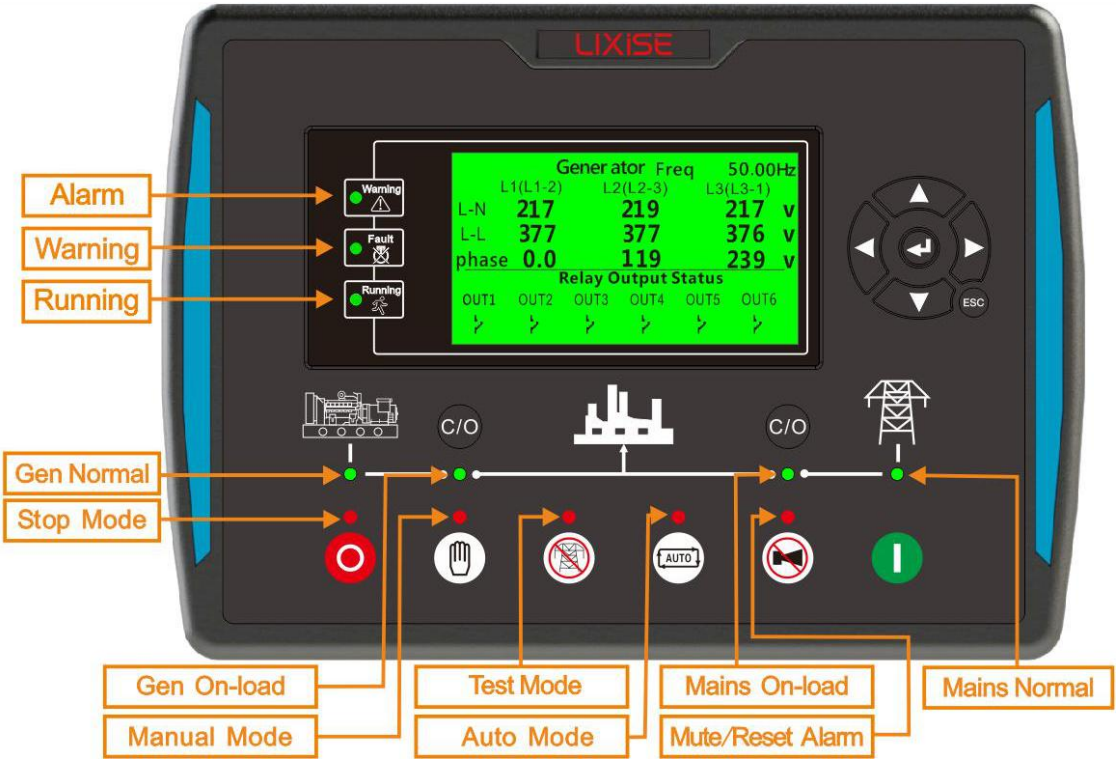
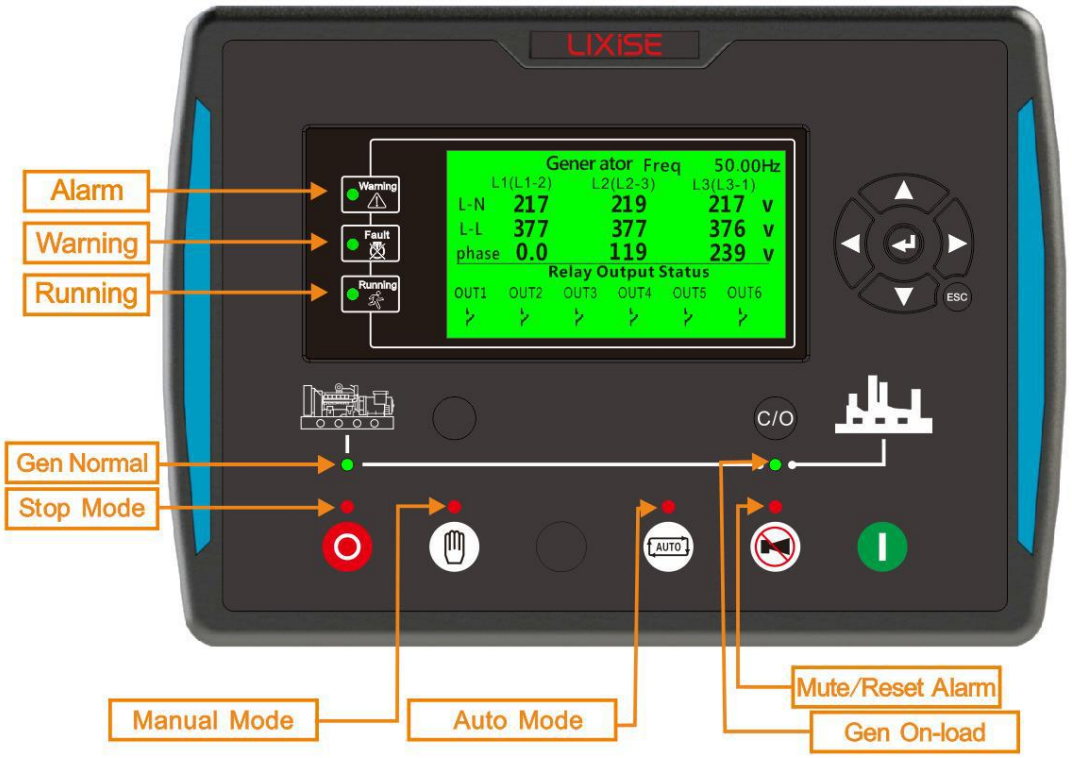
LXC83X0 Series Genset Controller

