

**Description:**

GU331A is a Genset intelligent controller, which has ATS auto transfer control function. It is adopted high performance computer chip, can modify the control procedure and protection parameters of generator, which incorporated kinds of functions, such as measure, control, protection, three remote, and programmable management. It fully meets the auto control requirements of different kinds of Genset for generator user and or special assembly factory.

- 2 The controller measures and displays input voltage both for generator and Mains and all electric parameters for load output, and rpm, oil pressure, coolant temperature, DC source voltage and running hours for engine, and the voltage and current are adopted true RMS measure to make sure data accuracy.
- 2 Optional Chinese and English menu, large LCD display.
- 2 Has real time calendar and clock.
- 2 Keep running data, status and special event records.
- 2 Realizing start and stop at desired time
- 2 Time preset and reminding functions for unit maintain.
- 2 Optional kinds of preset PT-sensor and can configure parameters.
- 2 User defines auxiliary control relay output.
- 2 Buttons on control panel are used for selecting control modes, starting the running procedure, displaying data, and modifying the parameters of running and protection. LED indicators are used for indicating the operation mode of controller and the running status of Genset, and LCD displays each measuring parameter and status.
- 2 Collect the status of expansion data and control output module via CI485A communication link.
- 2 Optional communication interface of RS485 or RS232, realizing long distance monitor, or communication with PC, fully realizing functions of remote signaling, telemetering and remote control, can read and set the running parameters of controller.
- 2 The controller is closely combined by panel and powder coated steel enclosure, and the panel is die-casting by flame-retarded and high strength plastic. All connections of controller are connected by pin-like and locked up terminal, easier and more convenient to connect, move, maintain and replace the device.

**Measure and Display Data:**

- Mains 3-phase phase voltage **L1-N, L2-N, L3-N**
- Mains 3-phase line voltage **L1- L2, L2- L3, L3- L1**
- Gen 3-phase phase voltage **L1-N, L2-N, L3-N**
- Gen 3-phase line voltage **L1- L2, L2- L3, L3- L1**
- Load 3-phase current **L1, L2, L3**
- Mains frequency **Hz (L1)**
- Gen frequency **Hz (L1)**
- 3-phase apparent power **AL1, AL2, AL3**
- 3-phase power and total power **P L1, P L2, P L3, ΣP**
- 3-phase reactive and total reactive power **QL1, QL2, QL3 ΣQ**
- 3-phase power factor **PFL1, PFL2, PFL3**
- Active energy **(KWhr) ΣE**
- Reactive energy **(KVAhr) ΣE**
- Phase sequence detect
- Genset running speed **RPM**
- Engine oil pressure **Kpa**
- Engine coolant temp **°C**
- Fuel level **%**
- Batter voltage **VDC**
- Genset running time **HOUR**

**Panel Buttons**

- AUTO operation mode
- MAN operation mode
- TEST operation mode
- Start button
- Stop/Failure reset button
- Lamp test/ mute button
- ▶ Button (parameters setting)
- ▼ Button (scroll down menu/ value descend)
- ▲ Button (scroll up menu/ value ascend)

**Panel LED:**

- Charge fail
- Fail to start
- Low oil pressure failure
- High coolant temp failure
- Overspeed failure
- Emergency stop
- Gen normal LED
- Gen supply LED
- Mains normal LED
- Mains supply LED
- LED for AUTO operation mode
- LED for MAN operation mode
- LED for Test operation mode
- LED for Unit start running
- LED for stop/fail to stop
- Mute LED

**Digital Input:**

- Gen close auxiliary input
- Mains close auxiliary input
- Genset remote signal
- Emergency stop signal
- High coolant temp signal (warning/stop)
- Low oil pressure signal (warning/stop)
- Pickup sensor
- Digital input configurable by expansion module (most 8 ways)

