

LWBE3G225-092NS-13

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Model No.:	LWBE3G225-092NS-13
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]	3500±5%
Rated Current	[A]	1.87±10%
Rated Power	[W]	239±10%
Maximum Input Power	[W]	315±10%
Air Flow (Max)	[m3/h]	1630
	[CFM]	959
Static Pressure (Max)	[Pa]	839
Noise Level (LpAin)	dB(A)	71
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

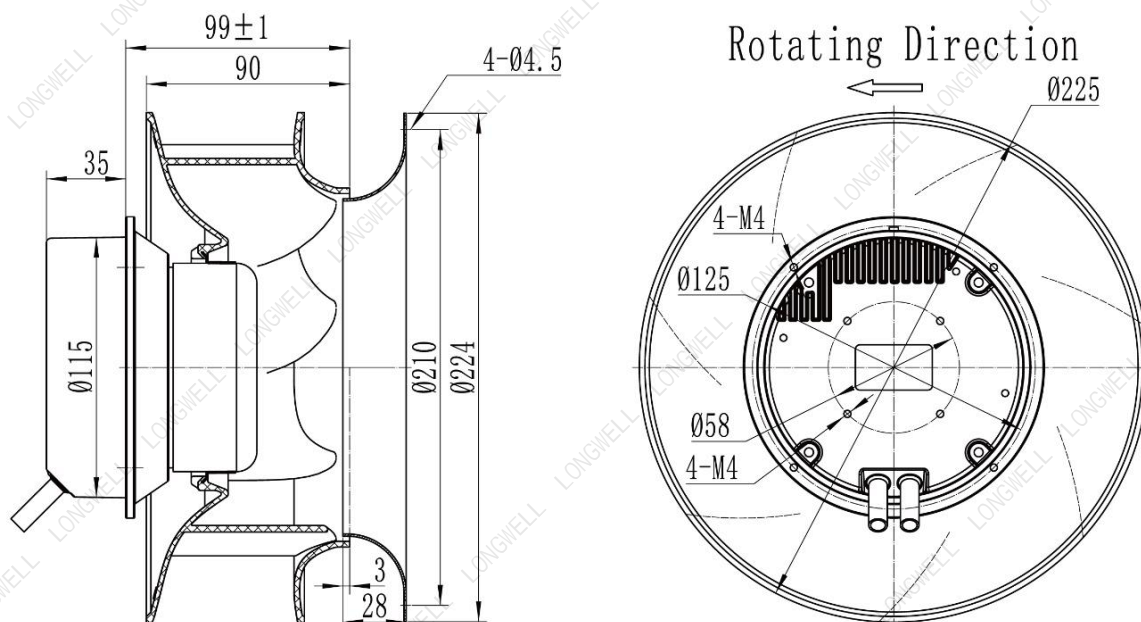
Service Environment	Operating temperature: -25~60℃ ; Operating humidity: 0 ~ 85% RH Storing temperature: -25 ~ 70℃ ; Storing humidity: 0 ~ 95% RH Applicable altitude range: < 1000m
Life Expectance	40,000Hours(L10). At 40℃ room, humidity 15%~65%RH
Balancing	According to JB/T 9101-1999 requirements G6.3
Vibration Of The Fan	Test method accord with JB/T 8689
Installation Method	Horizontal or vertical installation
Material	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 10 ± 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