Ver:1.0

1. Indicator light





2. Key function description

	Stop	Stop the running generator in Auto/Manual mode; Reset alarm in stop mode; During stopping process, press this button again to stop generator immediately In the standby mode, press this key for more than 3 seconds, all the LED on the panel will be lit, and all the dot matrix will be lit.
	Start	Start genset in Manual mode or Test mode.
	Manual Mode	Press this key ,the controller will be in Manual mode.
	Auto Mode	Press this key and controller will be in Auto mode
	Running With Load	Press this key ,the controller will be in Manual Testing mode. (LXC8310 without)
	Mute/ Alarm Reset	1. Eliminate the alarm sound 2. If there is trip alarm, pressing the button can reset this alarm. But you can't reset other alarm types, pressing the button can reset this alarm. But you can't reset other alarm types
	Gen Close/Open	Under the manual mode, the power generation closing &openning sluice can be controlled。
	Mains Close/Open	Under manual mode, it can control the city electric closing &openning sluice(LXC8310 without)
	Set/Confirm	1.press this key can set the parameters. 2.press this button to confirm the set parameters. 3.Long press this key, can get into the basic parameter settings 4.press the"Confirm"&"stop" keys at the same time， can get into the advanced parameter settings.
	Up/Increase	Move the cursor upwards and increase the number of the position of the cursor
	Down/Decrease	Move the cursor downwards and decrease the number of the position of the cursor
	Left	1. Screen scroll。 2. Move the cursor to the left in the setting
	Right	1. Screen scroll。 2. Move the cursor to the right in the setting。
	Exit	1.when the screen displays other interfaces, press this key to return to the main interface. 2.When setting parameters, press this key to cancel the parameter settings that are not confirmed. 3. When entering parameter settings, long press this key to exit quickly and return to the main interface.

3. Parameter Setting

3.1. Password management

- **The controller has 2 groups of different permissions password**

  Password for technician ： default password：0000 ；
  Password for operator：default password：1111 ；
  When the user needs to configure parameters, the controller will present different parameter configuration interfaces by entering different permissions of the password.

❖ **Password permission instructions**

Password for technician : All parameters permissions can be modified
Password for operator : Can view parameter items ,but have no permission to modify parameters.

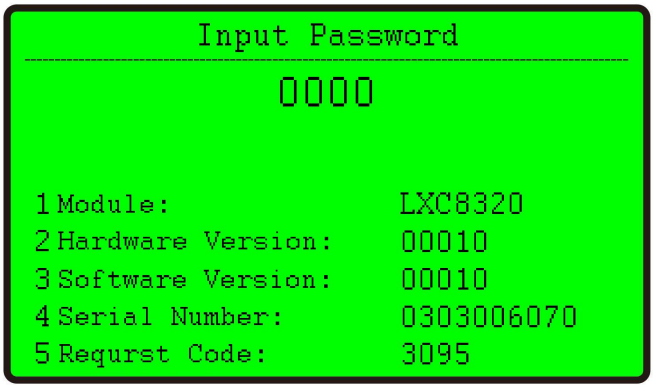
❖ **When voltage and current calibration is needed, please contact the manufacturer.**

❖ **Basic configuration parameters**

❖ Long press ↵, enter the "**basic configuration parameters**" interface， press ESC to exit after the modifcation；

❖ **Advanced configuration parameters**

Press ○ ↵ at the same time，enter the "**password input**" interface，it will enter the**"advanced configuration parameters"** interface after the right password was entered，press ESC to exit；



3.2. Basic configuration parameters

NOTE：There is no items of mains in setting and also no mains items in configurable ports of input/output of LXC8310 controller.

