浙江伟成风机有限公司
ZHEJIANG WEICHENG BLOWER CO.,LTD

驱动器规格书 **The specification of the CONTROLLER**	规格书编号： Specification No.	**WM-C-118-72-220VAC-300W-W**
	发布日期： Date Issued	**2024/6/28**

产品主型号Main model name：	**WM-C-118-72-220VAC-300W-W**
细分驱动器型号Subdivision of Drive Models：	**220VAC-300W-W**

说明书组成内容/Composition of the instruction manual	
要求和变更/REQUESTS &REVISION RECORDS	√
电气规格/TECH SPECIFIICATIONS	√
PCB安装尺寸/PCB DRAWING	√
散热片尺寸/HEAT SINK SIZE	√
端子说明/PIN INSTRUCTION	√
控制方法/ CONTROL INSTRUCTION	√
故障表达和定义/FAULT EXPRESSION AND DEFINITION	√
共计（TOTAL without Cover) _____ 页	
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认证证书Certificates： CE， ROHS， ISO10993, ISO9001:2015

基础电气规格	Basic Tech specification	220VAC-200W-W	
		单位（Unit）	数据（Data）
额定电压	Rate voltage	V	220
额定电流	Rate current	A	1.3
额定功率	Power consumption	W	300
转速范围	Speed range	rpm	5000~45000
建议电压范围	Voltage range	V	195~245
极限电压	Limited voltage	V	187~253
最大可持续电流	Max current	A	1.5
响应时间	Response time	ms	2
霍尔信息	Hall information		/
适配磁铁极数	Adaptive magnet poles		4
PCB重量	PCB Weight	g	120
使用环境温度范围	Operating ambient temperature range	℃	{-20，55}
使用环境湿度范围	Operating environment humidity range	%RH	{30，90}
建议储存温度范围	Recommended storage temperature range	℃	{-10，40}
驱动方式	Driving method		FOC
调速方式	Speed control mode		0-5V PWM

注意事项 Notice

*接入电线前请仔细阅读规格书，查看端子说明，不能接错线。

*Before connecting the wires, please carefully read the specifications and check the terminal instructions, and do not connect the wrong wires.

* 运行期间严禁打开外壳测量或触摸底板上任何器件和接插件。

*During operation, it is strictly prohibited to open the casing for measurement or touching any electronic elements on the bottom PCB

* 断电后1分钟后才能进行底板检查或更换保险管。

*Pls 1 minute after the power outage can the bottom plate be inspected or the safety tube be replaced.

* 运行期间尽量使用驱动器金属外壳帮助驱动器散热。

*During operation, try to use the metal casing of the drive to help dissipate heat.

* 110V-220V刷电机驱动器和310V无刷电机需良好可靠接地,否则有可能无刷电机转速不平稳。

*The 110V-220V brush motor driver and the 310V brushless motor need to be well and reliably grounded, otherwise there is a possibility of unstable speed of the BLDC MOTOR

* 如果驱动器在运行期间意外损坏，本公司只负责承担驱动器在保修范围内的维修和更换。
  本公司不承担由于驱动器意外损坏导致的电机失控或人员伤亡以及财产损失等的赔偿。

