



MC24 1.0

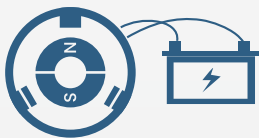
MOTOR CONTROLLER

**MOTOR CONTROLLER FOR
MID POWER UP TO 24KW**

Control of motors from 60 to 120V,
sustaining up to 200A cont. current.

Designed for eVTOL and electric aircraft,
it meets the DO178C and DO254
certification standards.

INVERTERS FOR EVTOL CERTIFICATION



**ANY TYPE
OF MOTORS**

MC24 speed controller is capable of driving any type of 3-phase PMSM motor.



**FOC ALGORITHM
CONTROL**

It uses FOC algorithms for motor control together with MOSFET technology.



**RANGE
OF USES**

It can be used with a wide variety of UAVs or eVTOL or in automotive applications.



MAIN FEATURES

Max. Power	24kW continuous (voltage and rpm dependant)
Voltage Range	60VDC to 120VDC
Max. Current	200A continuous (voltage and rpm dependant)
Peak Current	400A (< 5 seconds)
Max. speed	600.000 ERPM
PWM Frequency	16kHz to 20 kHz
Cooling	Air Cooling
Aircraft Certification	DO178C DO254 DAL B DO160
Use Cases	eVTOL, cars, UGV, electric aircraft



USER PROGRAMMABLE

Custom control	Motor parameters FOC Parameters
Start-up	Open loop or close loop
Telemetry	Motor & ESC temperature RPM Input voltage
Control telemetry	Selectable control variables

ADVANCED PERFORMANCE

Motor control	Sensorless or sensored
Sensors	Digital incremental Hall Analog SIN/COS
Fault detection	Over-current Over-temperature
Additional features	Reverse operation

I/O

Ports	1x PWM control 1x Digital error signal
CAN interfaces	2x CAN 2.0
Serial interfaces	1x RS232 1x RS485 Full Duplex 1x UART
Configuration port	1x USB
Cooling fan	1x PWM
Fault Detection	Digital I/O CAN Serial



GENERAL

Power Input	8 - 20VDC 6.6 - 13.2W
Redundancy	Redundant power input
Construction	Anodized aluminum IP67
Dimensions	260 x 160 x 100 mm
Temperature	-20 to 55°C
Weight	2430g



24 AUG

[P005430] Veronte Motor Controllers: MC24 1.0