





GC 250

A.M.F. Single Genset Controller

- NEW AUTO-START and AMF (Automatic Mains Failure) controller for single gensets
- 3 Phase mains (utility) sensing
- 3 Phase generator sensing
- 3 x CTs Inputs
- True RMS measurements: kW, kVA, kVAr, pf, kWh (phase & total)
- 4 Configurable Digital Inputs
- 3 Analogue Inputs + 1 Extra Analogue Input (instead of a digital Input) + 1 for D+
- 4 Configurable Digital Output + 2 Digital Output 10A
- Interface for MPU and J1939 engines as standard
- USB serial port for configuration and FW update
- Large LCD display 128x64 with LED backlight and ICONES
- Compact dimensions: 144(W)x108(H)x40(D)mm (34mm)
- IP65 as protection degree with gasket always included as standard
- Periodical test
- Real Time clock
- Data recording: 64 Events log (64 slow trend and 42 fast trend)
- Remote start and stop
- Built in a larm sounder
- Free configuration softw are BOARD PRG



• Attractive price

• Outstanding performances including AND/OR logics

Alternative configurations
 especially used for rental
 sets

NEW

- User friendly, intuitive and easy to use
 - Made in Italy



General info

GC250 is the newest controller made by SICES for single stand-by gensets.

The same controller can be also used for AUTO START applications.

Despite the compact dimensions, GC250 includes the main engine and alternator protections like the engine speed, oil pressure, coolant temperature, frequency, voltage, current, power and fuel level.

The same controller can be used for electronic engines with **CAN interface J1939 protocol** and **MPU engines** (nonelectronic) as well.

Configuring the Inputs, Outputs and protections, GC250 can be easily adapted to suit a wide range of applications.

GC250 offers a **wide, graphic and powerful resolution display** 128x64 pixel providing **ICONS** for alarms/warning advices and for signalling the status of the engine, controller and data logs as well.

All parameters can be easily configured through USB using the **free software tool (BoardPrg)**, which can be downloaded thorough Sices website. It is also possible to set them directly through GC250 keyboard.

Measures

Mains Voltage:

L1-N, L2-N, L3-N, L1-L2, L2-L3, L3-L1 True RMS measure Max 300Vac CAT III (L-N) Max 520Vac CAT III (L-L) Generator Voltages: L1-N, L2-N, L3-N, L1-L2, L2-L3, L3-L1 True RMS measure Max 300Vac CAT III (L-N) Max 520Vac CAT III (L-L) Generator Currents: L1, L2, L3 True RMS measure. Rated current: 5A Generator and Mains Frequency meter: Resolution = 0.1 Hz. Accuracy = ±50ppm, ±35ppm/°C (typical) Battery Voltmeter: Resolution = 0.1V Oil Pressure Gauge: VDO 0-10 Bar, VDO 0-5 Bar, Veglia 0-8 Bar (Settable curve based on sensors available) Water or Oil Thermometer: VDO, Veglia, BERU (Settable curve based on sensors available) Fuel Level: VDO, Veglia (Settable curve based on sensors available) Engine revolution counter: By frequency detection. D+ for the measure of the voltage alternator battery charger

Power and power factor measures are available as total measures and for each single phase too.

Maximum power and current reached values, are registered with date and time.

Additional measures available based on the Isolated and Auto-supplied CAN J1939.

Protections

A set of high efficiency LEDs are used for signalling the current status of the Generator Set and for the visualization of alarm occurred. By means of ICONES it is possible to realize the type of the alarm/shutdown

Engine protections

- Fuel reserve
- Min./Max. fuel level
- Min./Max. battery voltage
- Min./Max. oil pressure
- Min./Max. w ater temperature
- Max. Pow er (32P)
- Closing of mains contactor or genset contactor failed
- Engine over crank
- Over speed from generator frequency
- Belt breakage
- Operating conditions not reached
- Emergency Stop

Generator protections

- Underfrequency (81U)
- Overfrequency (810)
- Undervoltage (27)
- Overvoltage (59)
- Time dependent overcurrent (51)
- Instantaneous overcurrent (50, 50V)
- Phase sequence (47)
- Current and Voltage unbalance (46/47)

Mains protections

- Min./Max. mains voltage (27/59)
- Min./Max. mains frequency (81U/810)
- Mains failure

Inputs, outputs and aux. functions

- N. 4 Configurable digital Inputs
- N. 3 Analogue Inputs + N.1 Additional digital Input, which can be used as analogue + N.1 Analogue Input for D+ (if not used in this way, they can be used as not isolated digital Inputs)
- N. 4 Configurable digital voltage source Outputs
- N. 2 High pow er digital voltage source Outputs (10A) for fuel solenoid and engine start.
- Built tin alarm sounder
- Engine diagnostic code
- Real Time Clock with internal rechargeable Lithium battery
- Periodical test
- AND/OR Configurable logics

Operating temperature: -30°C to 70°C Storage temperature: -30°C to 80°C Dimensions: 141(L)x113(H)x39(P)mm - Weight: 200g Cut-Out dimensions: 118x92mm Protection degree: IP65 (with complimentary gasket).



Human interface: Immediate and Intuitive solution using Symbols

- W ↓ Min. voltage generator
 H₂ ↑ Max. generator frequency
 Over speed
 Min. fuel level
 - ☐ High water temperature



- Low battery voltage
- HEDC")
- Failure Engine CANBUS



Connections







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