NOTE: Please set the generator frequency value as low as possible when cranking, so that make the starter be separated quickly as soon as crank disconnect.

CAUTION: Please modify the controller internal parameters when generator is in stand-by mode only, otherwise, the alarming to stop and other abnormal conditions may happen.

Long press ↵ for more than 3 seconds in the parameter interface, can enter the basic parameters configuration interface.

Basic configuration parameter			
No.	**Items**	**Defaults**	**Description**
1	Language :	Englilsh	The controller display language setting
2	Main Failure Deteotion:	Enable	The mains condition monitoring settings
3	Main Rate Volt (30-30000V):	00230	Standard for checking mains over/under voltage. (This value is primary voltage of transformer).
4	Main Rated Freq (10-65Hz):	50.0	Standard for checking mains over/under frequency.
5	Fast loading Feature:	Disable	
6	Crank Suoess:	6. Oil + speed +Freq	

7	Flywheel Teeth (10-300):	118	Teeth number of the engine for judging of starter disconnection and inspecting speed of engine.
8	Rated Speed (0-6000RPM):	1500	Offer standard to judge over /under/ loading speed.
9	Gen Rated Volt (30-30000V):	00230	Offer standards for detecting of gens' over/under voltage and loading volt.If using voltage transformer, this value is primary volt of transformer.
10	Gen Rated Freq (10-65Hz):	50.0	Offer standards for detecting of over/ under /load frequency.
11	Curr transform (6000/5A):	0500	The change of external connected CT.
12	Rated Current (5-6000A):	0500	Generator's rated current, standard of load current.
13	Rated Power (0-6000KW):	0276	Generator's rated power, standard of load current.
14	Bat Rated Volt (1-60V):	24.0	Standard for detecting of over/under voltage of battery.
15	Module Date:	User Setting	
16	Module Clook:	User Setting	
17	Start Delay (0-3600s):	0001	Time from mains abnormal or remote start signal is active to start genset.
18	Stop Delay (0-3600s):	0001	Time from mains normal or remote start signal is inactive to genset stop.
19	Return Delay (0-3600s):	0003	
20	Preheat Delay (0-3600s):	0000	Time of pre-powering heat plug before starter is powered up.
21	Cranking Time (1-60s):	08	Time for each start of the starter。
22	Crank Rest Time(3-60s):	10	The second waiting time before power up when engine start fail.
23	Safety On Delay (0-3600s):	0010	Alarms for low oil pressure high temp , under speed,under frequency/ voltage , charge fail are inactive.
24	Start Idle Time (0-3600s):	0000	Idle running time of genset when starting.
25	Warming Up Time (0-3600s):	0010	Warming time before genset switch on , after it into high speed running.
26	Cooling Time (0-3600s):	0010	Radiating time before genset stop, after it unloads.
27	Stop Idle Time (0-3600s):	0000	Idle running time when genset stop.
28	ETS Hold Time (0-3600s):	0020	Stop electromagnet's power on time when genset is stopping.
29	Wait Stop Time (0-3600s):	0000	
30	After Stop Time (0-3600s):	0000	
31	Genset Message:		

3.3. **Advanced configuration parameter**

Press and key in the controller main interface，enter the password input interface，press or to enter the corresponding bit password（0-9），press to shift left and righ，press to proofread the password after the completion of the input，it will enter the main interface of the different permissions parameter according to the different permissions password if the password is correct，or it will exit directly because of the wrong password. (The factory default password is: 0000), the user can modify the factory default password.Press and can flip up and down the parameters configuration screen operation，under the currently selected configuration parameter, press ，to the current configuration mode parameters，the current value of the first black display,press and keys for the bit value adjustment ,press shift，press to confirm the setting, This value is permanently saved to the internal FLASH controller.。. press in the configuration process,can return to the previous menu or long press to exit the configuration menu directly and return to the main screen .

