



HGM9530

HGM9530 controller is designed for manual/auto parallel system generators with similar or different capacity. Additionally, it is suitable for single unit constant power output and mains paralleling. It allows automatic start/stop, parallel running, data measurement, alarm protection as well as remote control, remote measurement and remote communication function. It fits with LCD display, optional Chinese, English and other languages interface, and it is reliable and easy to use.

Product Code : 6010035

Power Supply : DC(8-35)V

Case Dimensions : 266*182*45(mm)

Panel Cutout : 214*160(mm)

Operating Temp. : (-25~+70)°C

Weight : 0.93kg

COMPLETE DESCRIPTION

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Utilizing the GOV (Engine Speed Governor) and AVR (Automatic Voltage Regulator) control function, the controller is able to synchronize and share load automatically; it can be used to parallel with other HGM9530 controller.

HGM9530 controller also monitors the engine, indicating the operational status and fault conditions accurately. When abnormal condition occurs, it splits bus and shuts down the genset, simultaneously the exact failure mode information is indicated by the LCD display on the front panel. SAE J1939 interface enables the controller to communicate with various ECU (ENGINE CONTROL UNIT) which is fitted with J1939 interface.

The powerful 32-bit Microprocessor contained within the module allows for precision parameters measuring, fixed value adjustment, time setting and set value adjusting and etc.. Majority parameters can be configured from front panel, and all parameters can be configured by USB interface (or RS485) to adjust via PC. It can be widely used in all types of automatic gen-set control system with compact structure, advanced circuits, simple connections and high reliability. The controller can monitor genset cylinder temperature and venting temperature via expansion analog input module (especially suitable for gas genset automatic parallel system).

PERFORMANCE AND CHARACTERISTICS

1. With ARM-based 32-bit SCM, high integration of hardware and more reliable;
2. 480x272 LCD with backlight, multilingual interface (including English, Chinese or other languages) which can be chosen at the site, making commissioning convenient for factory personnel;
3. Improved LCD wear-resistance and scratch resistance due to hard screen acrylic;
4. Silicon panel and pushbuttons for better operation in high/low temperature environment;
5. RS485 communication port enable remote control, remote measuring, remote communication via ModBus protocol.
6. Fitted with ECU CANBUS port and can communicate with J1939 genset. Not only can you monitor frequently-used data (such as water temperature, oil pressure, engine speed, fuel consumption and so on) of ECU machine, but also control start, stop, raising speed and speed droop via CANBUS port. The genset also can connect to expansion modules: digital input module DIN16, digital output module DOUT16A and analog input module AIN24 (can monitor genset cylinder temperature and venting temperature).

