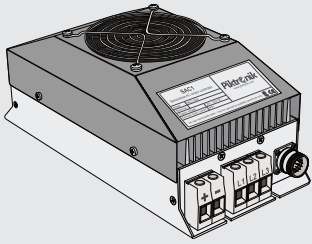


Advanced solutions for battery powered vehicles and boats



SAC1-90A

Motor controller for small vehicles and boats

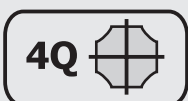
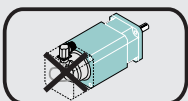
MAIN FEATURES

- 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



TECHNICAL CHARACTERISTICS

- | | |
|------------------------|-----------------|
| Battery voltage | 24 V to 48 V DC |
| Supply voltage | 20 V to 60 V DC |
| Rated output current | 90 A |
| Maximal output current | 110 A |
| Rated power | 5.0 kVA |
| Maximal power | 7.7 kVA |



Technical specifications

Electrical data

| | |
|------------------|---|
| Supply voltage | 24 V to 60 V DC |
| Output frequency | 0 Hz to 400 Hz (optionally up to 600Hz) |
| Interfaces | <ul style="list-style-type: none"> CAN RS232 interface for setup with the PC Software Motor temperature monitoring (PTC) HALL position sensor interface |

Functions

| | |
|---------------------|---|
| Control method | <ul style="list-style-type: none"> Sensorless vector control (or combined with speed/position sensor) Torque or speed control |
| Operating functions | Speed mode with analog input, torque mode with analog input, constant speed operation, EV mode, CAN bus operation (speed or torque mode) |
| Braking functions | Generator braking (at speed limit, with analog input or with brake input) |
| Protections | 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 with or without hall sensors |

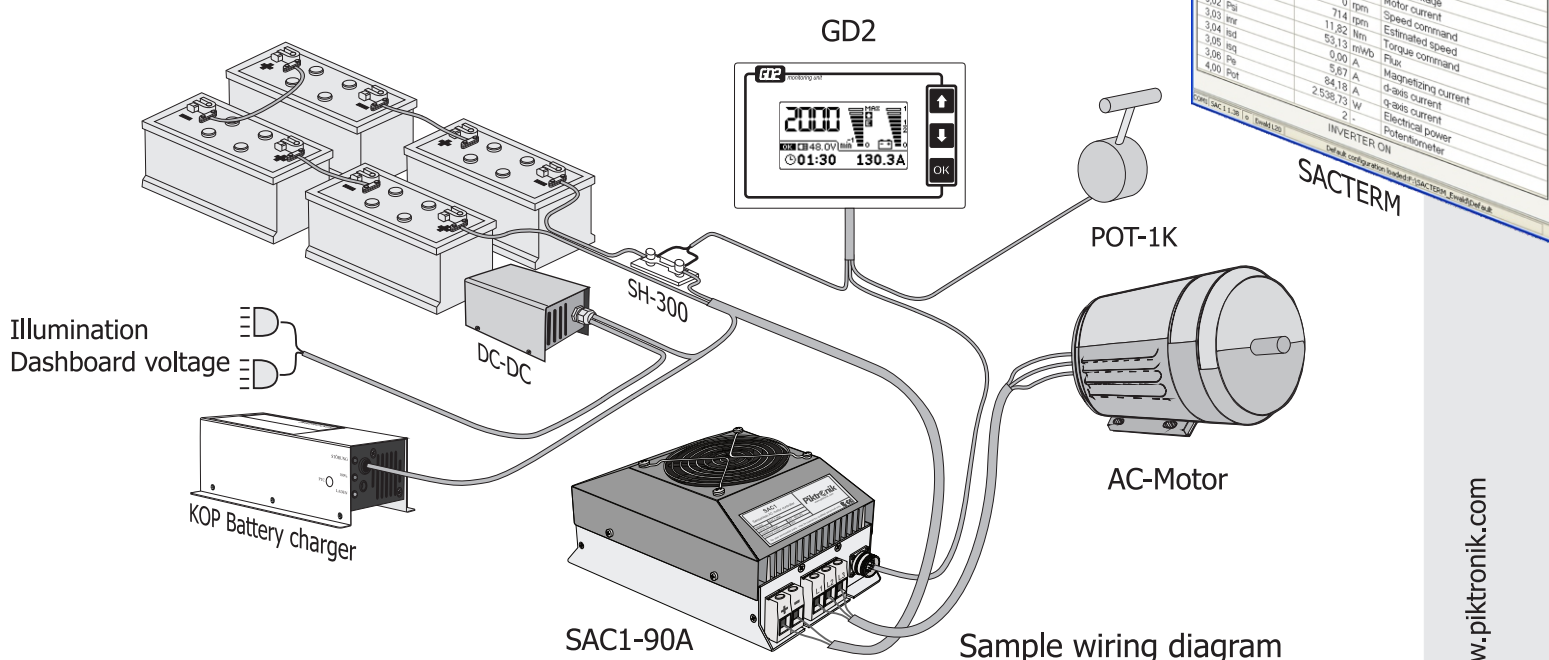
Mechanical data

| | |
|------------------------|-----------------|
| IP enclosure rating | IP44 |
| Ambient temperature | -25°C to +35°C |
| Size (D x W x H) in mm | 300 x 123 x 153 |
| Weight | 3.5 kg |

Accessories

- GD2 display, control and battery monitoring unit
- C4DR6 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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