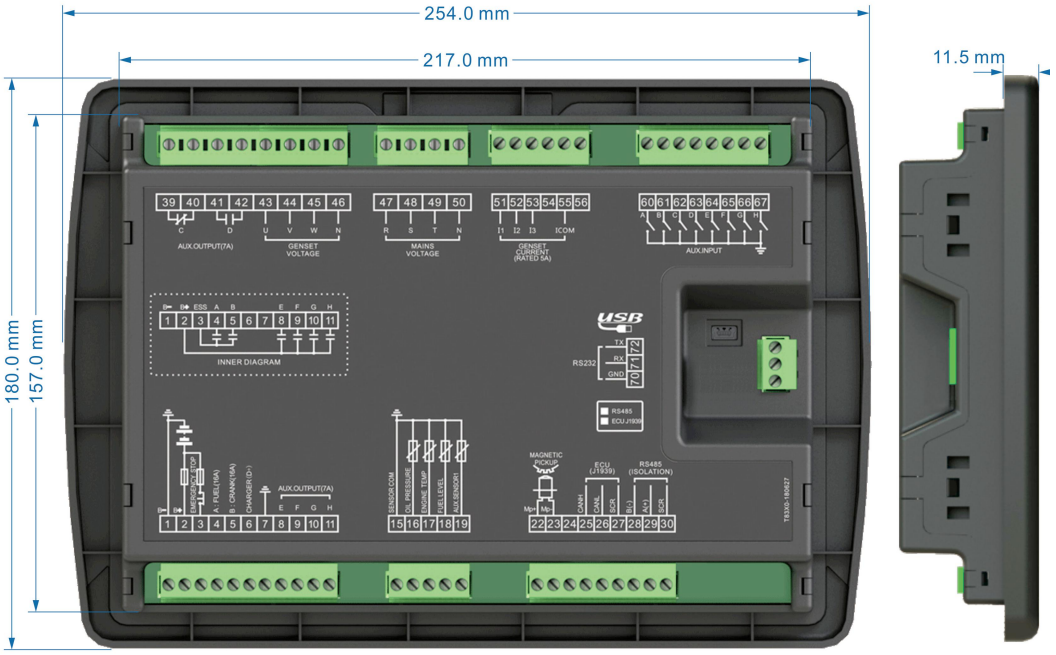
4：Model

Comparison

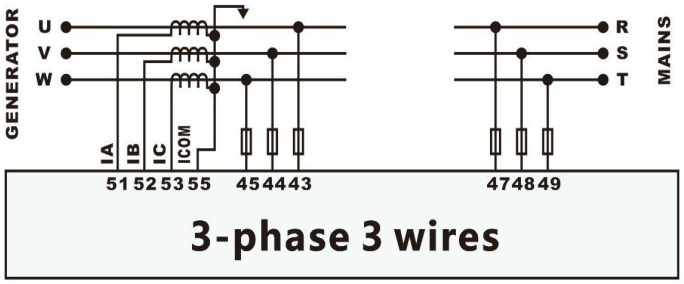
List of product models	LXC8310	LXC8320
Mains monitoring		●
Number of input ports	8	8
Number of output ports	6	6
Number of sensors	4	4
RS485	●	●
GSM	●	●
J1939		
USB	●	●
Real time clock	●	●
Historical records	●	●

5. Installation

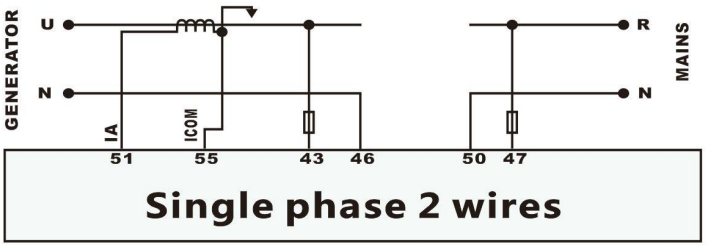
LXC83X0　Controller design for panel embedded，is fixed by the card during the installation 。the outline dimesion is as below, Panel hole size is 218x160mm



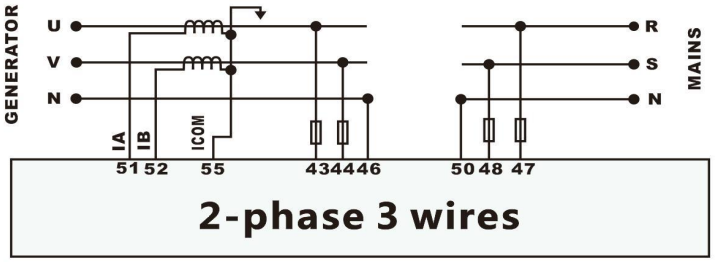
Connection diagram of three phase three line connection (Take LXC8320 as an example)



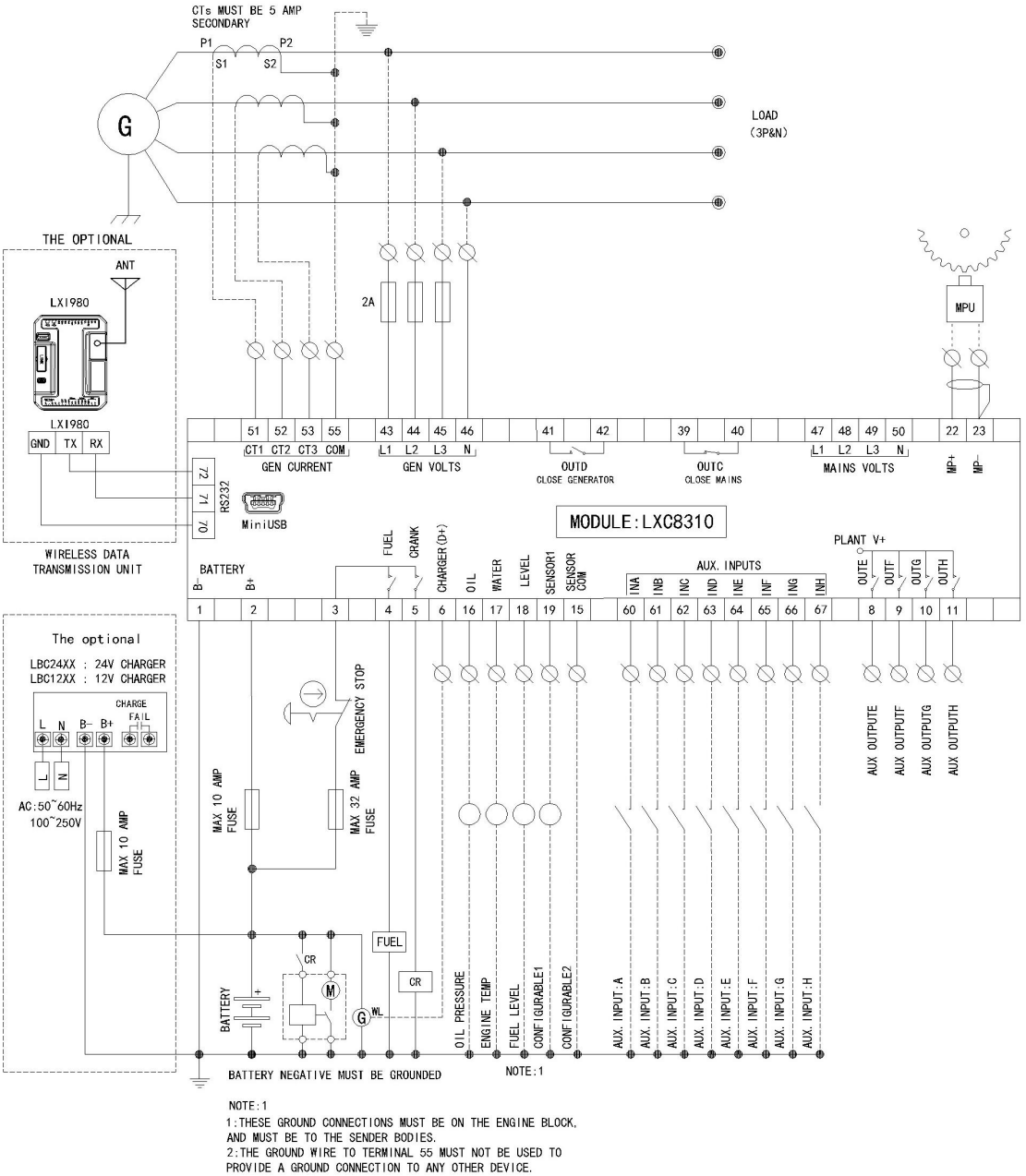
Connection diagram of single phase double line connection (Take LXC8320 as an example)



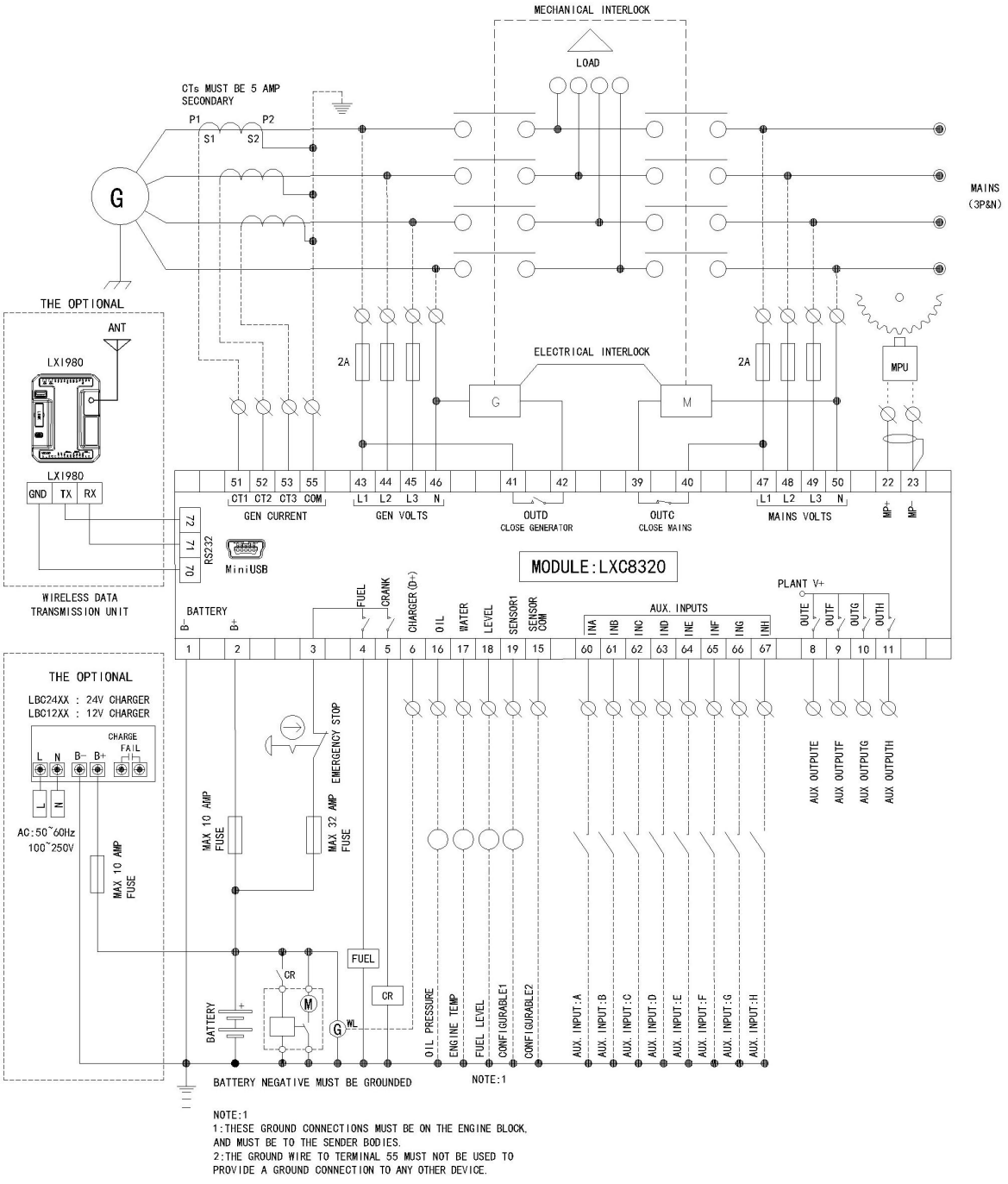
Connection diagram of two phase three line connection (Take LXC8320 as as an example)



LXC8310 Typical application diagram



LXC8320 Typical application diagram



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