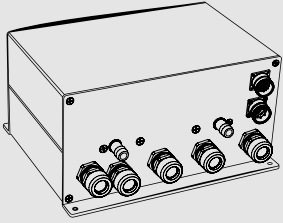


Advanced solutions for battery powered vehicles and boats



## SAC51

Motor controller for vehicles and boats

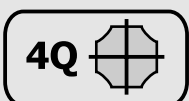
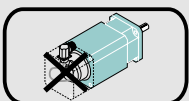
### MAIN FEATURES

- State of the art technology
- Compact design
- Easy setup
- Sensorless vector control
- Speed or torque control
- Set-point value analog or via CAN bus
- Autotuning and self-test functions
- Battery management
- Liquid cooling



### TECHNICAL CHARACTERISTICS

- |                        |               |
|------------------------|---------------|
| Battery voltage        | 96 V to 370 V |
| Supply voltage         | 80 V to 440 V |
| Rated output current   | 250 A         |
| Maximal output current | 280 A         |
| Rated power            | 110 kVA       |
| Maximal power          | 140 kVA       |



# Technical specifications

## Electrical data

Supply voltage	80 V to 440 V (12 V to 15 V for control stage)
Output frequency	0 Hz to 400 Hz
Interfaces	<ul style="list-style-type: none"> <li>• CAN</li> <li>• RS232 interface for setup with the PC Software</li> <li>• Motor temperature monitoring over CAN</li> <li>• HALL position sensor interface / Resolver interface (SSI)</li> </ul>

## Functions

Control method	<ul style="list-style-type: none"> <li>• Sensorless vector control</li> <li>• Torque or speed control</li> </ul>
Operating functions	Speed mode, torque mode, EV mode
Braking functions	Generator braking
Protection functions	Undervoltage, overvoltage, overcurrent, thermal motor protection, overtemperature, protection against battery deep-discharge and over-charge application specific protection functions possible
Motor types	Asynchronous motors, permanent magnet synchronous motors

## Mechanical data

IP enclosure rating	IP65
Ambient temperature	-25°C to +60°C
Cooling type	Liquid
Coolant temperature	-25°C (with non-freezing coolant) to 40°C (min. flow 7 l/min)
Size (W x D x H) in mm	316 x 308 x 165
Weight (with cables)	17.6 kg

## Accessories

- GD2 display, control and battery monitoring unit
- HV2 data acquisition unit
- C60D6 wiring harness
- SAC-USB2 galvanically isolated programming adapter
- SACTERM setup, parametrization and diagnostics software

The desired performance features are binding only then if they were expressly agreed by contract.

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