

# 1200W Air Cooler Controller PMSM/BLDC Motor Driver(**PFC version**)



500W-1200W PMSM Motor Driver with Control Panel(Remote Controller is Optional), Build-in Full Protection for Industrial Air Cooler.

## Product Highlights

- Input Voltage: 160-255Vac
- Rated Current: 5.5A
- Applicable Motor Power: Up to **1200W**
- Speed: Up to **650RPM**
- Closed-Loop Starting without Position Sensor
- Non-Inductive FOC Motor Control Algorithm to Achieve **low motor noise**.
- **Energy Efficient:** Accurate frequency adjustment and real-time voltage compensation algorithms make the motor work efficiently.

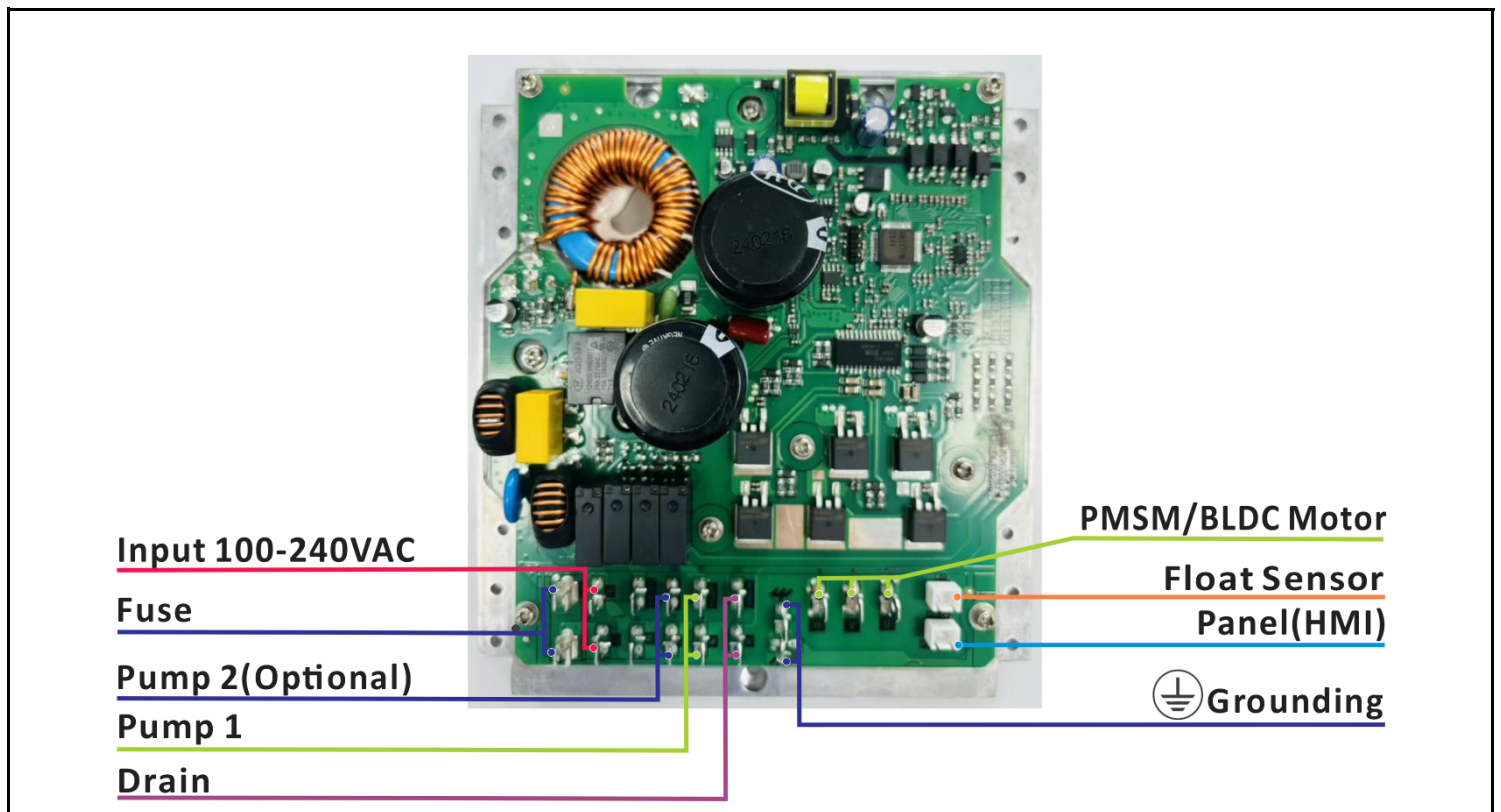


## Specification

Name	Description	Condition	Value
Input	Input Voltage	Full Load	160-265VAC
	Input Power	Full Load	1200W
	Input Frequency	/	47-63Hz
	Working Current	Full Load	5.5A
	Input PF	Full Load	0.99
Output	Output Current	Full Load	2.0A(rms)
	Output Power	Full Load	1200W
	Output Frequency	Full Load	400Hz
	Speed Range	InputAC Voltage<100VAC	415-1000RPM
Control	Motor position sensor	/	Sensorless
	Control Method	/	FOC Sine-Wave Vector Control
	Start Method	/	Zero-speed closed Loop Start
Motor	Type of Motor	/	Outer Rotor(Customizable)
	Number of Poles	/	24 Pairs
	Rated Speed	/	650RPM
	Motor Resistor	/	1.75
	Motor Inductance	/	0.018
	Motor Flux	/	0.075591
External	Speed Control	By Control Panel (Remote Controller is Available)	Customizable
	On/Off	By Control Panel (Remote Controller is Available)	
Protection	Over Current Protection	Current Monitoring	2.15A
	Short-Circuit Protection	Current Monitoring	20A
	Locked Rotor Protection	/	Available
	Overload Protection	Current Limiting	2.15A
	Phase Loss Protection	RMS Phase Current	<0.5A
