GENSET CONTROLLER

DC70D Series

This series controller is specialized for Diesel / Gasoline / Gas Genset Start, Stop,Parameters monitoring, faults-checking as well as data setting.

4.3 inch colorful LCD screen display with brand new UI design is adapted in this controller that the relative failures can be displayed directly. All the parameters can be displayed by simulated indicators and words.Besides, LCD screen can display various faults in the same time that the genset will be stopped once it can not work smoothly. There are Chinese/English/Spanish/Russian interface options, more language can be set according to user's request. All the parameters can be configured through the front face buttons or use programmable interface by RS485 or USB to adjust via PC.It can be widely applied for all kinds of auto control system of gensets.

Features

There are five Models under DC70D series.

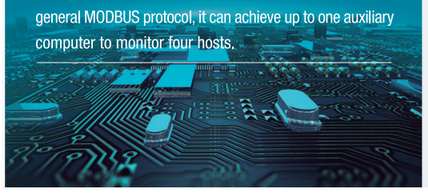
DC70D :Used for single machine automation. Start/Stop through remote start signal.

DC72D :Based on DC60D, it adds Mains monitoring and AMF (Mains/Generator automatic switching control) , especially suitable for the automation system composed by mains and genset.

DC70DR : Based on DC60D, it adds RS485 port.

DC72DR : Based on DC62D, it adds RS485 port.

DC70D-REMOTE: This module mainly cooperates with DC70D series controllers to realize remote data monitoring and operation control functions. With RS485 interface and general MODBUS protocol, it can achieve up to one auxiliary computer to monitor four hosts.



MAIN FEATURES

- 32 units Micro-procession technology is used.
- 4.3 inch TFT colorful big screen LCD, option language interface(Chinese/English/Spanish/Russian), user's language set if necessary.
- Indicator and number display through UI surface.
- Acrylic material is adapted to protect the screen.
- The silica gel panel is effective, waterproof, oil resistant and UV resistant. It has good handle and long service life.
- USB Port: parameters can be set even without power.
- With RS485 communication port, can achieve "Three Remote" functions via MODBUS protocol.
- Various kinds of parameters display.
- Input/output function, status can be shown directly.
- More categories of surface setting.
- Real time clock inside: preset time operate and auto maintenance is available. Genset working plan can be set as per week or month.
- Three class protection countdown function, which can set the maintenance time or date.
- Records function: relative faults shall be recorded in real time.
- Totally 7 relay's output, among which 5 relay output can be self-configurable, each relay can be set as max 50 functions, besides, there are 4 groups as non-contact terminals.
- 5 relays can be set as switch value input, and each can be set as max 40 functions.
- 4 sensor simulation input connectors, 6 input types is configurable and various kinds of units can be set.
- Battery charging control function,which can protect the battery according to battery voltage status.
- Sensor can be self-defined by front face button or PC software.
- Adapt to 3P4W,1P2W,2P3W(120V/240V,50/60HZ).
- Various of crank conditions(RPM,Frequency, Oil Pressure) can be chosen
- Control Protection:Auto Start/Stop of genset,load transfer (ATS control) and perfect failure display and protection.
- Standard water-proof rubber gasket. The waterproof can reach IP54.
- Module design: All the connections are adapted with European connectors so that installation, connection, repair and replacement can be more easily.

PARAMETERS DISPLAY

- Engine RPM
- Engine oil pressure
- Engine water temperature
- Engine fuel temperature
- Engine cylinder temperature
- Engine Tank temperature
- Engine fuel level
- Engine battery voltage
- Charging voltage
- ECU parameter display
- Mains Frequency (only for DC72D)
- Mains phase voltage L-N(only for DC72D)
- Mains phase voltage L-L(only for DC72D)
- Generator 3 Phase voltage L-N
- Generator 3 Phase voltage L-L
- Generator 3 phase current A
- Generator Frequency Hz
- Generator Power Factor COS ϕ
- Generator active power KW
- Generator apparent power KVA
- Generator reactive power KVar
- Current loading rate %
- Total average loading rate %
- Current consumption KWH
- Total consumption Kwh
- Total Crank times
- Current running time
- Total running time
- Three classes maintenance notice
- Current date / time

