

**Summarization:**

GU611A is an auto start controller of Mains dripping. Mains is monitored by controller under auto control mode, when Mains voltage occurs failure, generator auto start and Gen. supply; Mains supply when Mains recover and generator stop delay. The control procedure and protection parameters of generator can be modify, completely meet requirements of Genset on auto start, and stop control and basic protection.

- | Controller through LCD on panel display control status, running status and related measuring data for Genset.
- | LCD has background-light function that operator can clearly read the operating parameters even at night.
- | Controller has two running modes: AUTO/MAN, they are selected by keys on panel.
- | Controller measures and displays output voltage, current, oil pressure, water temperature, frequency, and DC source voltage of generator.
- | Voltage and current are measured by RMS value to make sure data more exact.
- | It can control the output switches both of generator and Mains on making or breaking.
- | Can select RS485 or RS232 communication interface, can read and setting running parameters of controller by communication with PC.
- | 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.

**Measuring and Display Data:**

Mains phase voltage **L1-N L2-N L3-N**  
 Mains line voltage **L1-L2 L2-L3 L3-L1**  
 Gen. phase voltage **L1-N**  
 Generator current **L1 L2 L3**  
 Frequency **Hz**  
 Engine oil pressure **Kpa**  
 Engine water temperature **°C**  
 battery voltage **Vdc**  
 Running time **h**  
 Aux. input (fuel level) **%**

**Keys on Panel:**

AUTO Key (select auto running mode)  
 MAN Key (select manual running mode)  
**START** Key (manual start)/+ Key (Scroll down menu/ value descend)  
**STOP** Key (manual stop/ failure reset key)  
 / - Key (Scroll up menu/ value ascend)  
**MUTE** Key (mute Key)

**LED Indicators on Panel:**

**ALARM** (when alarm failure, flash; when failure shutdown, hold illuminate)  
 Gen. voltage normal LED  
 Gen. supply LED  
 Mains voltage normal LED  
 Mains supply LED

**Settable Running Parameters:**

Current transformer rate (1~5000)  
 Voltage transformer rate (1~100)  
 Communication address (1~255)  
 Mains low voltage alarm value (AC45~20000V) 0 (no set)  
 Mains low voltage failure value (AC45~20000V) 0 (no set)  
 Mains high voltage alarm value (AC45~20000V)  
 9999 (no set)  
 Mains high voltage failure value (AC45~20000V)  
 9999 (no set)  
 Gen. low voltage alarm value (AC45~20000V)  
 0 (no set)  
 Gen. low voltage failure value (AC45~20000V)  
 0 (no set)  
 Gen. high voltage alarm value (AC45~20000V)  
 9999 (no set)  
 Gen. high voltage failure value (AC45~20000V)  
 9999 (no set)  
 Gen. Over current alarm value (0~9999A) 9999 (no set)  
 Gen. Over current failure value (0~9999A) 9999 (no set)  
 Electrical failure delay (0~600 s)  
 Engine running speed (99-9999 RPM)  
 Sensor frequency input value (1-9999 Hz)  
 The mode of delivery valve (0 N.C. / 1 N.O.)  
 The mode of coolant temperature sensor (1~8) 0 (not use)  
 The mode of oil pressure sensor (1~9) 0 (not use)  
 Start delay (1~300 s)  
 Crank attempt (1~10 times)  
 Crank time (1~30 s)  
 Crank interval time (1~300 s)  
 The barring speed of disconnection (1~9999RPM)  
 Safety-on delay time (0~600 s)  
 Cooling delay (0~600 s)  
 Stop fail delay (0~60 s)  
 Low speed failure value (0~9999RPM) 0 (no set)  
 Low speed alarm value (0~9999RPM) 0 (no set)  
 Over speed alarm value (0~9999RPM) 9999 (no set)  
 Over speed failure value (0~9999RPM) 9999 (no set)  
 Low oil pressure failure value (50~300kPa) 0 (no set)  
 Low oil pressure alarm value (50~300kPa) 0 (no set)  
 High water temperature alarm value (70~160°C)  
 9999 (no set)  
 High water temperature failure value (70~160°C)  
 9999 (no set)  
 Low battery warning (1~25V) 0 (no set)

**Digital Input:**

High water temperature signal  
Low oil pressure signal  
Genset remote signal  
2 channels standby input can be defined

**Other Parameters:**

DC working power source voltage: 12V/24V (6.5~35V continued)  
AC input voltage: phase voltage 10~300 Vac RMS (AC frequency  $\geq$  40 Hz)  
AC input frequency: 3~70Hz (voltage  $\geq$  10V)  
The maximum power consumption:  $\leq$  4W  
Class: 1%  
Startup relay output: 3A/30VDC  
Operating relay output: 3A/30VDC  
Aux. controller output: 3A/30VDC  
The grade of protection: IP65 (for controller front under correctly mounting)  
Running ambient temperature: -20~70°C  
Storage ambient temperature: -40~80°C

