

## MC MOTOR CONTROLLERS

Integrated motor controllers to seamlessly engineer safe and efficient equipment for OEM application needs.

### **J1939 COMMUNICATION**

- > Simplified integration with Vanguard™ battery packs.

### **AUTOMOTIVE GRADE DESIGN**

- > Outstanding resilience and reliability.

### **AUTO-TUNING**

- > Less work to optimize your system.

### **FAULT PROTECTION**

- > Keep the equipment working as well as possible, as long as possible.

### **MULTIPLE CONTROL MODES**

- > Control speed, torque, or a combination.



MOTOR CONTROLLERS

# TECHNICAL SPECIFICATIONS



<sup>1</sup>



SPECIFICATION	MC2000	MC4000	MC8000
NOMINAL INPUT VOLTAGE	48 VDC	48 VDC	48 VDC
MAXIMUM INPUT VOLTAGE	72 VDC	72 VDC	72 VDC
MINIMUM INPUT VOLTAGE	30 VDC	30 VDC	30 VDC
PHASE CURRENT (PEAK)	200 A	430 A	630 A
EFFICIENCY (PEAK)	95% or greater	95% or greater	95% or greater
SUPPORTED MOTOR TYPES	Three-phase SPM	Three-phase SPM	Three-phase SPM
FAULT PROTECTION	Over/under voltage, over temperature, over current	Over/under voltage, over temperature, over current	Over/under voltage, over temperature, over current
OPERATING TEMPERATURE RANGE	-20 to 50°C	-20 to 50°C	-20 to 50°C
STORAGE TEMPERATURE RANGE	-35 to 85°C	-35 to 85°C	-35 to 85°C
COMMUNICATIONS PROTOCOL	J1939	J1939	J1939
ENCLOSURE RATING	IPx5	IPx5	IPx5

# VANGUARD™

**BRIGGS & STRATTON**

Milwaukee, WI 53201-0702 USA  
(414) 259-5333

Wolleraustrasse 41  
8807 Freienbach, Switzerland  
+41 (0)55 415 1200

Copyright ©2025. All rights reserved

**VWWW.VANGUARDPOWER.COM**

<sup>1</sup> See [vanguardpower.com](http://vanguardpower.com) for warranty details.