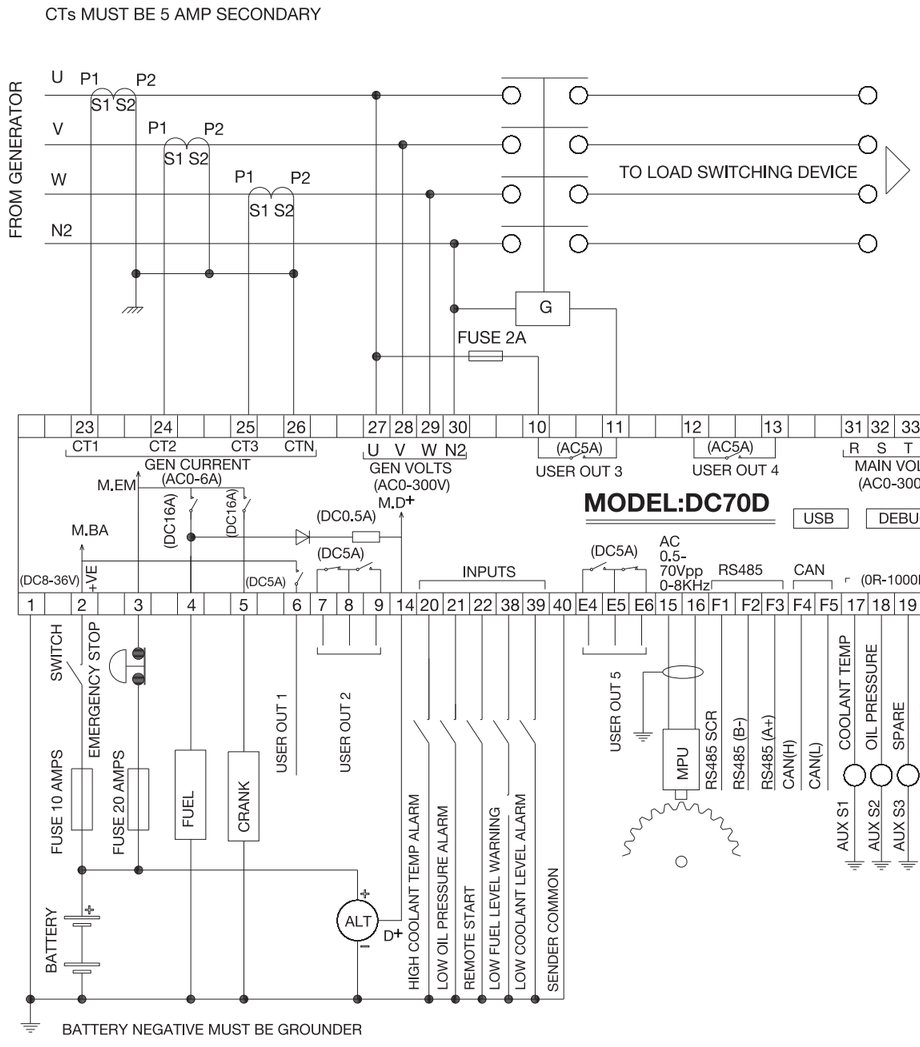
PROTECTION

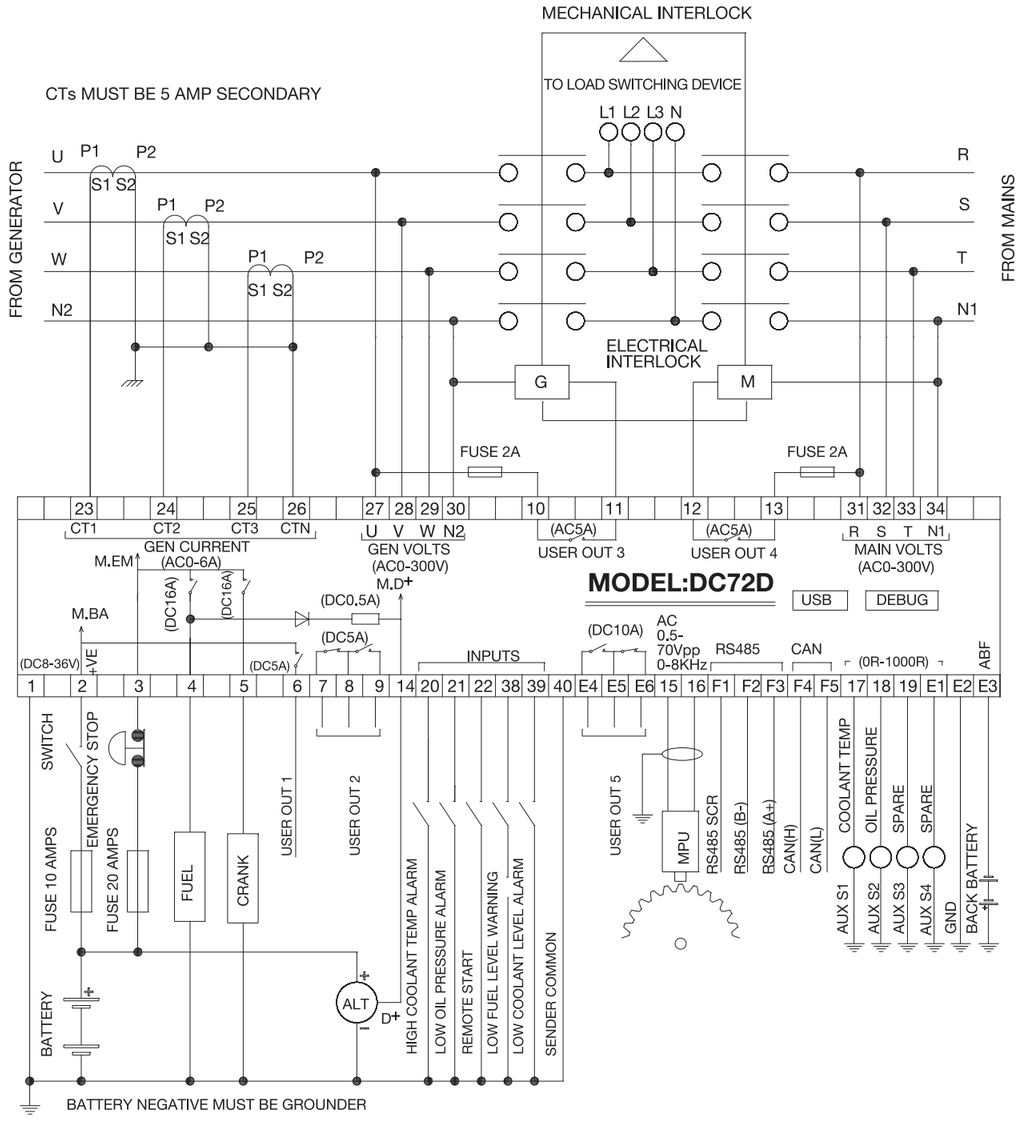
- Over speed
- Under speed
- Low oil pressure
- High water temperature
- High Oil temperature
- High Cylinder Temperature
- High Tank temperature
- Low fuel level
- Low oil level
- External emergency alarm
- D+ Opened
- RPM Lost
- Sensor Open
- Over Frequency
- Under Frequency
- Over voltage
- Under voltage
- Over current
- Non-balance of current
- Over power
- Lack of Phase
- Gen load failure
- Gen unload failure
- Mains Load failure
- Mains unload failure
- Primary maintenance expire
- Secondary maintenance expire
- Third maintenance expire
- ECU alarm failure
- ECU communication Failure
- Low water level alarm
- Emergency Stop
- Crank failure
- Over battery voltage
- Under Battery voltage
- Charging failure
- Battery Charging failure
- Stop Failure

SPECIFICATION

Options	Parameters
Working voltage	DC8V~36V Continuous
Power consumption	Standby:24V:MAX 1W
	Working:24V:MAX 5W
AC Voltage Input	1P2W 30VAC-276VAC(ph-N)
	2P3W 30VAC-276VAC(ph-N)
	3P4W 30VAC-276VAC(ph-N)
Rotate speed sensor Frequency	200-10000Hz
MAX Accumulating Time	99999.9Hours(Min Store time:6min)
Fuel Relay Output	16Amp DC+VE Supply voltage
Start Relay Output	16Amp DC+VE Supply voltage
Programmable Relay output 1	5Amp DC+VE Supply voltage
Programmable Relay output 2	5AMP Non-contact-Normal open--Normal close output
Programmable Relay output 3	5AMP Non-contact Normal Open output
Programmable Relay output 4	5AMP Non-contact normal open output
