

CROSS FLOW FAN - EC Motor

LWCE-90680SG-06-00

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.:	LWCE-90680SG-06-00
Version Number:	A0
Make :	ZHANG
Review :	HE
Approvd :	GUO
Date:	20260805



Version number	Notes Remarks	Reason content	Revised by	Date

CROSS FLOW FAN - EC Motor

LWCE-90680SG-06-00

Nominal Data

Project1	Unit	Value
Nominal Voltage :	[VAC]	115
Voltage Range :	[VAC]	104-126
Frequency :	[Hz]	50/60
Minimum Speed :	[rpm]	450±5%
Maximum Speed	[rpm]	1500±10%
Current :	[A]	/
Power input :	[W]	60±10%
Air flow (Max) :	[m3/h]	1200
	[CFM]	706
Static pressure (Max) :	[Pa]	/
Noise level (LpA) :	dB(A)	55
Max.ambient Temp :	℃	60
Min.ambient Temp :	℃	-25
Insulation Class :		Class B
Protection Type :		IP55
Work system :		S1

Technical Features

Production Reference standard	GB12350 《 Safety requirements of small power motors》 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)

CROSS FLOW FAN - EC Motor

LWCE-90680SG-06-00

Technical Features

Environmental protection	RoHS 、 Reach
Service environment	Operating temperature: -25~60℃; Operating humidity: 5 ~ 90 % RH Storing temperature: -40 ~ 80℃; Storing humidity: ≤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	SGCC (Impeller); cold-rolled sheet (frame)
Bearing	The motor adopts ceramic bearings (2pcs), and the impeller end adopts conventional bearings (1pcs)
Weight	/

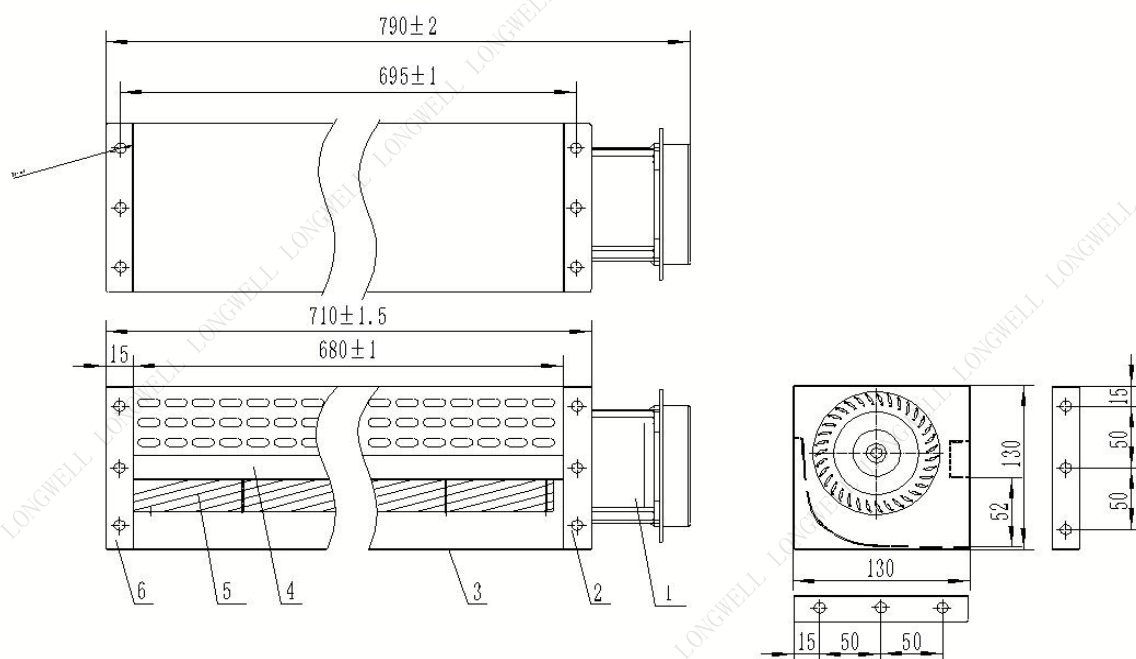
Electrical Protection

Speed Control	Control input 0~10VDC/PWM
VSP Control	Control signal VSP voltage range 0VDC~ 10VDC (During normal operation, when the VSP voltage is below 1.0VDC, the motor switches from operating mode to standby mode)
PWM Control	PWM signal: frequency 1K ~ 10KHz, amplitude 10V, duty cycle 10% ~ 100% .
Signal Output	Tach output: 2 Pulse/R; FG internal open circuit output, external pull-up resistor 10K Ω, pull-up voltage +10V
Auxiliary power output	Output 10VDC, Max Current 10mA
Protection	Current limiting protection 、 Over-temperature protection 、 Over-current protection Locked-rotor protection
Soft start	Delay time <20 seconds to full speed
Serial Communication	/

CROSS FLOW FAN - EC Motor

LWCE-90680SG-06-00

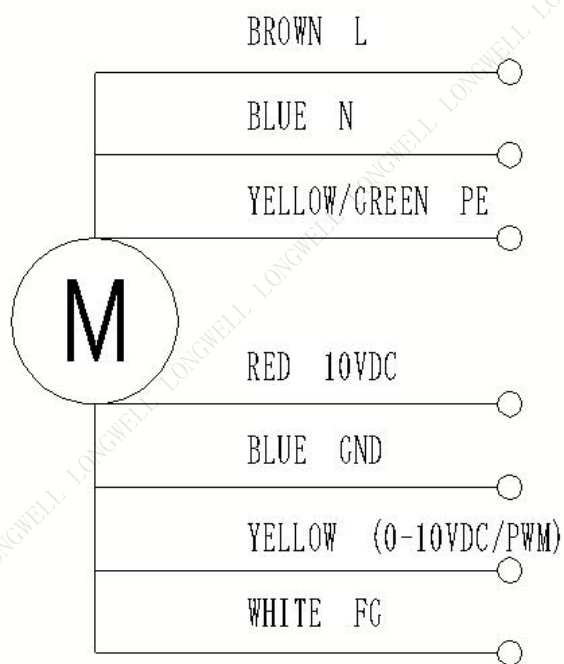
Product Drawing



CROSS FLOW FAN - EC Motor

LWCE-90680SG-06-00

Wiring Diagram



Label

Confirm by sales team when placing sample order or bulk order

CROSS FLOW FAN - EC Motor**LWCE-90680SG-06-00****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.

CROSS FLOW FAN - EC Motor**LWCE-90680SG-06-00****Approval****CUSTOMER APPROVAL****CUSTOMER SIGNATURE:****DATE :****Product Data Confirm :**