

LWBE3G355-102NS-15

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Model No.:	LWBE3G355-102NS-15
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]	2050±5%
Maximum Input Current	[A]	5.3±10%
Rated Power	[W]	423±10%
Maximum Input Power	[W]	645±10%
Air Flow (Max)	[m3/h]	3915
	[CFM]	2303
Static Pressure (Max)	[Pa]	770
Noise Level (LpAin)	dB(A)	74
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

Technical Features

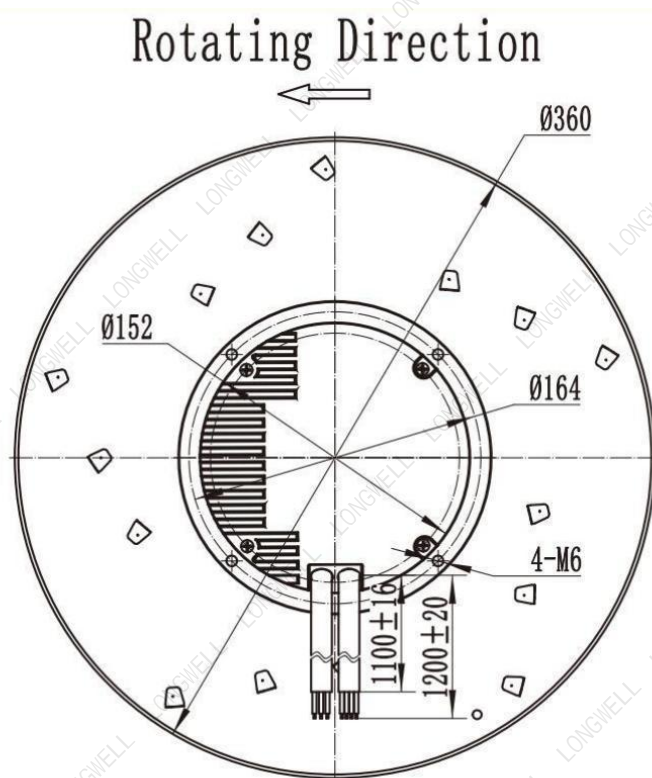
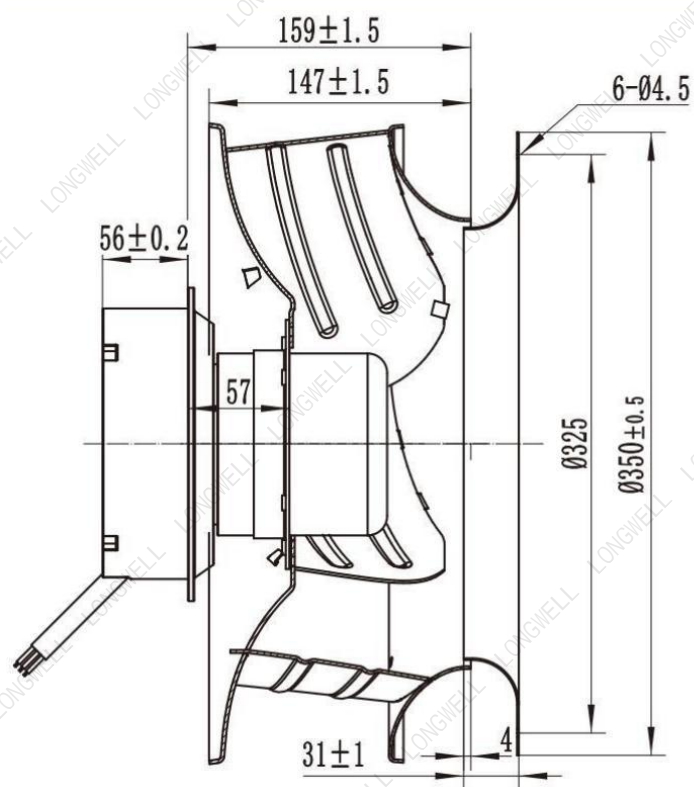
Service Environment	Operating temperature: -25~60℃ ; Operating humidity: 0 ~ 85% RH Storing temperature: -25 ~ 70℃ ; Storing humidity: 0 ~ 95% RH Applicable altitude range: < 1000m
Life Expectance	40,000Hours(L10). At 40℃ room, humidity 15%~65%RH
Balancing	According to JB/T 9101-1999 requirements G6.3
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
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: 5 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: 10mA
Protection	Current limiting protection, Over-temperature protection, Over-current protection Locked-rotor protection,
Soft Start	Delay time <35 seconds to full speed
Serial Communication	N/A

