

Single Genset Controller, SGC 110



SGC 110

Main features

- **Auto, manual and remote start/stop** modes for operation
- **Island** application support
- **Deep sleep mode** extends the battery lifetime
- **8 inputs**, configurable
 - 3 analogue
 - 5 digital
- **6 digital outputs**, configurable
- **Controls** start relay, fuel relay, stop relay, alarm horn and more
- Supports the **battery charging** alternator I/O interface
- **Manually configurable** from the controller front buttons or from a PC using DEIF Smart Connect utility software
- **Backlit full graphics LCD** with power saving feature for extended battery lifetime
- **Monitors 1-phase/3-phase** voltage and frequency for the generator
- **Monitors engine safety parameters** like lube oil pressure, engine temperature, fuel level and more
- **Event log** for 30 events with real time clock (RTC) stamps
- **Counters** for engine starts, stops and running hours
- **Multiple level passwords** to protect against unauthorised changes to the configuration from the display

General description

The SGC 110 is a modern genset controller with a user-friendly interface and full graphics LCD.

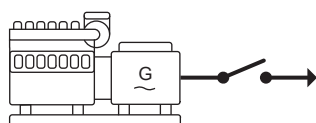
It includes engine safety monitoring, genset voltage and frequency measurement (true RMS).

Configurable analogue and digital inputs/outputs are provided for various features.

Start and stop gensets remotely using the Remote start/stop function.

Deep sleep mode is a useful feature that extends the battery lifetime by suspending the normal controller functions of when the genset is off.

Configure parameters from a PC using DEIF Smart Connect utility software. Connect to the PC through the controller's USB Type B port.



Power supply

- Nominal voltage: 12/24 V DC
- Operating range: 8 to 28 V DC
- Power transients in compliance with ISO 7637-2

Operating conditions

- Operation: -20 to 65 °C
- Storage: -30 to 75 °C
- In compliance with IEC 60068-2-1, 2

Environment

- Vibration: 2G in X, Y and Z axes for 8 to 500 Hz, in compliance with IEC 60068-2-6
- Shock: 15 g for 11 ms, in compliance with IEC 60068-2-27
- Humidity: 0 to 95 % RH, in compliance with IEC 60068-2-78
- Protection degree: IP65 for front face with gasket, in compliance with IEC 60529
- EMI/EMC: In compliance with IEC 61000-6-2, 4

Approvals

- CE approved:
 - Comply to the EU Low Voltage Directive: EN 61010-1 Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements
 - Comply to the EU EMC directive EN 61000-6-2, 4
- UL

Technical specifications

Maximum standby current:

- 124 mA, 12 V DC
- 123 mA, 24 V DC

Crank-start dropout survival period

- 50 ms for a drop from 12/24 V DC

Charging alternator interface

- 0.25 A, 12/24 V DC
- Diagnostic voltage measurement

Digital outputs

- 6 x 0.50 A outputs, configurable for pre-heat, horn and more

Digital inputs

- 5 switch-to-ground inputs, configurable for lube oil, temp, fuel level and more

Analogue inputs

- 3 resistive inputs, configurable for various sources
 - 2 x 10 to 1000 Ω
 - 1 x 10 to 5000 Ω

Genset voltage measurement

- 32 to 300 V AC RMS, 5 to 75 Hz for phase-to-neutral

Dimensions

- External dimensions: 139 mm x 114 mm x 38.3 mm
- Mounting panel cut-out: 118 mm x 93 mm

For more information, please contact:

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