Programmable Relay output 5	5AMP Non-contact-Normal open--Normal close output
Excitation output	Max 1AMP DC+VE supply voltage
Switch value input	Available if connecting with Battery -
Working condition	-25-65℃
Storage condition	-40-85℃
Protection Level	IP54:when waterproof rubber gasket is added between controller and its panel
Insulation Intensity	Object: among in input/output/power Quote standard: IEC688-1992 Test way: AC2.2 kV / 1min 3mA leakage current
Overall dimension	210mm*160mm*50mm
Panel cutout	186mm*142mm
Weight	0.9Kg

APPLICATION CONNECTION DIGRAM





GENSET CONTROLLER

DC80D Series

DC80D DC82D

This series controller is specialized for Diesel / Gasoline / Gas Genset Start, Stop, Parameters monitoring, faults-checking as well as data setting.

4.3inch colorful LCD screen display with brand new UI design is adapted in this controller that the relative failures can be displayed directly. All the parameters can be displayed by simulated indicators and words. Besides, LCD screen can display various faults in the same time that the genset will be stopped once it can*t work smoothly.

There are Simplified Chinese, Traditional Chinese, English, Spanish, Russian interface options, more language can be set according to user*s request. All the parameters can be configured through the front face buttons or use programmable interface by RS485 or USB to adjust via PC. It can be widely applied for all kinds of auto control system of gensets.