*If the drive is accidentally damaged during operation, our company is only responsible for repairing and replacing the drive within the warranty scope.
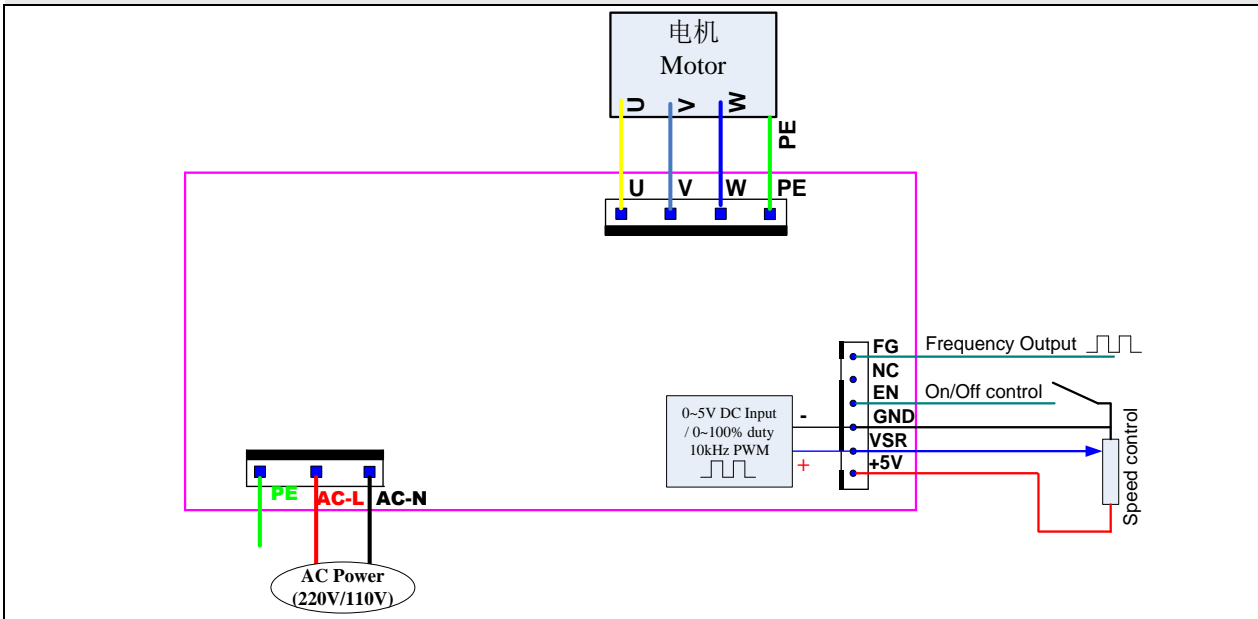Our company shall not be liable for compensation for motor loss of control, personal injury, or property damage caused by accidental damage to the drive.

PCB尺寸图（PCB DRAWING）	散热机壳尺寸图（HEAT SINK DRAWING）
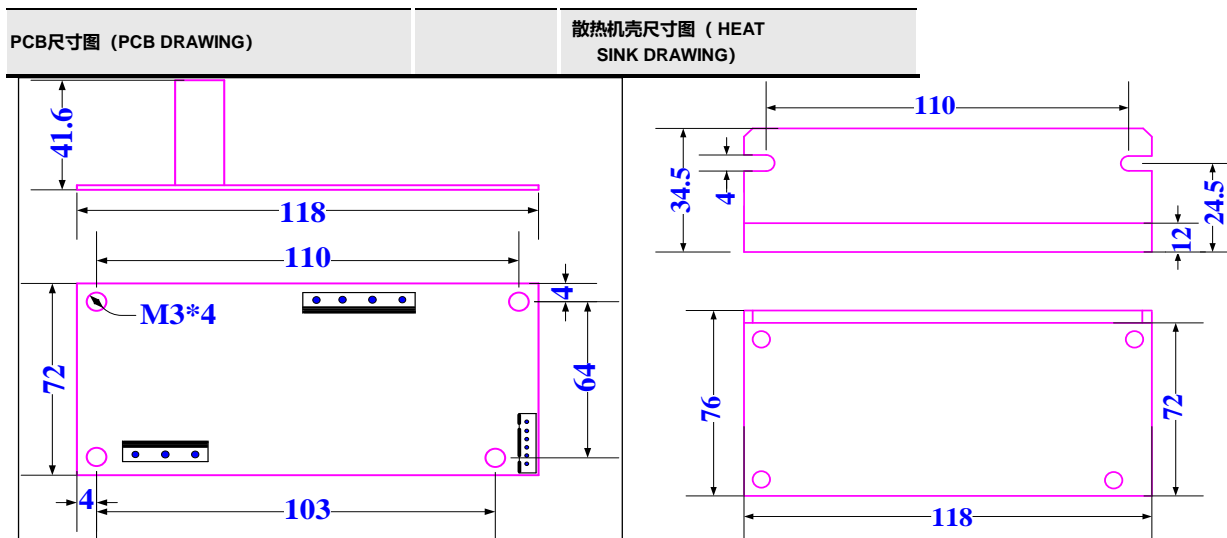
接口定义（CONNECTOR DENTIFICATION）