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Product Drawing



NOTE: The default line length is 1.2m

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Wiring Diagram

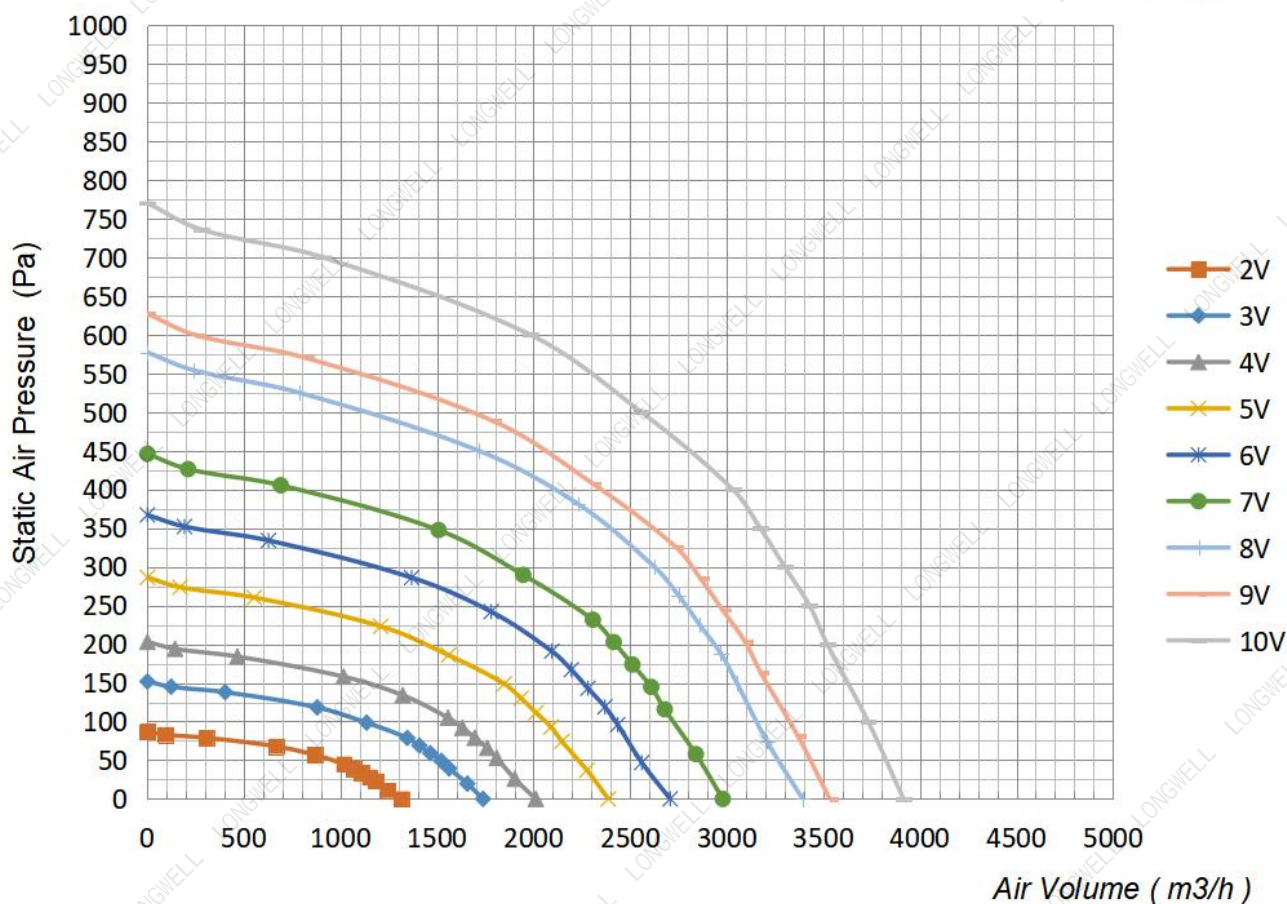
L	Color	Function	Functional description	AWG
L1	Yellow/Green	PE	Ground lead	UL21411 18AWG
	Brown	L	Live lin	
	Blue	N	Naught line	
L2	Yellow	Speed Control	Speed regulation signal input terminal,0-10VDC voltage	UL21411 22AWG
	White	FG	Velocity feedback pulse output 5 Pulse/R	
	Red	+12VDC	Fixed voltage output 12VDC	
	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)

