



-power in control



## OPERATOR'S MANUAL



### **Genset Controller, GC-1F**

- Push-buttons
- LEDs
- Icon list
- Display readings



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## 1. Delimitation

1.1. Scope of Operator's Manual.....	3
1.1.1. GC-1F .....	3

## 2. General information

2.1. Warnings, legal information and safety.....	4
2.1.1. Warnings and notes .....	4
2.1.2. Legal information and disclaimer .....	4
2.1.3. Safety issues .....	4
2.1.4. Electrostatic discharge awareness .....	4
2.1.5. Factory settings .....	4
2.2. About the Operator's Manual.....	5
2.2.1. General purpose .....	5
2.2.2. Intended users .....	5
2.2.3. Contents and overall structure .....	5
2.3. Application information.....	5
2.3.1. UL applications .....	5

## 3. Push-buttons, LEDs and display

3.1. Unit.....	6
3.1.1. Dimensions .....	6
3.1.2. Push-button functions .....	6
3.1.3. LED functions .....	7
3.1.4. Display functions .....	8

# 1. Delimitation

## 1.1 Scope of Operator's Manual

### 1.1.1 GC-1F

This document covers the following GC-1F versions:

GC-1F	SW version 1.2x.x
GC-1F/2	SW version 2.0x.x or later

## 2. General information

### 2.1 Warnings, legal information and safety

#### 2.1.1 Warnings and notes

Throughout this document, a number of warnings and notes with helpful user information will be presented. To ensure that these are noticed, they will be highlighted as follows in order to separate them from the general text.

##### Warnings



**Warnings indicate a potentially dangerous situation, which could result in death, personal injury or damaged equipment, if certain guidelines are not followed.**

##### Notes



**Notes provide general information, which will be helpful for the reader to bear in mind.**

#### 2.1.2 Legal information and disclaimer

DEIF takes no responsibility for installation or operation of the engine set. If there is any doubt about how to install or operate the engine controlled by the unit, the company responsible for the installation or the operation of the set must be contacted.



**The units are not to be opened by unauthorised personnel. If opened anyway, the warranty will be lost.**

##### Disclaimer

DEIF A/S reserves the right to change any of the contents of this document without prior notice.

#### 2.1.3 Safety issues

Installing and operating the unit may imply work with dangerous currents and voltages. Therefore, the installation should only be carried out by authorised personnel who understand the risks involved in working with live electrical equipment.



**Be aware of the hazardous live currents and voltages. Do not touch any AC measurement inputs as this could lead to injury or death.**

#### 2.1.4 Electrostatic discharge awareness

Sufficient care must be taken to protect the terminal against static discharges during the installation. Once the unit is installed and connected, these precautions are no longer necessary.

#### 2.1.5 Factory settings

The unit is delivered from factory with certain factory settings. These are based on average values and are not necessarily the correct settings for matching the individual engine. Precautions must be taken to check the settings before running the engine.

## 2.2 About the Operator's Manual

### 2.2.1 General purpose

This document is the Operator's Manual for DEIF's generator controller GC-1F. The document includes information about push-buttons, LEDs, display readings and icon list.

The general purpose is to give the operator important information to be used in the daily operation of the unit.



**Please make sure to read this manual before working with the GC-1F controller and the genset to be controlled. Failure to do this could result in damage to the equipment or human injury.**

### 2.2.2 Intended users

This Operator's Manual is mainly intended for the daily user. On the basis of this document, the operator will be able to carry out simple day-to-day procedures.

### 2.2.3 Contents and overall structure

This document is divided into chapters, and in order to make the structure simple and easy to use, each chapter will begin from the top of a new page.

## 2.3 Application information

### 2.3.1 UL applications

These flat surface panel-mounted controllers are intended to be used in Listed Generator Assemblies where the suitability of the combination has been determined by Underwriters Laboratories.

These devices have been evaluated for fire and shock only. The accuracy and/or reliability of the voltage regulating function has not been evaluated. Metering, monitoring protection and signalling functions have not been evaluated.