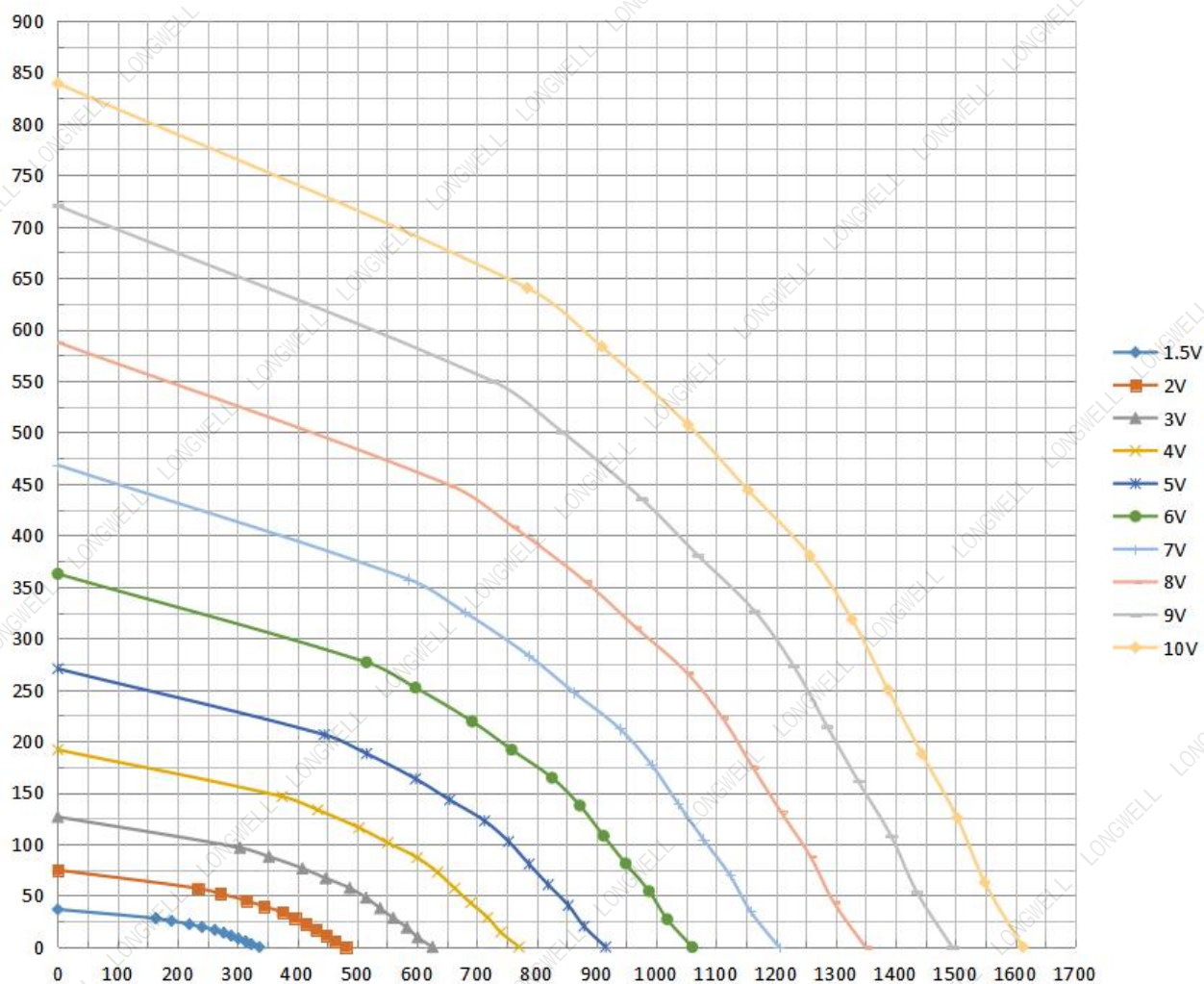
L	Color	Function	Functional description	AWG
L1	Yellow/Green	PE	Ground lead	UL21411 18AWG
	Brown	L	Live lin	
	Blue	N	Naught line	
L2	Yellow	Speed Control	Speed regulation signal input terminal,0-10VDC voltage	UL21411 22AWG
	White	FG	Velocity feedback pulse output 3 Pulse/R	
	Red	+10VDC	Fixed voltage output 10VDC	
	Blue	GND	Ground reference end of control signal	

Label

Confirm by sales team when placing sample order or bulk order

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Charts :Air Flow (P-Q)



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VSP	Static pressure(Pa)	Airflow (m³ /h)	Power input(W)	Speed (RPM)	VSP	Static pressure(Pa)	Airflow (m³ /h)	Power input(W)	Speed (RPM)
10V	0	1630	217	3500	9V	0	1494	192	3150
	63	1549	227	3500		54	1435	201	3150
	126	1503	242	3500		108	1393	214	3150
	188	1444	254	3500		161	1338	224	3150
	250	1387	270	3500		215	1285	239	3150
	318	1327	280	3500		273	1230	248	3150
	380	1257	296	3500		327	1164	252	3150
	444	1154	305	3500		381	1069	240	3150
	507	1053	310	3500		435	976	246	3150
	583	909	295	3500		501	842	251	3150
	839	0	147	3500		720	0	129	3150
8V	0	1350	159	2845	7V	0	1205	129	2540
	44	1296	166	2845		35	1157	135	2540
	88	1258	177	2845		70	1123	144	2540
	132	1208	186	2845		105	1079	151	2540
	175	1161	198	2845		140	1037	161	2540
	223	1111	205	2845		178	991	167	2540
	266	1051	209	2845		212	939	170	2540
	311	965	199	2845		248	862	162	2540
	355	881	204	2845		283	787	166	2540
	408	761	208	2845		326	679	169	2540
	587	0	107	2845		468	0	87	2540
6V	0	1060	103	2235	5V	0	916	99	1930
	27	1018	108	2235		20	879	104	1930
	54	988	115	2235		40	853	111	1930
	81	949	120	2235		61	820	116	1930
	108	912	128	2235		81	788	124	1930
	138	872	133	2235		103	753	128	1930
	164	826	135	2235		123	713	130	1930
	192	758	129	2235		143	655	124	1930
	219	692	132	2235		163	598	127	1930
	252	598	134	2235		188	516	130	1930
	363	0	69	2235		270	0	67	1930

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VSP	Static pressure(Pa)	Airflow (m³ /h)	Power input(W)	Speed (RPM)	VSP	Static pressure(Pa)	Airflow (m³ /h)	Power input(W)	Speed (RPM)
4V	0	771	24	1625	3V	0	626	42	1320
	14	740	25	1625		9	601	44	1320
	29	718	26	1625		19	584	47	1320
	43	690	28	1625		28	561	50	1320
	57	663	30	1625		38	539	53	1320
	73	634	31	1625		48	515	55	1320
	87	601	31	1625		57	488	56	1320
	101	551	30	1625		67	448	53	1320
	116	503	30	1625		76	409	54	1320
	133	435	31	1625		88	353	55	1320
	192	0	16	1625		126	0	29	1320
2V	0	482	23	1015	1.5V	0	337	10	710
	6	462	24	1015		3	324	10	710
	11	449	26	1015		5	314	11	710
	17	431	27	1015		8	302	12	710
	22	414	29	1015		11	290	12	710
	28	396	30	1015		14	277	13	710
	34	375	30	1015		17	262	13	710
	40	344	29	1015		19	241	12	710
	45	314	30	1015		22	220	13	710
	52	271	30	1015		25	190	13	710
	75	0	16	1015		37	0	7	710

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