P-Q Curve



VSP	Speed(RPM)	Power input(W)	Airflow(m³ /h)	Static pressure(Pa)
10V	2050	423	3915	0
	2050	483	3732	100
	2050	539	3520	200
	2050	565	3428	250
	2050	592	3300	300
	2050	614	3173	350
	2050	638	3031	400
	2050	645	2557	500
	2050	632	1981	600
	2050	479	907	700
	2050	343	277	736
	2050	281	0	770

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VSP	Speed(RPM)	Power input(W)	Airflow(m ³ /h)	Static pressure(Pa)
9V	1850	311	3533	0
	1850	355	3368	81
	1850	396	3177	163
	1850	415	3094	204
	1850	435	2978	244
	1850	451	2863	285
	1850	469	2735	326
	1850	474	2308	407
	1850	464	1788	489
	1850	352	819	570
	1850	252	250	599
	1850	207	0	627
8V	1780	275	3393	0
	1780	307	3209	74
	1780	351	3052	150
	1780	367	2969	188
	1780	385	2860	225
	1780	400	2751	263
	1780	415	2625	300
	1780	426	2231	381
	1780	410	1715	450
	1780	311	786	525
	1780	224	240	554
	1780	182	0	577
7V	1560	186	2979	0
	1560	213	2840	58
	1560	238	2679	116
	1560	249	2609	145
	1560	261	2511	174
	1560	271	2415	203
	1560	281	2307	232
	1560	284	1946	290
	1560	279	1507	347
	1560	211	690	405
	1560	151	211	426
	1560	124	0	446

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VSP	Speed(RPM)	Power input(W)	Airflow(m ³ /h)	Static pressure(Pa)
6V	1420	140	2707	0
	1420	156	2560	47
	1420	178	2435	96
	1420	186	2369	119
	1420	196	2281	143
	1420	203	2195	167
	1420	210	2094	191
	1420	217	1780	242
	1420	208	1368	286
	1420	158	627	334
	1420	114	192	352
	1420	93	0	367
5V	1250	96	2387	0
	1250	110	2276	37
	1250	122	2146	74
	1250	128	2090	93
	1250	134	2012	112
	1250	139	1935	130
	1250	145	1848	149
	1250	146	1559	186
	1250	143	1208	223
	1250	109	553	260
	1250	78	169	274
	1250	64	0	286
4V	1055	57	2011	0
	1055	64	1902	26
	1055	73	1809	53
	1055	76	1760	66
	1055	80	1695	79
	1055	83	1631	92
	1055	86	1556	105
	1055	89	1322	134
	1055	85	1016	158
	1055	65	466	184
	1055	47	143	194
	1055	38	0	203

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VSP	Speed(RPM)	Power input(W)	Airflow(m ³ /h)	Static pressure(Pa)
3V	910	37	1738	0
	910	42	1657	20
	910	47	1563	39
	910	49	1522	49
	910	52	1465	59
	910	54	1409	69
	910	56	1345	79
	910	56	1135	99
	910	55	879	118
	910	42	403	138
	910	30	123	145
	910	25	0	152
2V	690	16	1315	0
	690	18	1244	11
	690	20	1183	23
	690	21	1151	28
	690	22	1108	34
	690	23	1067	39
	690	24	1018	45
	690	25	865	57
	690	24	665	68
	690	18	305	79
	690	13	93	83
	690	11	0	87

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