接口说明 Connector instruction	端子型号 Connector model	PIN序号 P/N	PIN定义 Pin Definition		使用说明 Use instructions
电源接口 Power connector	VH3.96-5P	PE	电源地线		接用户电源地线
		AC_L	220VAC输入		接用户电源火线L端
		AC_N	220VAC输入		接用户电源零线N端
电机接口 Motor connector	VH3.96-7P	PE	地线		接电机地线
		U	电机U相		
		V	电机V相		
		W	电机W相		
控制信号接口 Control connector	XHB2.54-6P	+5V	+5V控制电源正极	+5V	配合B10K电位器使用+5V,VSR和GND，也可直接配合VSR实现开机全速. Use+5V, VSR, and GND in conjunction with B10K Potentiometer, Or directly cooperate with VSR to achieve full startup speed.
		VSR	调速信号输入	Input speed control signal	接受调速电压0-5V（0.7V启动） PWM脉冲调速（频率：10KHz，电压：+5V，占空比：0-100%）(占空比15%启动） Accepting speed regulation voltage 0-5V (starting at 0.7V) PWM pulse speed regulation (Frequency: 10KHz, voltage:+5V, duty cycle: 0-100%)（starting at duty 15%）
		GND	控制信号电源负极	Negative of signal control	控制信号负极,可配合VSR ,EN使用 Negative of signal control can be used in conjunction with VSR and EN
		EN	启动和停止	Start and stop control	EN引脚配合GND在驱动器持续接受调速信号时，可控制启动和停止。 连接GND时，停止。 断开GND时，运行。 The EN pin, in conjunction with GND, can control start and stop when the driver continuously receives a speed control signal. Connecting to GND--------Stop. Disconnecting GND--------Run.
		悬空	引脚为空	/	暂无功能,可定制成正反转功能 No function so far，Customizable with forward and reverse functions
		FG	速度信号输出	Output frequency	电机速度脉冲输出，用于转速计算 当极对数为P时，每转一圈输出P个脉冲。 电机转速（rpm）=输出脉冲频率(Hz)*60/极对数 **Motor speed pulse output for speed calculation** When the number of poles is P, P pulses are output per revolution. Motor speed=output pulse frequency * 60/number of pole pairs

电机
Motor

U V W PE

U V W PE

FG — Frequency Output

NC

EN — On/Off control

GND

VSR

+5V

0~5V DC Input / 0~100% duty 10kHz PWM

\- +

Speed control

PE AC-L AC-N

AC Power (220V/110V)

故障定义 （FAULT DEFINITION）

闪灯次数 Number of flashes	闪灯意义	Meaning of flashing lights
2	电机堵转报警 电机由于负载过大或者驱动板故障，会导致MCU检测到电机的速度持续低于900rpm，且时间超过2.5s，会触发电机堵转报警。	Motor stall alarm Due to excessive load or drive board failure of the motor, the MCU will detect that the speed of the motor is continuously below 900rpm for more than 2.5s, and trigger a motor stall alarm.
3	电机缺相报警 电机输入导线U/V/W任何接触不良或者断线，都会导致该报警。	Motor phase loss alarm Any poor contact or disconnection of the motor input wire U/V/W will cause this alarm.
4	软件过流 软件检测到电机输入电流高于4.0A超过10ms，会产生软件过流报警。	Software overcurrent If the software detects that the input current of the motor is higher than 4.0A for more than 10ms, it will generate a software overcurrent alarm.
5	欠压报警 如果电源电压低于180V，产生欠压报警，请检查电源情况。	Under voltage alarm If the power supply voltage is below 180V and an undervoltage alarm occurs, please check the power supply condition.
6	过压报警 如果电源电压高于270V，产生过压报警，请检查电源情况。	Overvoltage alarm If the power supply voltage is higher than 270V and an overvoltage alarm occurs, please check the power supply condition.
7	模块温度过高报警 当IPM模块的温度超过96°C以上会触发报警，低于90°C清除报警。	Module temperature too high alarm When the temperature of the IPM module exceeds 96 ° C, an alarm will be triggered, and when it falls below 90 ° C, the alarm will be cleared.
8	硬件过流 驱动IPM模块硬件发生故障会触发该报警。	Hardware overcurrent The hardware failure of the IPM module will trigger this alarm.

包装方式（PACKING)

包装方式：　每个驱动配备一个纸盒，一个防静电袋
　　　　　　25个驱动/层*1层，25个驱动/箱
　　　　　　50个毛重：6.2kgs
　　　　　　50个净重：7.9kgs