	3-Phase Current Imbalance Protection(output)	Phase Current Difference	>1A

	Start Failure Protection	Rotor Cannot be Synchronized within 10 seconds	Auto restart; If it happens 5 times in a row, it will automatically shut down & need to reconnect power to recover.
	Undervoltage Protection	Voltage Monitoring	<150VAC
	Overvoltage Protection	Voltage Monitoring	>280VAC
	Overheating Protection 1	85°C	Auto Slow Down
	Overheating Protection 2	100°C	Auto shutdown for 30 seconds
	Communication Fail Protection	5 Seconds no Signal	Auto close output
	Temperature Sensor Failure	Temperature Sensor on Board	Only detect open circuit
	Communication Failure	15S No signal is received from the control panel	The driver stop working
Power Consumption	Standby Power	/	2W
Efficiency	Control Board Only	/	>94%
Cooling	/	Air Cooling	/
Noise	/	/	≤50dbA
Environment	Operating Temperature		-20 °C ~50 °C
	Operating Humidity		0% ~90%
	Storage Temperature		-20 °C ~85 °C
	Storage Humidity		0% ~95%
Standard	/	RoHS	/
Dimension(LxWxH)	/	/	200x140x72mm

### Terminal Blocks / Connection



### Cautions

- It is strictly forbidden to immerse the product in any liquid or corrosive environment.
- It is strictly forbidden to be placed in an environment exceeding 70 ° C for a long time, and away from fire and heat sources.
- It is strictly forbidden to assemble or operate this product in an environment with strong static electricity and magnetic.

### Lumsyn Sales Support & Location.

Address: Building 1, #28, Lane 299 Jinshan Road, Jiangbei District, Ningbo, Zhejiang Province, China 315034  
 Tel: +86 574 27705560 Email: enquiry@lumsyn.com WhatApp: +8615606680916 / +8613606586049  
 Web: <https://www.lumsyn.com>