GC250

Auto Start and Automatic Mains Failure Controller

INTRODUCTION

Despite its compact dimensions, GC250 includes all the main engine and alternator protections you need, such as oil pressure, coolant temperature, frequency, voltage, current, power and fuel level.

The same controller can be used for electronic engines with CAN interface J1939 and MTU MDEC protocolsor used on traditional (non-electronic) engines.

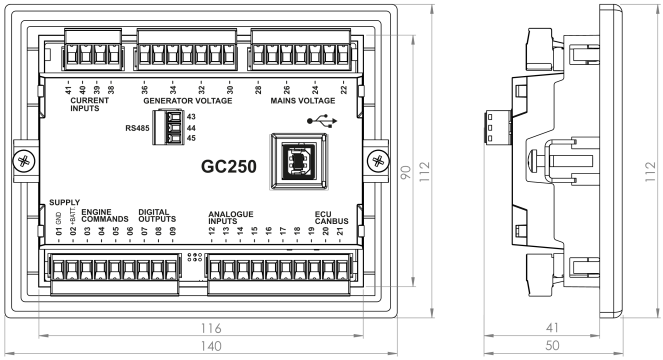
Configuring the inputs, outputs and protections, GC250 can be easily adapted to suit a wide range of applications.

GC250 offers a wide, graphic display, providing icons for alarms/ warning and for signalling the status of the engine, controller and data logs.

GC250 Plus version provides RS485 serial port with Modbus RTU and SMARTCLOUD secure connection by CL100 or DANCE modules.

MAIN FEATURES

- AUTO-START and AMF (Automatic Mains Failure) controller for single gensets
- Large LCD display with LED backlight and icons
- Compact dimensions
- 3 Phase mains (utility) sensing
- 3 Phase generator sensing
- 3 CT inputs
- True RMS measurements: kW, kVA, kVAr, pf, kWh (phase and total)
- 4 Configurable digital inputs
- 3 Configurable analogue inputs + Configurable Charge alternator D+ input
- Interface for traditional and J1939 engines
- USB serial port for configuration and FW update
- Data recording: 64 events log, 64 (slow) + 42 (fast) periodical recordings
- Remote start and stop
- Embedded alarm sounder
- Real Time Clock with internal rechargeable Lithium battery
- Periodical test
- Free configuration software



EMBEDDED FUNCTIONS

User-friendly symbols and codes for:

- Minimum/maximum voltage generator
- Minimum/maximum generator frequency
- Over speed
- Minimum fuel level
- High coolant temperature
- Low battery voltage
- Failure engine CANBUS

Protective measures for all phases or for each single phase:

- Engine protection:
  - Fuel reserve
  - Minimum/maximum fuel level
  - Minimum/maximum battery voltage
  - Minimum/maximum oil pressure and temperature
  - Minimum/maximum coolant temperature
  - Maximum power (32)
  - Closing failure of mains contactor or genset contactor
  - Engine over crank
  - Over speed from generator frequency
  - Belt breakage
  - Operating conditions not reached
  - Emergency stop
- Generator protection:
  - Underfrequency (81U)
  - Overfrequency (810)
  - Undervoltage (27)
  - Overvoltage (59)
  - Time dependent overcurrent (51)
  - Instantaneous overcurrent (50)
  - Phases sequence (47)
  - Currents and voltages unbalance (46/47)
- Mains protection:
  - Minimum/maximum mains voltage (27/59)
  - Minimum/maximum mains frequency (81U/810)
  - Mains failure

Auto Start and Automatic Mains Failure Controller

COMMUNICATION

GC250

- USB
  - Slave mode for Mecc Alte software connection

GC250 Plus

- USB
  - Slave mode for Mecc Alte software connection
- RS485
  - Fault-protected bus-pin up to ±70-V with fast transient and ±36-V with slow transient
  - Protection circuit against 1 kV surge, 1.2/50 µs (IEC 61000-4-5) with internal transient voltage suppressors
  - Support for connection to CL100 (2G/5G & GPS) gateway
  - Support for connection to DANCE (Ethernet interface) module
  - Support for Mecc Alte SmartCloud remote monitoring platform

5 YEAR WARRANTY

Mecc Alte Kit
Bundle Option

Lower Costs
Smart Logistics

User Friendly
Intuitive

TECHNICAL DATA

- Recommended operating temperature -30°C to +60°C
- Storage temperature -30°C to 80°C
- Dimensions: 142 (W) x 112 (H) x 41 (D) mm
- Cut-out dimensions 118 (W) x 92 (H) mm
- Weight 250grammes
- Protection degree IP65 (with complimentary gasket)

Mecc Alte SPA (HQ)
Via Roma
20-36051 Creazzo
Vicenza - ITALY
T: +39 0444 396111
E: info@meccalte.it

The information contained in this document is substantially correct at the time of publication but may be subject to change. Please work with your Mecc Alte contact to confirm details.