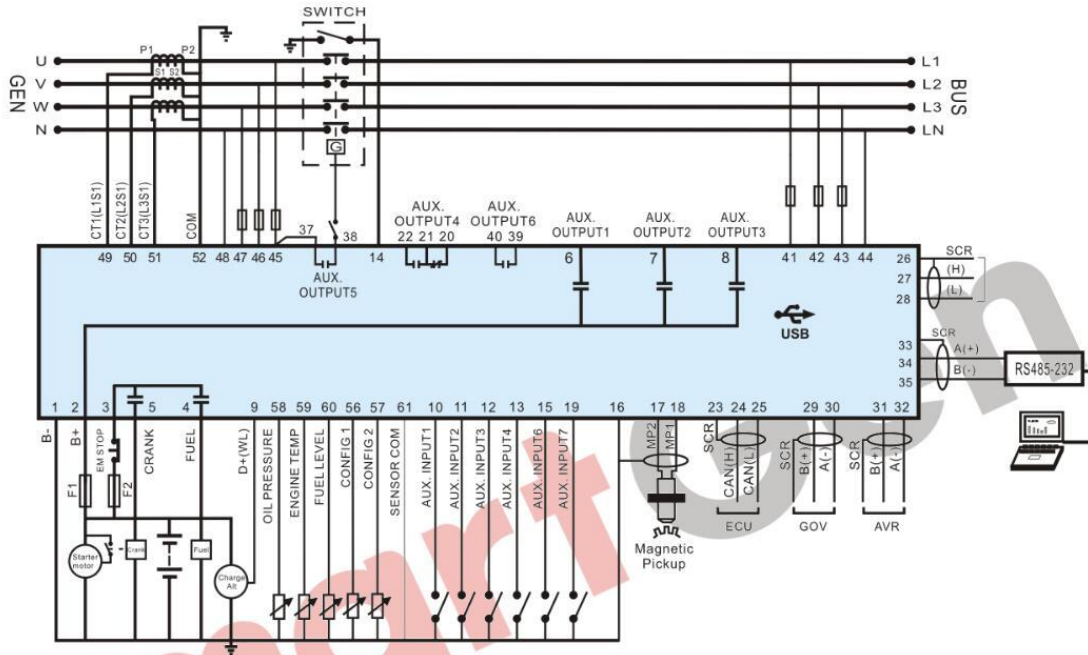
7. Suitable for 3-phase 4-wire, 3-phase 3-wire, single phase 2-wire, and 2-phase 3-wire systems with voltage 120/240V and frequency 50/60Hz;
8. Collects and shows 3-phase voltage, current, power parameter and frequency of Bus/mains.
9. For Bus, controller has loss of phase and phase sequence wrong detection functions; For generator, controller has over voltage, under voltage, over frequency, under frequency, over current, over power, reverse power, loss of phase, phase sequence wrong detection functions;
10. Synchronization parameters : Voltage Difference Between Bus and Mains, Frequency Difference Between Bus and Mains, Phase Difference Between Bus and mains;
11. Multiple running modes in auto state: with load running, off load running, demand parallel running;
12. Ramp on and ramp off function;
13. 3 fixed sensors (temperature, oil pressure and liquid level);
14. 2 configurable sensors can be set as sensor of temperature, oil pressure or fuel level;
15. More kinds of curves of temperature, oil pressure, fuel level can be used directly and users can define the sensor curves by themselves ;
16. Precision measure and display parameters about Engine,
17. Protection: automatic start/stop of the gen-set, ATS(Auto Transfer Switch) control with perfect fault indication and protection function;
18. All output ports are relay output;
19. Parameter setting: parameters can be modified and stored in internal EEPROM memory and cannot be lost even in case of power outage; most of them can be adjusted using front panel of the controller and all of them can be modified using PC via USB or RS485 ports;
20. Multiple crank disconnect conditions (rotate speed, oil pressure, generator frequency) are optional;
21. Widely power supply range DC(8~35)V, suitable to different starting battery voltage environment;
22. Event log, real-time clock, scheduled start & stop generator (can be set as start genset once a day/week/month whether with load or not);
23. Accumulative total run time and total electric energy of A and B. Users can reset it as 0 and re-accumulative the value which make convenience to users to count the total value as their wish.
24. Can control engine heater, cooler and fuel pump.
25. With maintenance function. Actions (warning, trip and stop, shutdown) can be set when maintenance time out;
26. All parameters used digital adjustment, instead of conventional analog modulation with normal potentiometer, more reliability and stability;
27. IP55 waterproofness level can be achieved with the help of rubber-ring gasket between shell and control panel.
28. Metal fixing clips enable perfect in high temperature environment ;
29. Modular design, self-extinguishing ABS plastic shell, pluggable terminal, built-in mounting, compact structure with easy installation ;

PARAMETER LIST

Function Item	Parameter
Display	4.3 inches TFT-LCD (480*272)
Operation Panel	Silicon Rubber
Language	Chinese & English & Others
Digital Input	7
Relay Output	8
Analogue Input	5
AC System	1P2W/2P3W/3P3W/3P4W
Alternator Voltage	(15~360)V(ph-N)
Alternator Frequency	50/60Hz
kW/Amp Detecting & Display	●
Monitor Interface	RS485
Programmable Interface	USB/RS485
CANBUS(1939)	●
RTC & Event Log	●
Scheduled Start Genset	●
Maintenance	●
ULP	●
Can Expand Digital Input/Output Modules	●
DC Supply	DC(8-35)V
Case Dimensions(mm)	266*182*45
Panel Cutout(mm)	214*160
Operating Temp.	(-25~+70)°C

HGM9530 Typical Application

HGM9530 typical application diagram



Note: Fuse F1: min. 2A; max. 20A. Fuse F2: max. 32A. Users should select suitable fuse depend on practical application.