



HGM7110DC

HGM7110DC genset controller is used for genset automation and monitor control system of single unit to achieve automatic start/stop, data measurement, alarm protection and “three remote” (remote control, remote measuring and remote communication). The controller adopts large liquid crystal display (LCD) and selectable Chinese, English or other languages interface with easy and reliable operation.

Product Code : 6010022

Power Supply : DC(8-35)V

Case Dimensions : 197*152*47(mm)

Panel Cutout : 186*141(mm)

Operating Temp. : (-25~+70)°C

Weight : 0.75kg

COMPLETE DESCRIPTION

HGM7110DC genset controller is used for genset automation and monitor control system of single unit to achieve automatic start/stop, data measurement, alarm protection and “three remote” (remote control, remote measuring and remote communication). The controller adopts large liquid crystal display (LCD) and selectable Chinese, English or other languages interface with easy and reliable operation.

HGM7110DC controller adopts 32 bits micro-processor technology with precision parameters measuring, fixed value adjustment, time setting and threshold adjusting and etc. The majority of parameters can be set using front panel and all the parameters can be set using PC (via USB port) and can be adjusted and monitored with the help of RS485 ports. It can be widely used in all types of automatic genset control system with compact structure, advanced circuits, simple connections and high reliability.

PERFORMANCE AND CHARACTERISTICS

HGM7110DC : Control the genset to start/stop by detecting the accumulator voltage or charger current.

1. With ARM-based 32-bit SCM, highly integrated hardware, new reliability level;
2. 132x64 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 rubber panel and pushbuttons for better operation in high/low temperature environment;
5. RS485 communication port enables remote control, remote measuring, remote communication via ModBus protocol.
6. Equipped with SMS (Short Message Service) function. When genset is alarming, controller can send short messages via SMS automatically to max. 5 telephone numbers. Besides, generator status can be controlled and checked using SMS.
7. Equipped with CANBUS port and can communicate with J1939 genset. Not only can you monitoring frequently-used data (such as water temperature, oil pressure, speed, fuel consumption and so on) of ECU machine, but also control starting up, shutdown , raising speed and speed droop via CANBUS port.
8. Suitable for Accumulator Priority System, Generator Priority System, Or Double Accumulator System;
9. Accumulator Priority System : The accumulator supplies the power for load continuously. In Auto mode, the genset will start automatically to charge the accumulator if the accumulator voltage has fallen below the “Charge Start Voltage”.
10. Generator Priority System: The generator supplies the power for load continuously. If there is shutdown alarm occurs by either engine or generator, the accumulator will supply the power for load. In Auto mode, the genset will charge the accumulator if the accumulator voltage has fallen

- below the “Charge Start Voltage”; When the accumulator voltage has fallen below the “Nominal Voltage”, in addition, the generator abnormal condition occurs, Shutdown alarm will be initiated
11. Double Accumulator System: Firstly, the accumulator 1# supplies the power for load; if the accumulator 1# satisfies the charger requirement, then it will be charged by the genset and the accumulator 2# supplies the power for load.
 12. Collects and shows parameters;
 13. Accumulator over voltage, under voltage protection functions;
 14. 3 fixed analog sensors (temperature, oil pressure and liquid level);
 15. 2 configurable sensors can be set as sensor of temperature, oil pressure or fuel level;
 16. Precision measure and display parameters about Engine,
 17. Protection: automatic start/stop of the genset, perfect fault indication and protection function;
 18. All output ports are relay-out;
 19. Parameter setting: parameters can be modified and stored in internal FLASH 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. More kinds of curves of temperature, oil pressure, fuel level can be used directly and users can define the sensor curves by themselves;
 21. Multiple crank disconnect conditions (speed sensor, oil pressure) are optional;
 22. Widely power supply range DC(8~35)V, suitable to different starting battery voltage environment;
 23. Event log, real-time clock and Scheduled start & stop function (can be set as start genset once a day/week/month);
 24. Can be used as an indicating instrument (indicate and alarm are enable only, relay is inhibited);
 25. With maintenance function. Actions (warning, 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. Waterproof security level IP55 due to rubber seal installed between the controller enclosure and panel fascia;
 28. Metal fixing clips enable perfect in high temperature environment;
 29. Modular design, self-extinguishing ABS plastic enclosure, pluggable connection terminals and embedded installation way; compact structure with easy mounting.

PARAMETER LIST

| Function Item | Parameter |
|-----------------|----------------------------|
| Display | LCD(132*64) |
| Operation Panel | Silicon Rubber |
| Language | Chinese & English & Others |
| Digital Input | 7 |
| Relay Output | 8 |
| Analogue Input | 5 |

| Function Item | Parameter |
|------------------------|-------------|
| Monitor Interface | RS485 |
| Programmable Interface | USB/RS485 |
| CANBUS(1939) | • |
| RTC & Event Log | • |
| Scheduled Start Genset | • |
| Maintenance | • |
| DC Supply | DC(8-35)V |
| Case Dimensions(mm) | 197*152*47 |
| Panel Cutout(mm) | 186*141 |
| Operating Temp. | (-25~+70)°C |

HGM7110dc Typical Application