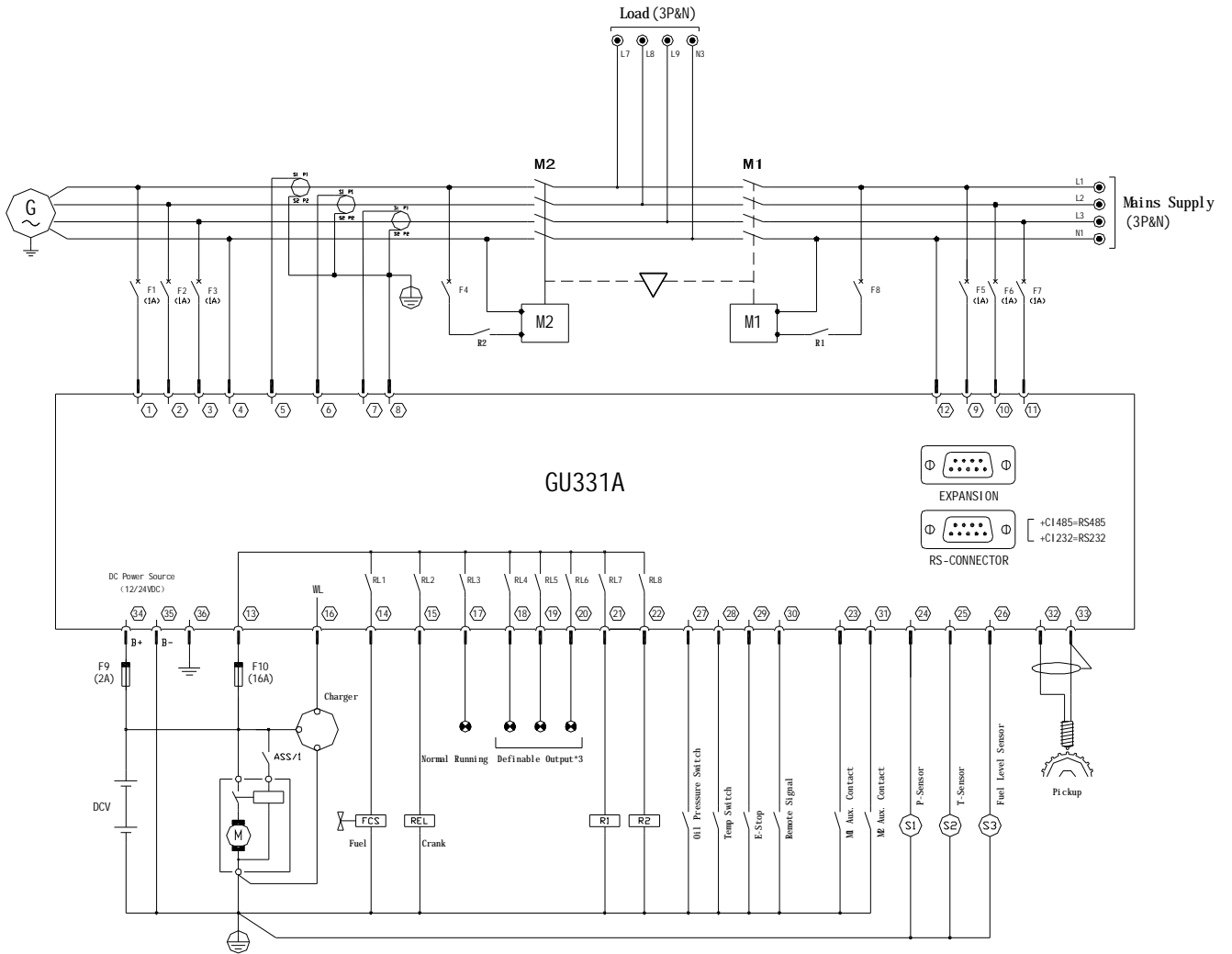
**Control Relay Output:**

- Fuel control output
- Start control output
- DC charger exciting output
- Generator normal running
- Definable auxiliary control relay output (total 3 ways)
- Control relay output configurable by expansion module (most 8 ways)
- Mains close output
- Gen close output

**Other Parameters:**

- DC working power source
- Voltage range: 12V/24V (8-35VDC continuous)
- Max. operation working current: @12V 0.4A ,@24V 0.2A
- AC input voltage: phase voltage 10-300VAC RMS (AC frequency ≥ 40 Hz)
- AC input frequency: 3~70HZ ( voltage ≥ 10V )
- Pickup sensor input frequency: Max. 10000Hz
- Pickup sensor input voltage: 1-70VAC
- Fuel/ start control relay output 10A/30VDC
- Auxiliary relay output 3A/30VDC
- Running ambient temp -20 to 50°C
- Storage ambient temp -40 to 80°C

