



SGC 110

# **General description**

The SGC 110 is a modern genset controller with a userfriendly 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.

## **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



## **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

Environment

• In compliance with IEC 60068-2-1, 2

pliance with IEC 60068-2-6

compliance with IEC 60529

## **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 × 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 × 10 to 1000 Ω
  - 1 × 10 to 5000 Ω

## Approvals

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- 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

• Vibration: 2G in X, Y and Z axes for 8 to 500 Hz, in com-

• Shock: 15 g for 11 ms, in compliance with IEC 60068-2-27

• Humidity: 0 to 95 % RH, in compliance with IEC 60068-2-

• Protection degree: IP65 for front face with gasket, in

• EMI/EMC: In compliance with IEC 61000-6-2, 4

Comply to the EU EMC directive EN 61000-6-2, 4

### 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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