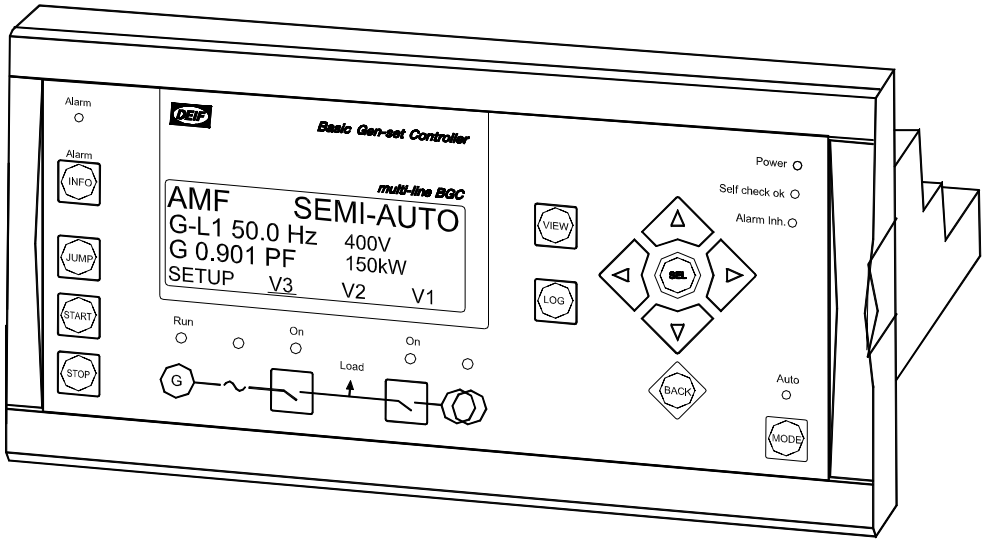
DEIF A/S

Description of options

Option F,
Analogue transducer outputs
Basic Gen-set Controller

4189340306B



- *Description of option*
- *Functional description*
- *Etc.*

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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.

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2. Description of option

This option includes analogue transducer outputs:

F1: 2 transducer outputs, 0…20mA or 4…20mA
F2: 4 transducer outputs, 0…20mA or 4…20mA

Terminal descriptions

Slot #2 or slot #3 are used for transducer outputs, if option F1 and/or F2 is selected.

The analogue outputs are **active** outputs, i.e. they use the internal power supply. The outputs are galvanically separated from each other and the rest of the unit.

The individual output can be selected (in display or via PC utility software) to represent any AC measuring value and related values (e.g. power, power factor, frequency etc.).

For actual selection refer to the channel numbers 4500-4560.

Via software/display selection the outputs can be selected to 0…20mA or 4…20mA.

Slot position

Term.		Function	Description
47	55	Not used	
48	56	0(4) - 20 mA out	Analogue output 1 or 3, selectable
49	57	0	
50	58	Not used	
51	59	Not used	
52	60	0(4) - 20 mA out	Analogue output 2 or 4, selectable
53	61	0	
54	62	Not used	

The actual position of the transducer outputs depends on the specific selection of options.

Locate the position of the specific option on the label of the BGC and find the correct output number in the table below.

	Option F1		Option F2	
	Slot #2	Slot #3	Slot #2	Slot #3
	Terminal numbers			
Output no. 1	48/49	56/57		
Output no. 2	52/53	60/61		
Output no. 3			48/49	56/57
Output no. 4			52/53	60/61

3. Functional description

Transducer output, options F1 and F2

The analogue output options each consist of two independent 0(4)…20mA outputs. Option F1 has two outputs, and option F2 has four outputs. Each of the two (four) outputs can be chosen to represent any of the following values.

4500 Power (P kW) output

No.	Setting		Min. setting	Max. setting (option F1)	Max. setting (option F2)	Factory setting
4501	Power output	Output A	0	2	4	0
4502	Power output	Output B	0	2	4	0
4503	Power output	Type	0-20mA	4-20mA		4-20mA
4504	Power output	Max. value	0kW	20000kW		500kW
4505	Power output	Min. value	-9999kW	20000kW		0kW

4510 Apparent power (S kVA) output

No.	Setting		Min. setting	Max. setting (option F1)	Max. setting (option F2)	Factory setting
4511	S output	Output A	0	2	4	0
4512	S output	Output B	0	2	4	0
4513	S output	Type	0-20mA	4-20mA		4-20mA
4514	S output	Max. value	0kVA	20000kVA		600kVA
4515	S output	Min. value	-9999kVA	20000kVA		0kVA

4520 Reactive power (Q kvar) output

No.	Setting		Min. setting	Max. setting (option F1)	Max. setting (option F2)	Factory setting
4521	Q output	Output A	0	2	4	0
4522	Q output	Output B	0	2	4	0
4523	Q output	Type	0-20mA	4-20mA		4-20mA
4524	Q output	Max. value	0kvar	16000kvar		400kvar
4525	Q output	Min. value	-8000kvar	16000kvar		0kvar

4530 Power factor (PF) output

No.	Setting		Min. setting	Max. setting (option F1)	Max. setting (option F2)	Factory setting
4531	PF output	Output A	0	2	4	0
4532	PF output	Output B	0	2	4	0
4533	PF output	Type	0-20mA	4-20mA		4-20mA
4534	PF output	Max. value	0.5	1		0.8
4535	PF output	Min. value	-0.5	1		-0.8

4540 Frequency output (f_{GEN})

No.	Setting		Min. setting	Max. setting (option F1)	Max. setting (option F2)	Factory setting
4541	Freq. output	Output A	0	2	4	0
4542	Freq. output	Output B	0	2	4	0
4543	Freq. output	Type	0-20mA	4-20mA		4-20mA
4544	Freq. output	Max. value	0Hz	70Hz		55Hz
4545	Freq. output	Min. value	0Hz	70Hz		45Hz

4550 Voltage output (U_{GEN})

The voltage output represents the L1-L2 voltage.

No.	Setting		Min. setting	Max. setting (option F1)	Max. setting (option F2)	Factory setting
4551	Voltage outp.	Output A	0	2	4	0
4552	Voltage outp.	Output B	0	2	4	0
4553	Voltage outp.	Type	0-20mA	4-20mA		4-20mA
4554	Voltage outp.	Max. value	0V	28000V		500V
4555	Voltage outp.	Min. value	0V	28000V		0V

4560 Current output

The current output represents the L1 current.

No.	Setting		Min. setting	Max. setting (option F1)	Max. setting (option F2)	Factory setting
4561	Current outp.	Output A	0	2	4	0
4562	Current outp.	Output B	0	2	4	0
4563	Current outp.	Type	0-20mA	4-20mA		4-20mA
4564	Current outp.	Max. value	0A	9000A		1000A
4565	Current outp.	Min. value	0A	9000A		0A