Features

There are four Models under DC8xD series.

DC80D: used for single machine automation. Start/Stop through remote start signal.

DC82D: Based on DC80D, it adds Mains monitoring and AMF (Mains/Generator automatic switching control), especially suitable for the automation system composed by mains and genset.

DC80DR: Based on DC80D, it adds RS485 port.

DC82DR: Based on DC82D, it adds RS485 port.

MAIN FEATURES

- Dual core 32bit high performance single chip microcomputer.
- 4.3inch TFT colorful big screen LCD, Available in 5 languages, user's language set if necessary.
- Indicator and number display through UI surface.
- Acrylic material is adapted to protect the screen.
- Silicone panels;
- USB Port: parameters can be set even without power through USD port to monitor in real time.
- With RS485 communication port, can achieve "Three Remote" functions via MODBUS protocol.
- Various kinds of parameters display.
- Input/output function, status can be shown directly.
- More categories of surface setting.
- Real time clock inside.
- Maintenance countdown function, can set maintenance timing or date.
- The black box function can save the relevant parameters of the unit when the fault alarm occurs in real time, and it is convenient to find the cause of the fault.
- Totally 7 relay's output, among which 5 relay output can be self-configurable, each relay can be set as max 50 functions, besides, there are 2 groups as non-contact terminals.
- 5 relays can be set as switch value input, and function configurable.
- 3 sensor simulation input connectors, various kinds of units can be set.
- Sensor can be self-defined by front face button or PC software.
- Adapt to 3P4W,1P2W,2P3W(120V/240V,50/60HZ)
- Various of crank conditions (RPM, Frequency, Oil Pressure) can be chosen.
- Control Protection: Auto Start/Stop of genset, load transfer (ATS control) and perfect failure display and protection.
- Standard water-proof rubber gasket. The waterproof can reach IP54
- Module design: All the connections are adapted with European connectors so that installation, connection, repair and replacement can be more easily.

PARAMETERS DISPLAY

- Engine RPM
- Engine oil pressure
- Engine temperature
- Engine fuel level
- Engine battery voltage
- Charging voltage
- Mains Frequency (only for DC82D series)
- Mains phase voltage L-N (only for DC82D series)
- Mains phase voltage L-L (only for DC82D series)
- Generator 3 Phase voltage L-N
- Generator 3 Phase voltage L-L
- Generator phase
- Generator 3 phase current A
- Generator Frequency Hz
- Generator Power Factor COS ϕ
- Generator active power KW
- Generator apparent power KVA
- Generator reactive power K Var
- Real-time load rate %
- Current load rate%
- Average loading rate %
- Current consumption KWH
- Total consumption KWH
- Total Crank times
- Current running time
- Total running time
- Maintenance notice
- 5 switches input status display
- Output status display of 7 relays

PROTECTION

- Over speed
- Under speed
- Low oil pressure
- High temperature
- Low fuel level
- Low oil level
- External emergency alarm
- RPM Lost
- Sensor Open
- Over Frequency
- Under Frequency
- Over voltage
- Under voltage
- Over current
- Over power
- Maintenance expire
- Low water level alarm
- Emergency Stop
- Crank failure
- Stop Failure

SPECIFICATION

Options	Parameters
Working voltage	DC8V~36V Continuous
Power consumption	Standby:24V:MAX 1W
	Working:24V:MAX 7W
AC Voltage Input	1P2W 30VAC-276VAC(ph-N)
	2P3W 30VAC-276VAC(ph-N)
	3P4W 30VAC-276VAC(ph-N)
Rotate speed sensor Frequency	200-10000Hz
MAX Accumulating Time	99999.9Hours(Min Store time:6min)
Fuel Relay Output	Max 16Amp DC+VE Supply voltage
Start Relay Output	Max 16Amp DC+VE Supply voltage
Programmable Relay output 1	Max 5Amp DC+VE Supply voltage
Programmable Relay output 2	Max 5Amp DC+VE Supply voltage
Programmable Relay output 3	Max 5Amp DC+VE Supply voltage
Programmable Relay output 4	5AMP Non-contact normal close output
Programmable Relay output 5	5AMP Non-contact normal open output
Excitation output	Max 0.9AMP DC+VE supply voltage
Switch value input	Available if connecting with Battery -
Working condition	-25-65℃
Storage condition	-40-85℃
Protection Level	IP54:when waterproof rubber gasket is added between controller and its panel
Insulation strength	Apply AC1.5kV voltage between high voltage terminal and low voltage terminal; The leakage current is not more than 3mA within 1min.
Overall dimension	241mm*177mm*45mm
Panel cutout	220mm*160mm
Weight	0.9Kg