## 1 Description:

**GM882** generator integrated controller, it uses a high-performance computer chip to modify the control program and protection parameters of the generator set. It integrates measurement, control, protection, three remote control, programmable management and many other functions, fully meet the automatic control requirements of single generator set and mains parallel grid connection.

#### Features:

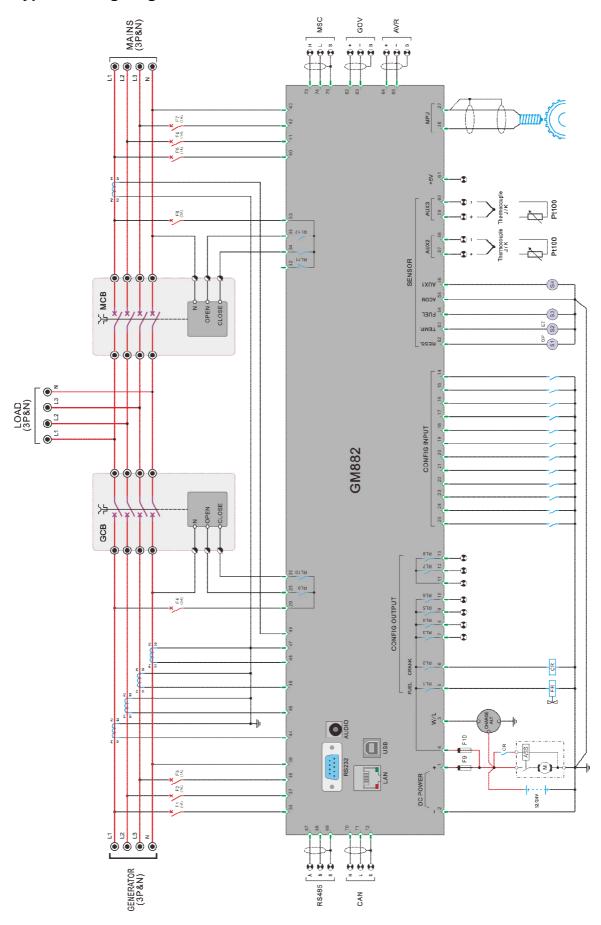
- I True RMS measure of voltage and current
- I Chinese, English, Russian, Spanish, Portuguese, etc. Multilingual Menu Selection
- I 5-inch TFT-LCD color display
- I The unit maintenance time preset and reminders
- I 4analog inputs for kinds of optional sensors, measurements show oil pressure, temperature and fuel, parameters also can be configured by user
- Supports 0-5V and 0-20mA sensors
- I Adds 2 analog measurement inputs to support PT100 and thermocouple sensors
- 1 12 definable auxiliary control relay outputs
- 1 12 ways to define isolated discrete input
- I Manually control the fuel pump
- I Manually control engine speed (EFI engine)
- I With extensions
- I Staged unloading/loading function, hierarchical plus virtual load
- Buttons on control panel are used for selecting control modes, starting and stopping the operating procedure, displaying data and modifying the parameters. 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
- I RS485 and RS23 communication port for remote monitoring, or communication with PC, complete remote signaling, telemetry, remote control
- USB communication port, communicates with PC, can read out and set the operating parameters of the controller
- I Can be adapted to GPRS-DTU module to realize the SMS emergency function of the controller and wireless network monitoring function
- I CANbus communication port for reading and controlling ECU engine parameters
- I Ethernet port
- I Audio power port output
- I Neutral wire or ground current measurement, generator earth fault protection
- I Through the pin-type locking terminal connection, it is very easy and convenient to connect, move, repair and replace the equipment.
- I Calendar and clock
- I Event record and measurement parameter record with clock
- Startup and shutdown of the scheduled time
- I Built-in relay pulse or analog voltage speed control function
- I Built-in relay pulse or analog voltage regulator control
- I Mains failure detection
- I Automatic synchronization control and detection

- I Active power control
- I Reactive power control
- I Selectable application modes: basic load, peak clipping, peaking and load soft switching

# 2 Shape and installation dimensions:



# 3 Typical wiring diagram:



#### 4 Technical parameters:

#### Working power

Voltage: 12/24Vdc (8 to 35Vdc)

As before cranking voltage ≥10V, can be maintained 80ms at 0V, until the voltage is restored≥5V, the controller can work without

to install additional auxiliary power.

Max. operating curren: @12V 400mA @24V

200mA

Max. standby current: @12V 150mA @24V

75mA

#### **AC** voltage

Type: True RMS

Phase voltage range: 15 to 346VAC Line voltage range: 25 to 600VAC

Voltage accuracy: 1%

Voltage frequency: 3 to 70HZ Frequency accuracy: 0.1%

## Speed sensor

Voltage range: 0.5 to 70VAC Frequency range: 1 to 10000Hz

#### Relay output

16A/30Vdc, total 2 3A/30Vdc, total 6 10A/240Vac total 4 Environmental parameters

Operating temperature range:  $-30^{\circ}\text{C}$  to

70℃

Storage temperature range:  $-40^{\circ}$ C to  $80^{\circ}$ C Humidity range:  $\leq$ 95%, non-condensing

#### Housing

Dimensions: 264\*192\*41.5mm Installation size: 220\*160mm

Protection level: IP65 (front) IP20 (back)

#### Sinusoidal vibration

4G, 5 to 100Hz, in accordance with

EN60068-2-6

#### **Impact**

40G, 11mS, in accordance with EN60068-

2-27

## **Electrical safety standards**

Complies with EN60950-1