## 3. Push-buttons, LEDs and display

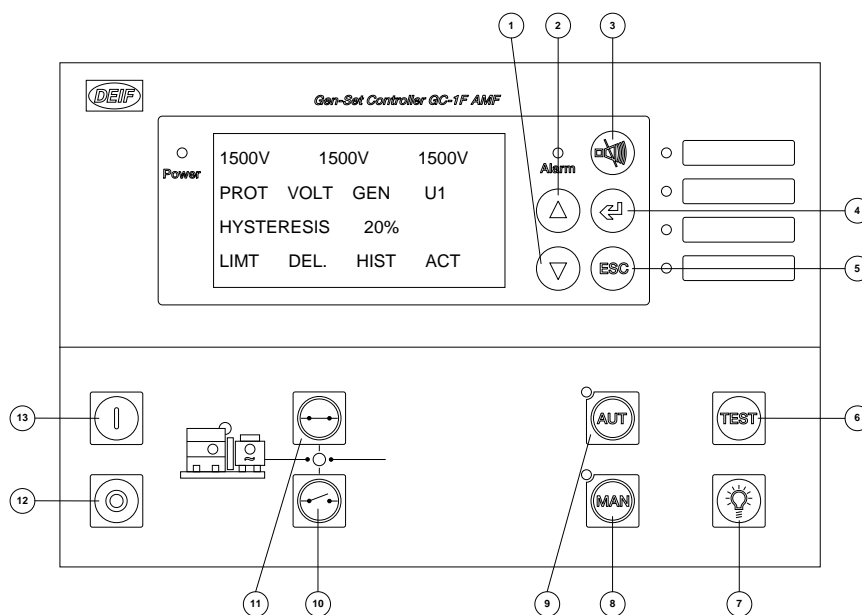
### 3.1 Unit

#### 3.1.1 Dimensions

Front dimensions H x W	160 x 220 mm (6.30" x 8.66")
Unit depth	54 mm (2.13")

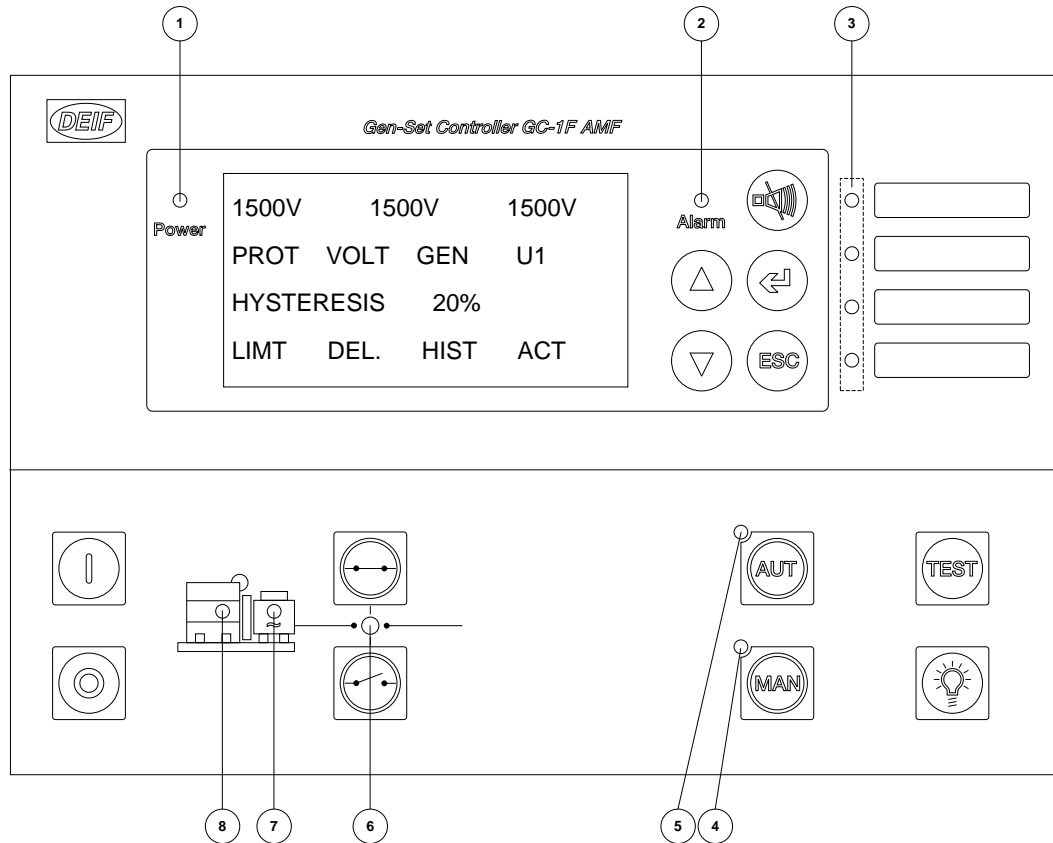
#### 3.1.2 Push-button functions

The push-buttons on the unit have the following functions:



- 1: Normal display: Scrolls the display down once. Programming: Decreases setpoint value.
- 2: Normal display: Scrolls the display up once. Programming: Increases setpoint value.
- 3: Resets horn relay. Extra function: Press and hold button 2 seconds to see alarm list.
- 4: Enters value/acknowledges alarm.
- 5: Jumps from parameter settings to display. Removes pop-up messages.
- 6: Initiates the test sequence selected for the push-button.
- 7: Lamp test. One push will illuminate all LEDs for 3 seconds.
- 8: Manual running mode selector.
- 9: AUTO running mode selector.
- 10: Breaker opens.
- 11: Breaker closes.
- 12: Stops the engine instantaneously. If the unit is in AUTO mode, the mode will change to MAN and the engine will stop.
- 13: Start engine (local (not auto)) running mode.

### 3.1.3 LED functions



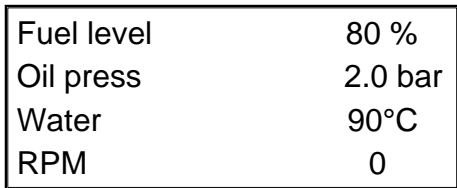
- 1: Power OK indicator.
- 2: Flashing: active, non-acknowledged alarm(s) present.  
Steady: active, acknowledged alarm(s) present.
- 3: Additional alarm indication LEDs:  
Flashing: active, non-acknowledged alarm(s) where output A or B is configured to LED 1, 2, 3 or 4.  
Steady: active, acknowledged alarm(s) where output A or B is configured to LED 1, 2, 3 or 4.
- 4: ON in manual mode.
- 5: ON in AUTO mode.
- 6: Generator breaker ON.
- 7: U/f OK, generator.
- 8: Running feedback present.

### 3.1.4 Display functions

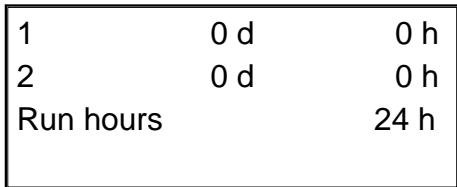
The display indicates both readings and alarms. The examples below are with icons and English language.



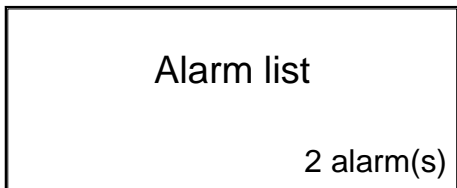
Type, hardware and software version.



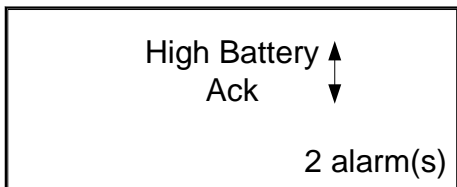
Fuel level, oil pressure, water temp. and RPM.



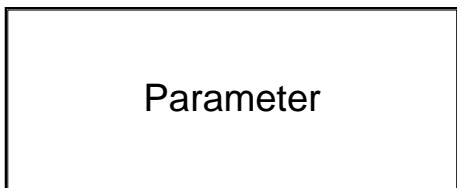
Service timer 1 and 2.  
Run hours.



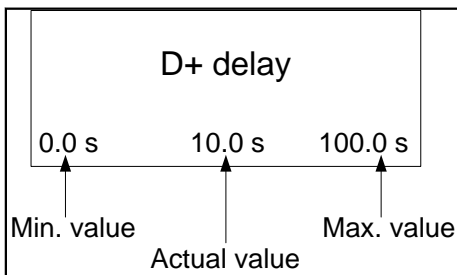
Press to enter the list of active alarms.



**Active alarm list.** The alarm list pops up automatically when an alarm appears. When the arrow is present, more alarms are active. Press ▼ to scroll through the list. Exit the list by pressing ESC.



Press to enter the parameter setting.



Parameter example: D+ delay setting. Use ▲ or ▼ to scroll through the settings list. If change of settings is necessary, press and enter the password. Then use ▲ or ▼ to change values. Use ESC to leave settings.





The available parameters depend on the set options. Some parameters can only be changed using the PC utility software (USW) for GC-1F. The parameter list will automatically be abandoned if no button is pressed during a 30 sec. period.



For detailed information about changing parameters and setup, please see the Installation Instructions and Reference Handbook.



3 line views can show a max. value of 9999.