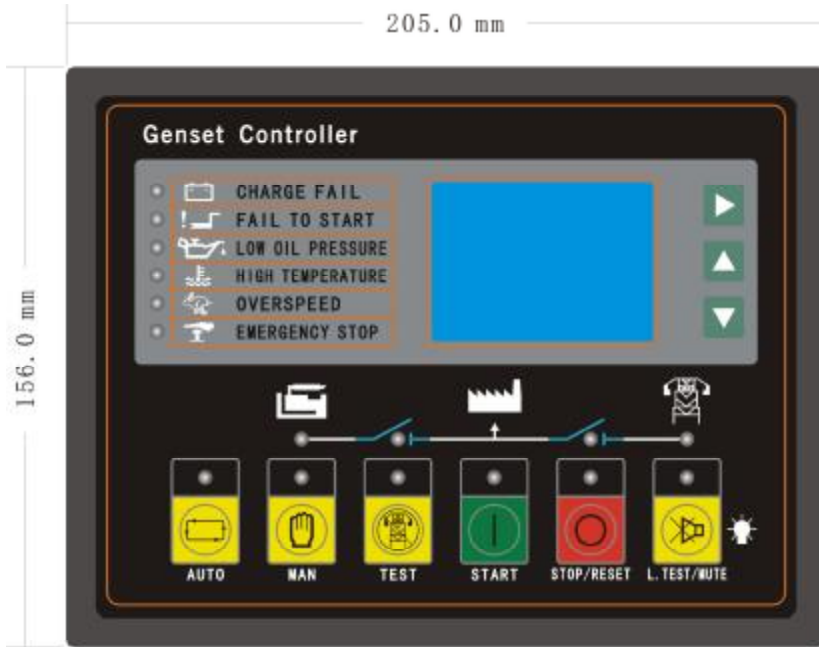
Typical Wiring Diagram:



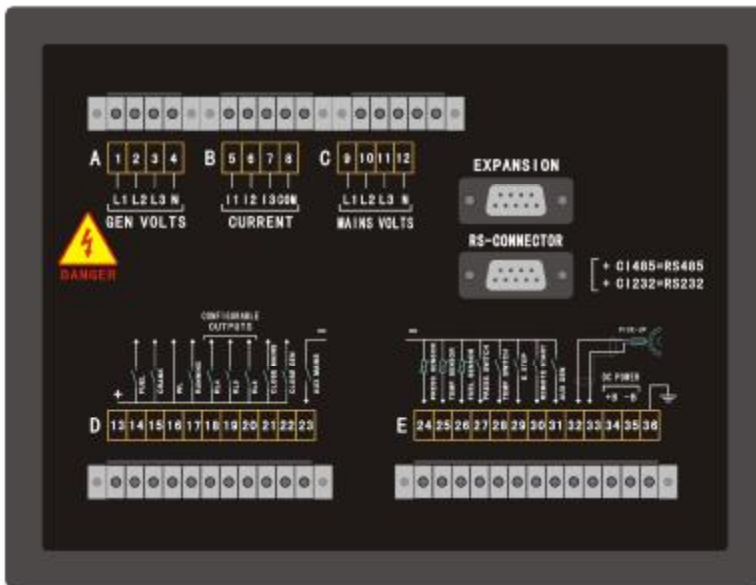
Note: Controller must be grounded well.

**Outline Dimensional Drawing:**

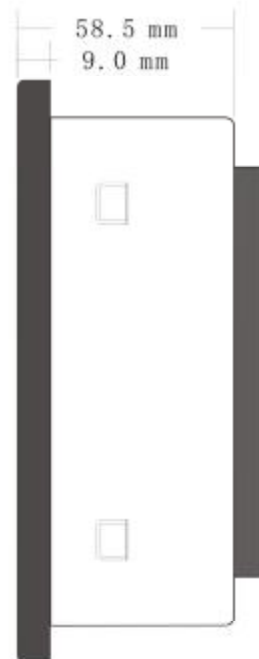
Operation Panel	W205mm×H156mm
Install Hatch	W186mm ×H137mm
Thickness	D58.5mm (unconnected)



Front view



Back view



Side view