1304	78	12	319
	0.9	1288	123	441	294
	1.0	1291	135	628	285
	1.1	1293	154	956	270
	1.2	1293	164	1206	255
	1.3	1291	170	1486	227
	1.3	1290	170	1750	195
	1.2	1292	163	2022	146
	1.0	1289	134	2297	62
	0.8	1289	109	2552	0

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.

LWBE3G355-102NS-20

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 .