

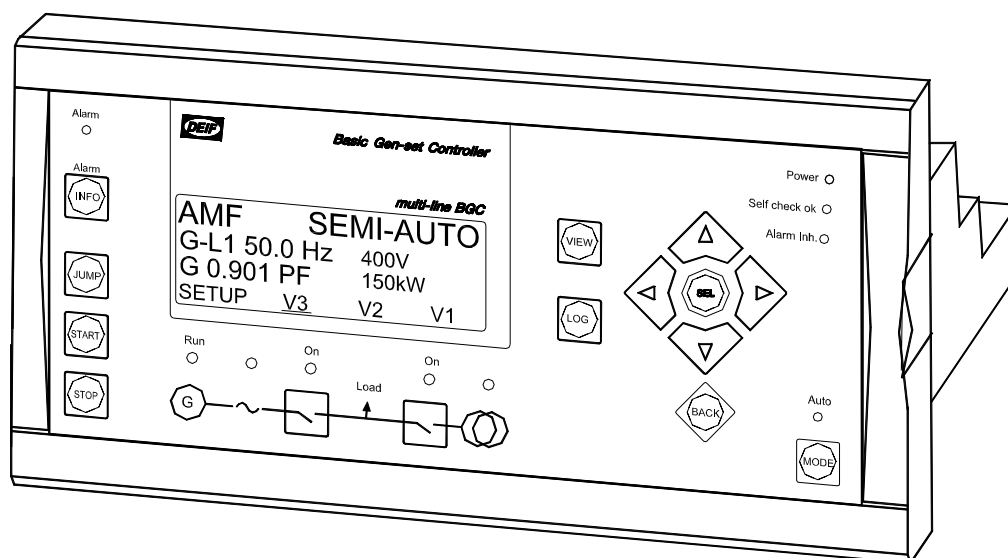
Description of options



-power in control

Option M14, Relay outputs Basic Gen-set Controller

4189340313B



- Description of option
- 4 relay outputs
- 8 relay outputs



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1. Warnings and legal information

This chapter includes important information about general legal issues relevant in the handling of DEIF products. Furthermore, some overall safety precautions will be introduced and recommended. Finally, the highlighted notes, which will be used throughout this document, are presented.

Legal information and responsibility

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

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

Electrostatic discharge awareness

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

Safety issues

Installing the BGC unit implies work with dangerous currents and voltages. Therefore, the installation of the BGC should only be carried out by authorized personnel who understand the risks involved in the working with live electrical equipment.

Notes

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



XX

2. Description of option

This option includes 4 relay outputs, if M14 is selected once during ordering.
This option includes 8 relay outputs, if M14 is selected twice during ordering.

Terminal description

Terminal		Function	Description
Slot #2	Slot #3		
47	55	Relay 6	250V AC, 8A, configurable
48	56	Com.	
49	57	Relay 7	250V AC, 8A, configurable
50	58	Com.	
51	59	Relay 8	250V AC, 8A, configurable
52	60	Com.	
53	61	Relay 9	250V AC, 8A, configurable
54	62	Com.	

Terminal		Function	Description
Slot #2	Slot #3		
47	55	Relay 10	250V AC, 8A, configurable
48	56	Com.	
49	57	Relay 11	250V AC, 8A, configurable
50	58	Com.	
51	59	Relay 12	250V AC, 8A, configurable
52	60	Com.	
53	61	Relay 13	250V AC, 8A, configurable
54	62	Com.	

These relay numbers are to be used when selecting the relay in question.

The relays will automatically be integrated in the available number of configurable relays in the unit and can be used as such.



The position of the relay PCB depends on the specific options selection. See the unit label to see the actual position.

Relay setup

As illustrated below the relays can be configured in two different ways.

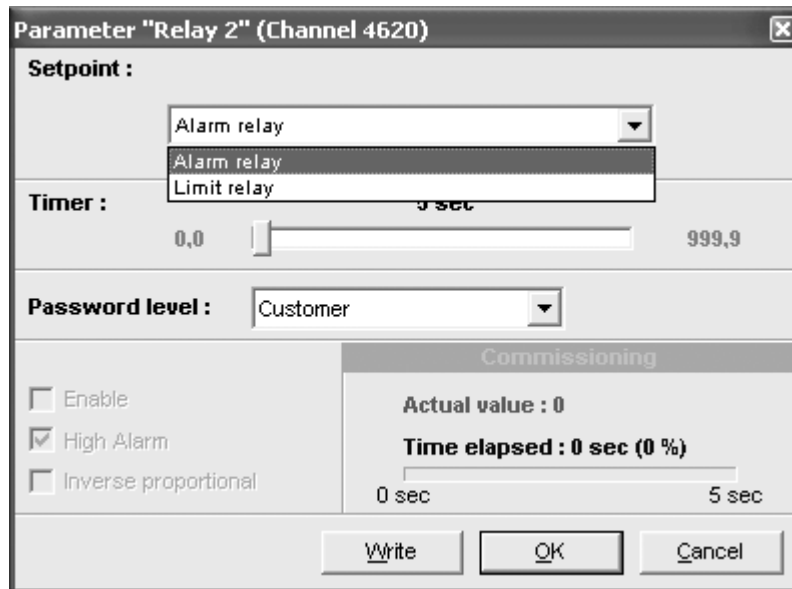
1. Alarm relay function:
When an alarm activates the relay, it will remain activated as long as the alarm is present and unacknowledged.
2. Limit function:
When an alarm activates the relay, no alarm message is displayed. After the condition activating the relay has returned to normal, the relay will deactivate, when the 'Off delay' has expired.

The setup of the relay is done in the setup menu (system). All relays are set up in the same way. This example indicates relay 6:

No.	Setting		First/min. setting	Second/max. setting	Factory setting
4661	Relay 6	Function	Alarm	Limit	Alarm
4662	Relay 6	Off delay	0.0 s	999.9 s	5.0 s

The 'off delay' is the time between the disappearance of the event that caused the relay to activate and the actual activation of the relay.

PC utility software



The screenshot shows a software window titled "Parameter "Relay 2" (Channel 4620)". It contains several configuration options:

- Setpoint :** A dropdown menu with "Alarm relay" selected.
- Timer :** A slider control ranging from 0,0 to 999,9, with a small "1 sec" label above the slider.
- Password level :** A dropdown menu with "Customer" selected.
- Commissioning section:**
 - Checkboxes for "Enable" (unchecked), "High Alarm" (checked), and "Inverse proportional" (unchecked).
 - A display showing "Actual value : 0" and "Time elapsed : 0 sec (0 %)".
 - A slider for time ranging from 0 sec to 5 sec.
- Buttons:** "Write", "OK", and "Cancel" at the bottom.

Relay controls selection

The relays of the option M14 can be used as alarm/limit relays. The 4 relays can also be used for digital output for the governor and AVR. When the relays are used for governor control, the option G2 or G3 must be selected. When used for AVR control, the option D1 or D2 must be selected.

For further information regarding these options please refer to their relevant document, Description of Option.

Choose the functionality of the 4 relay outputs in menu 4800.

4800 Option M14 type

No.	Setting		Setting	Factory setting
4801	Option M14 type	Type	Configurable relay	Configurable relay
			GOV + config	
			AVR + config	
			GOV/AVR	

This menu will appear in the system setup, when the option M14 is selected.



When two M14 cards are installed the relays on the second PCB will be alarm/limit relays.