**Control Output:**

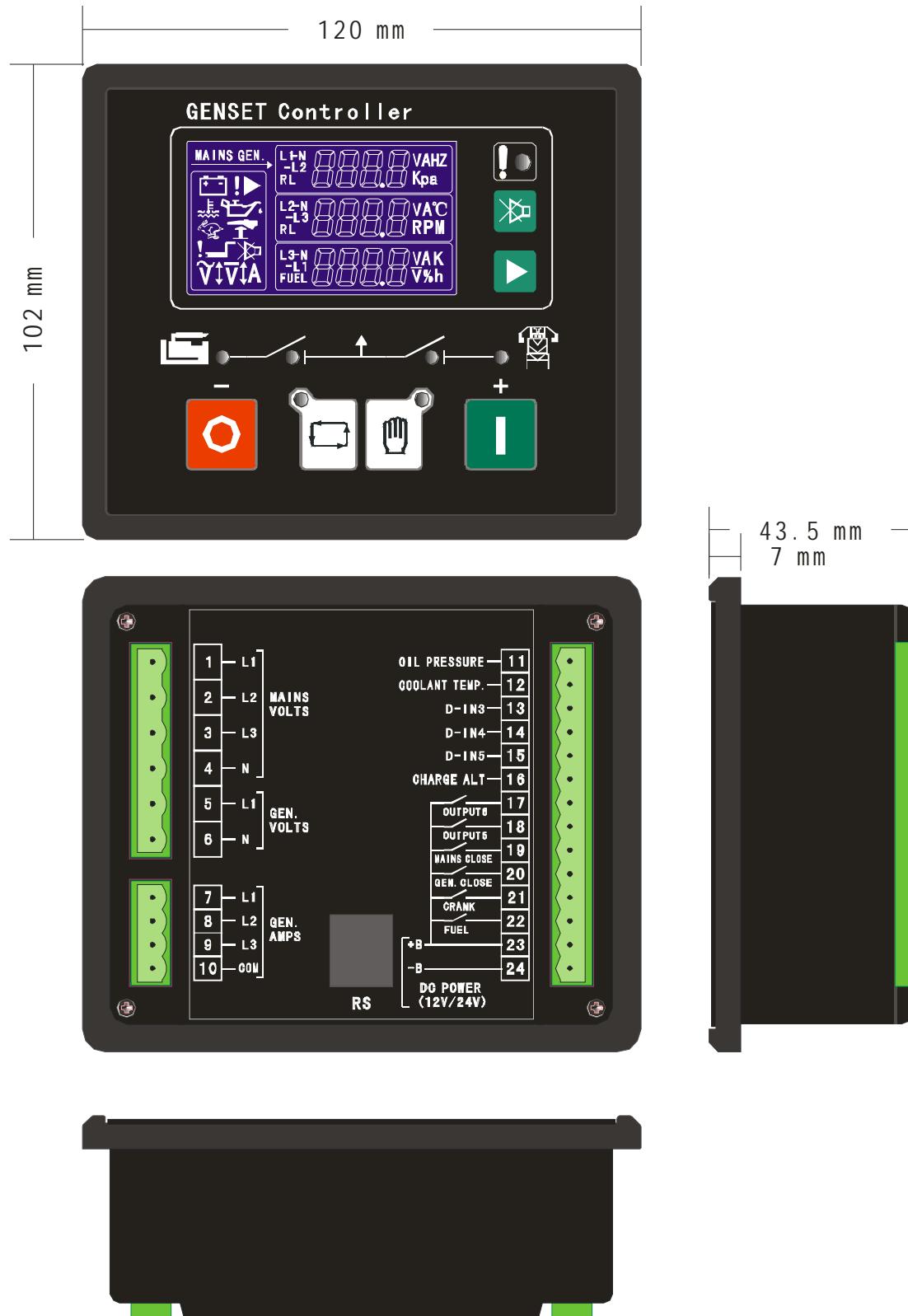
Fuel gate control output  
Start control output  
Generator output switch closing control  
Mains unit output switch closing control  
Custom output 1#  
Custom output 2#

**Failure Alarm and Shutdown**

Charge fail alarm  
High voltage alarm/ failure shutdown  
Low voltage alarm/ failure shutdown  
Over current alarm/ failure shutdown  
Low frequency alarm/ failure shutdown  
Over speed alarm/ failure shutdown  
Low oil pressure alarm/ failure shutdown  
High water temperature alarm/ failure shutdown  
Start failure  
Emergency stop  
Stop failure

## Outline Dimensional Drawing:

Operation Panel	W88mm×H75mm
Install Hatch	W78mm×H65mm
Thickness	D43.5mm (unconnected)



## Typical Wiring Diagram:

