



TECHNICAL MANUAL

6120N

Generator Control Module

<https://gensetpart.com/generator-controller/>

COMPATIBLE REPLACEMENT PART

POPULACE has manufactured generator electronic parts in Xiamen, China since 2006. 1000+ SKUs in stock, 1-5 day dispatch, every unit burn-in tested before shipment.

Document contents

- Specification and technical characteristics
- Terminal assignment and wiring diagram
- Installation, adjustment and settings
- Troubleshooting table

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Why source this part from POPULACE

- Factory in Xiamen, China - operating since 2006 (20 years)
- Over 1000 SKUs held in stock; dispatch within 1-5 days
- Every unit burn-in tested at 65 C before shipment
- CE and ISO 9001 production system; full batch traceability
- Free technical support for wiring, settings and fault diagnosis

Get a quote / technical support

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No.702 Xiniya Building, No.90 Anling Second Road, XIAMEN, FUJIAN, China

GC6100N系列发电机组控制器

安装操作说明

版本:V1.1

本说明资料为使用 GC6100N 系列控制器时提供快速操作指引，详细请参阅标准使用说明。
GC6100N 系列有四种型号如下所述：

型号	描述
GC6110N/6110NC/6110CAN	用于单机自动化，通过远端开机信号控制发电机组自动开机与停机
GC6120N/6120NC/6120CAN	在 GC6110N/6110NC/6110CAN 基础上增加了市电电量监测和市电/发电自动切换控制功能(AMF)，特别适用于一市一机构成的单机自动化系统。

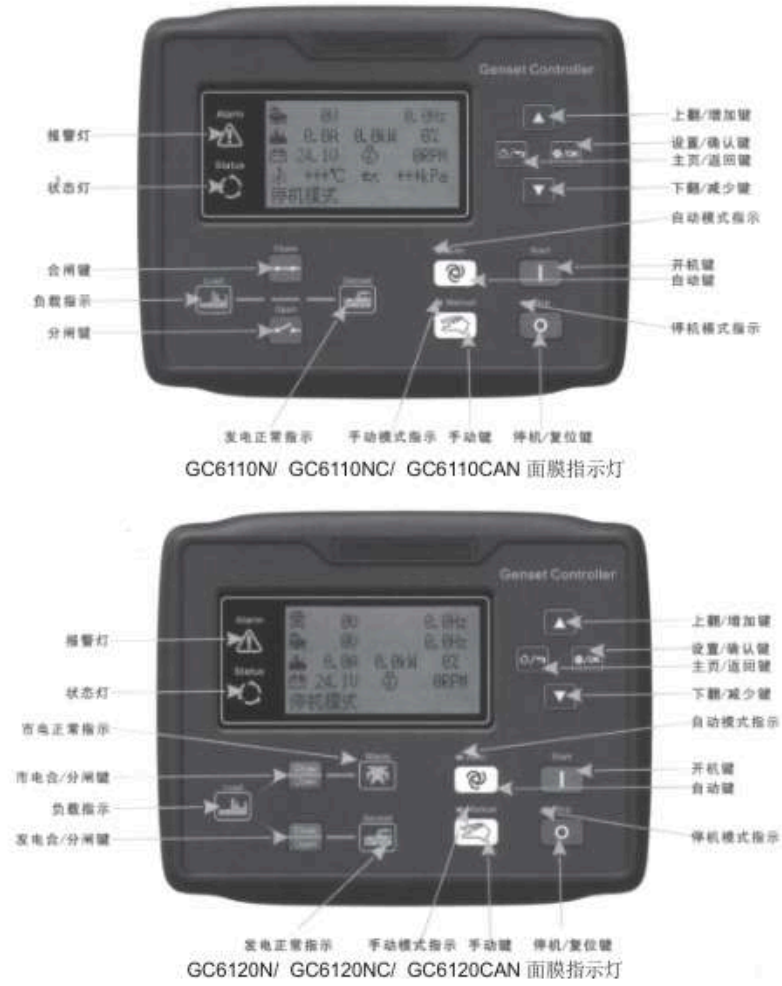
注 1：GC6110NC/6120NC 具有 RS485 接口，GC6110N/6120N 无 RS485 接口。
GC6110CAN/6120CAN 具有 CAN 接口，GC6110N/6120N 和 GC6110NC/6120NC 无 CAN 接口。

注 2：后文均以 GC6110/6120 为例进行描述。

1. 按键功能描述

图标	按键	描述
	停机/复位键	在手动/自动模式下，均可以使运转中的发电机组停止。在发电机组报警状态下，可以使任何的停机报警复位。在停机模式下，按下此键 3s 钟以上，可以测试面板指示灯是否正常(试灯)。在停机过程中，再次按下此键，可快速停机。
	开机键	在手动模式下，按下此键可以使静止的发电机组开始启动,在机组开机过程中按下此键，机组状态将会跳转到下一个状态。
	手动键	按下此键，可以将控制器置于手动模式。
	自动键	按下此键，可以将控制器置于自动模式。
	合分闸键	在手动模式下，按下此键，可控制开关合分闸。 注:该按键适合于 GC6120 系列。
	合闸键	在手动模式下，按下此键，可控制开关合闸。 注: 该按键适合于 GC6110 系列。
	分闸键	在手动模式下，按下此键，可控制开关分闸。 注: 该按键适合于 GC6110 系列。
	设置/确认键	按下此键进入菜单列表界面，在参数设置中移动光标及确认设置信息。
	上翻/增加	翻屏，在参数设置中向上移动光标或增加光标所在位的数字。
	下翻/减少	翻屏，在参数设置中向下移动光标或减少光标所在位的数字。
	主页/返回键	在主界面按下此键返回到主页，在参数设置界面按下此键退出参数设置。

2. 控制器面板



3. 参数设置

在控制器开机后按 键即可进入参数设置菜单，菜单项目有：

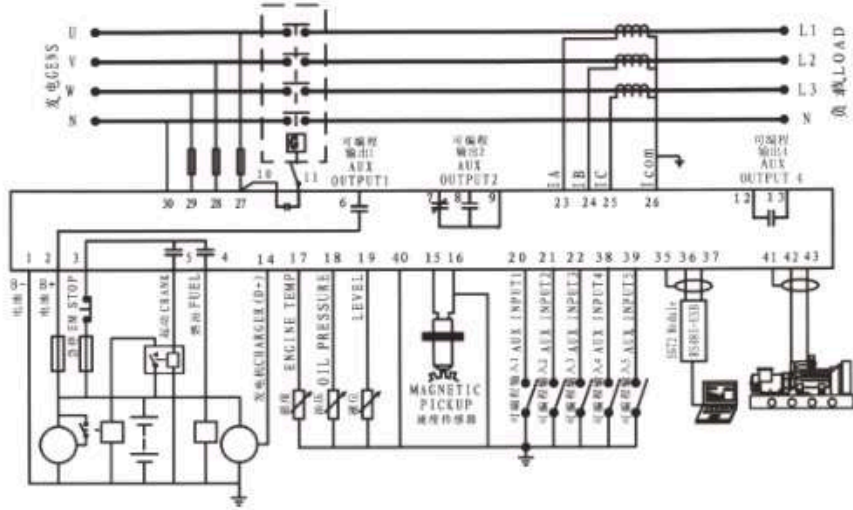
- 1.控制器参数整定
 - 2.控制器信息
 - 3.语言选择/Language
 - 4.历史记录
 - 5.维护设置
- 控制器参数设置

当输入口令时，输入“0318”能设置用户手册表**编程参数范围及定义一览表**中所有项目，当默认密码（0318）更改后，通过PC软件进行参数设置时需要输入与控制器一样的密码才能进行参数设置，当需要设置更多的项目时或密码忘记，如电压电流校准，请与厂家联系。

4. 控制器的尺寸

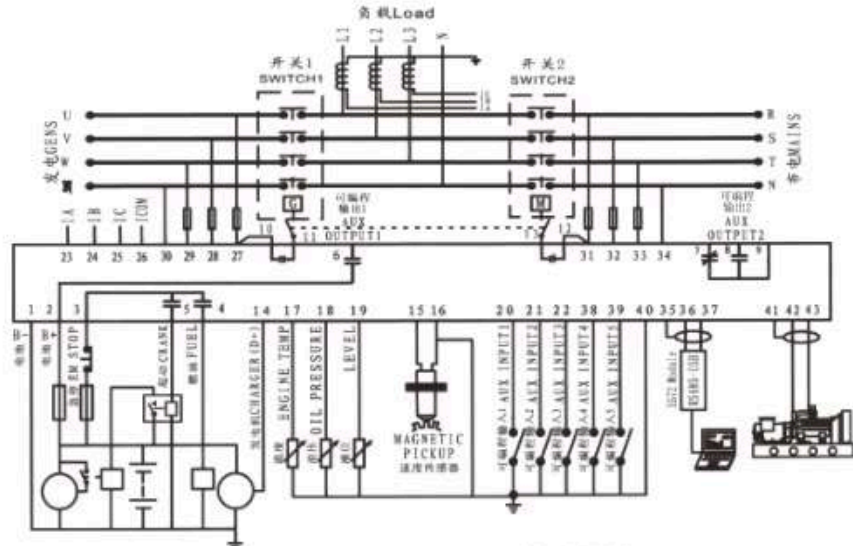
外形尺寸	安装开孔尺寸
209mm x 166mm x 45mm	186mm x 141mm

5. 典型应用



GC6110CAN/6110NC/6110N 典型应用图

注：GC6110N 无 CAN、RS485 接口，GC6110NC 无 CAN 接口。



GC6120CAN/6120NC/6120N 典型应用图

注：GC6120N 无 CAN、RS485 接口，GC6120NC 无 CAN 接口。

反面

GC6100N GENSET CONTROLLER

INSTALLATION INSTRUCTIONS

Version:1.1

The contents are intended for quick guidance and supplement to the user who is using GC6100N controller. Please read the standard manual for more details.

GC6100N controller has four variants as shown:

Type	Description
GC6110N/6110NC/6110CAN	Automatic Start Module, it controls generator to start/stop by remote start signal.
GC6120N/6120NC/6120CAN	Based on GC6110N/6110NC/6110CAN, it adds mains AC monitoring and mains/generator automatic switching control (AMF), especially suitable for the automation system composed by mains and genset.

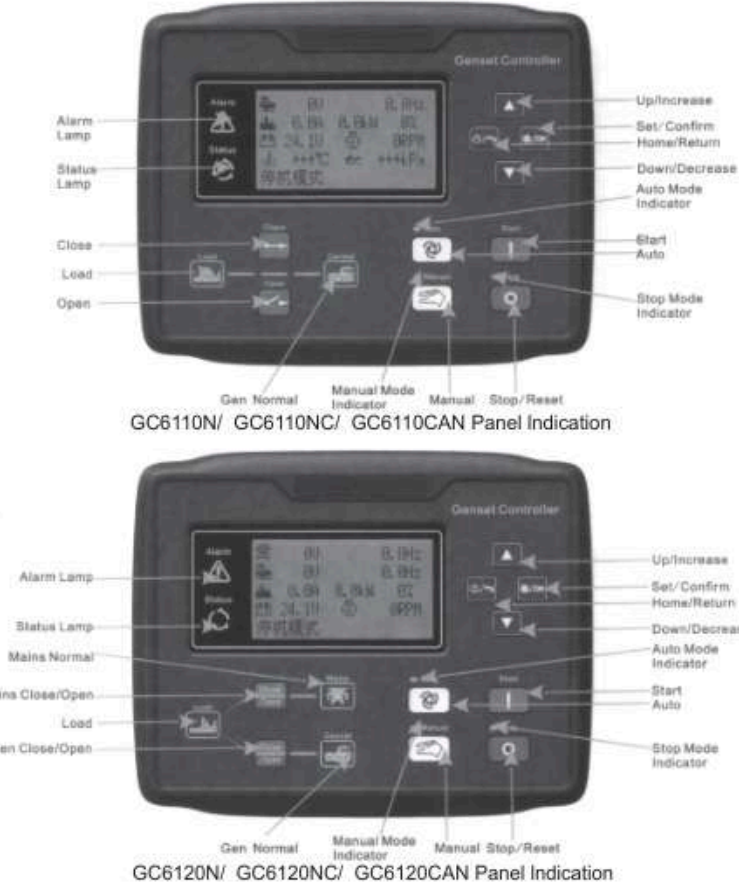
Note1: GC6110NC/6120NC has RS485 port, GC6110N/6120N without.
GC6110CAN/6120CAN has CAN port, GC6110N/6120N and GC6110NC/6120NC without.

Note2: GC6110/6120 is taken as an example to describe in this manual.

1. KEYS DESCRIPTION

Icon	Function	Description
	Stop/ Reset	Can stop generator under Manual/Auto mode; Can reset shutdown alarm; Press this key at least 3 seconds to test panel indicators are OK or not(lamp test); During stopping process, press this key again can stop generator immediately.
	Start	Start genset under Manual or Manual Test mode.
	Manual	Pressing this key will set the module as Manual mode.
	Auto	Pressing this key will set the module as Auto mode.
	Gens Close/Open	Can control gens to switch on or off in Manual mode. Note: the key is fit for GC6120 series controllers.
	Close	Can control gens to switch on in Manual mode. Note: the key is fit for GC6110 series controllers.
	Open	Can control gens to switch off in Manual mode. Note: the key is fit for GC6110 series controllers.
	Set/ Confirm	Press this key to enter menu interface; Shift cursor to confirm In parameters setting menu.
	Up/Increase	Screen scroll; Up cursor and increase value in setting menu.
	Down/Decrease	Scroll screen; Down cursor and decrease value in setting menu.
	Home/Return	Return to homepage when in main interface; Exit when in parameters setting interface.

2. PANEL INDICATORS DESCRIPTION



3. PARAMETER EDITING

After controller powered on, press to enter into the parameters setting menu:

- 1) Parameters Setting
- 2) Information
- 3) Language
- 4) Event Log
- 5) Maintenance Setting

Parameters Setting

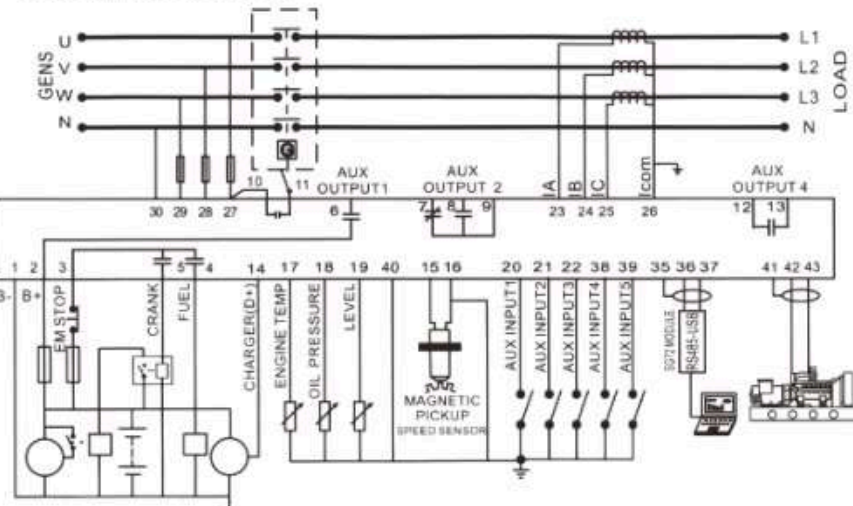
“0318” can set all items in user manual table **PARAMETER CONTENT AND RANGE TABLE** during inputting password. When default password has been changed, it needs to input the same password with controller for parameter setting via PC software.

If more parameter items need to be set or password is forgotten, such as voltage and current calibration, please contact with the factory.

4. CONTROLLER DIMENSION

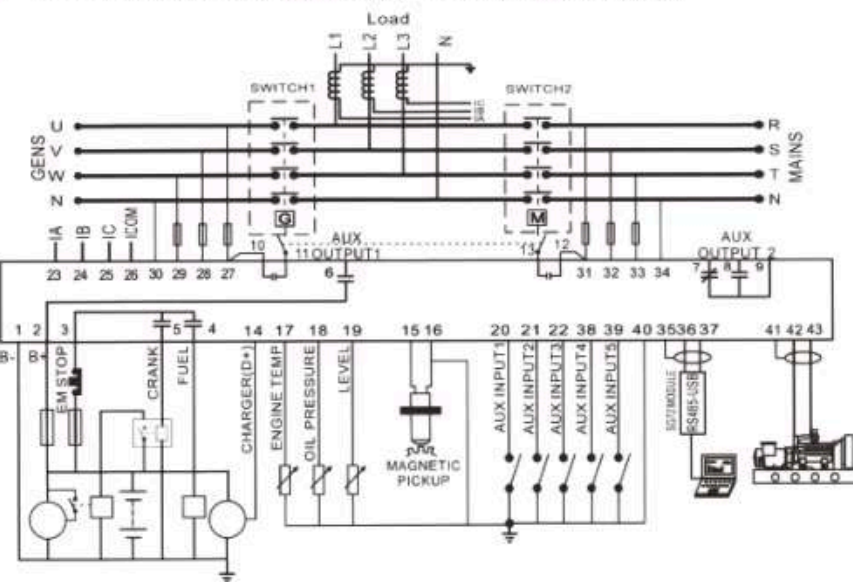
Overall Dimensions	Panel Cutout
209mm x 166mm x 45mm	186mm x 141mm

5. TYPICAL APPLICATION



GC6110CAN/6110NC/6110N Typical Application Diagram

Note: GC6110N without CAN and RS485 ports; GC6110NC without CAN port.



GC6120CAN/6120NC/6120N Typical Application Diagram

Note: GC6120N without CAN and RS485 ports; GC6120NC without CAN port.