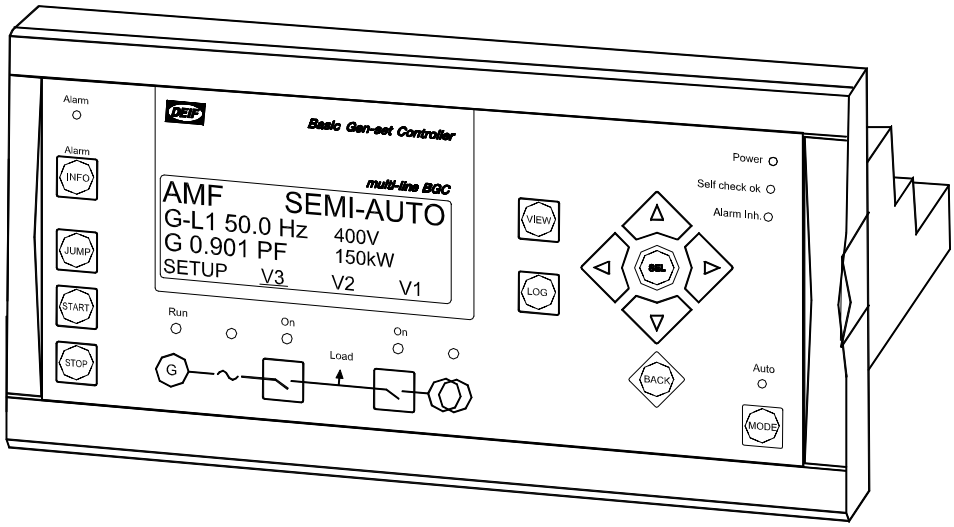
DEIF A/S

Description of options

Option M15, Configurable analogue inputs Basic Gen-set Controller

4189340314B



- *Description of option*
- *Utility software configuration*
- *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 4 analogue inputs (4…20mA).

Terminal description

Terminal		Function	Description
Slot #2	**Slot #3**		
47	55	4-20mA input 1 (+)	Configurable
48	56	Com. (0)	
49	57	4-20mA input 2 (+)	Configurable
50	58	Com. (0)	
51	59	4-20mA input 3 (+)	Configurable
52	60	Com. (0)	
53	61	4-20mA input 4 (+)	Configurable
54	62	Com. (0)	

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

Configuration description

The configuration of the 4…20mA inputs is done in the following menus. It can be done through the display or the utility software.

The maximum relay setting depends on the specific options selection.

1800 4…20mA input No 3.1

No.	Setting		Min. setting	Max. setting	Third setting	Factory setting
1801	4…20mA input 3.1	Set point	4mA	20mA	-	10mA
1802	4…20mA input 3.1	Timer	0.0 s	600.0 s	-	10.0 s
1803	4…20mA input 3.1	Relay output A	R0 (none)	Option dependent	-	R0 (none)
1804	4…20mA input 3.1	Relay output B	R0 (none)		-	R0 (none)
1805	4…20mA input 3.1	Enable	OFF	ON	RUN	OFF
1806	4…20mA input 3.1	Fail class	Alarm (1)	Shutdown (5)	-	Warning (2)

1810 4…20mA input No 3.2

No.	Setting		Min. setting	Max. setting	Third setting	Factory setting
1811	4…20mA input 3.2	Set point	4mA	20mA	-	10mA
1812	4…20mA input 3.2	Timer	0.0 s	600.0 s	-	10.0 s
1813	4…20mA input 3.2	Relay output A	R0 (none)	Option dependent	-	R0 (none)
1814	4…20mA input 3.2	Relay output B	R0 (none)		-	R0 (none)
1815	4…20mA input 3.2	Enable	OFF	ON	RUN	OFF
1816	4…20mA input 3.2	Fail class	Alarm (1)	Shutdown (5)	-	Warning (2)

1820 4…20mA input No 4.1

No.	Setting		Min. setting	Max. setting	Third setting	Factory setting
1821	4…20mA input 4.1	Set point	4mA	20mA	-	10mA
1822	4…20mA input 4.1	Timer	0.0 s	600.0 s	-	10.0 s
1823	4…20mA input 4.1	Relay output A	R0 (none)	Option dependent	-	R0 (none)
1824	4…20mA input 4.1	Relay output B	R0 (none)		-	R0 (none)
1825	4…20mA input 4.1	Enable	OFF	ON	RUN	OFF
1826	4…20mA input 4.1	Fail class	Alarm (1)	Shutdown (5)	-	Warning (2)

1830 4…20mA input No 4.2

No.	Setting		Min. setting	Max. setting	Third setting	Factory setting
1831	4…20mA input 4.2	Set point	4mA	20mA	-	10mA
1832	4…20mA input 4.2	Timer	0.0 s	600.0 s	-	10.0 s
1833	4…20mA input 4.2	Relay output A	R0 (none)	Option dependent	-	R0 (none)
1834	4…20mA input 4.2	Relay output B	R0 (none)		-	R0 (none)
1835	4…20mA input 4.2	Enable	OFF	ON	RUN	OFF
1836	4…20mA input 4.2	Fail class	Alarm (1)	Shutdown (5)	-	Warning (2)

1840 4…20mA input No 2

No.	Setting		Min. setting	Max. setting	Third setting	Factory setting
1841	4…20mA input 2	Set point	4mA	20mA	-	10mA
1842	4…20mA input 2	Timer	0.0 s	600.0 s	-	10.0 s
1843	4…20mA input 2	Relay output A	R0 (none)	Option dependent	-	R0 (none)
1844	4…20mA input 2	Relay output B	R0 (none)		-	R0 (none)
1845	4…20mA input 2	Enable	OFF	ON	RUN	OFF
1846	4…20mA input 2	Fail class	Alarm (1)	Shutdown (5)	-	Warning (2)

1850 4…20mA input No 1

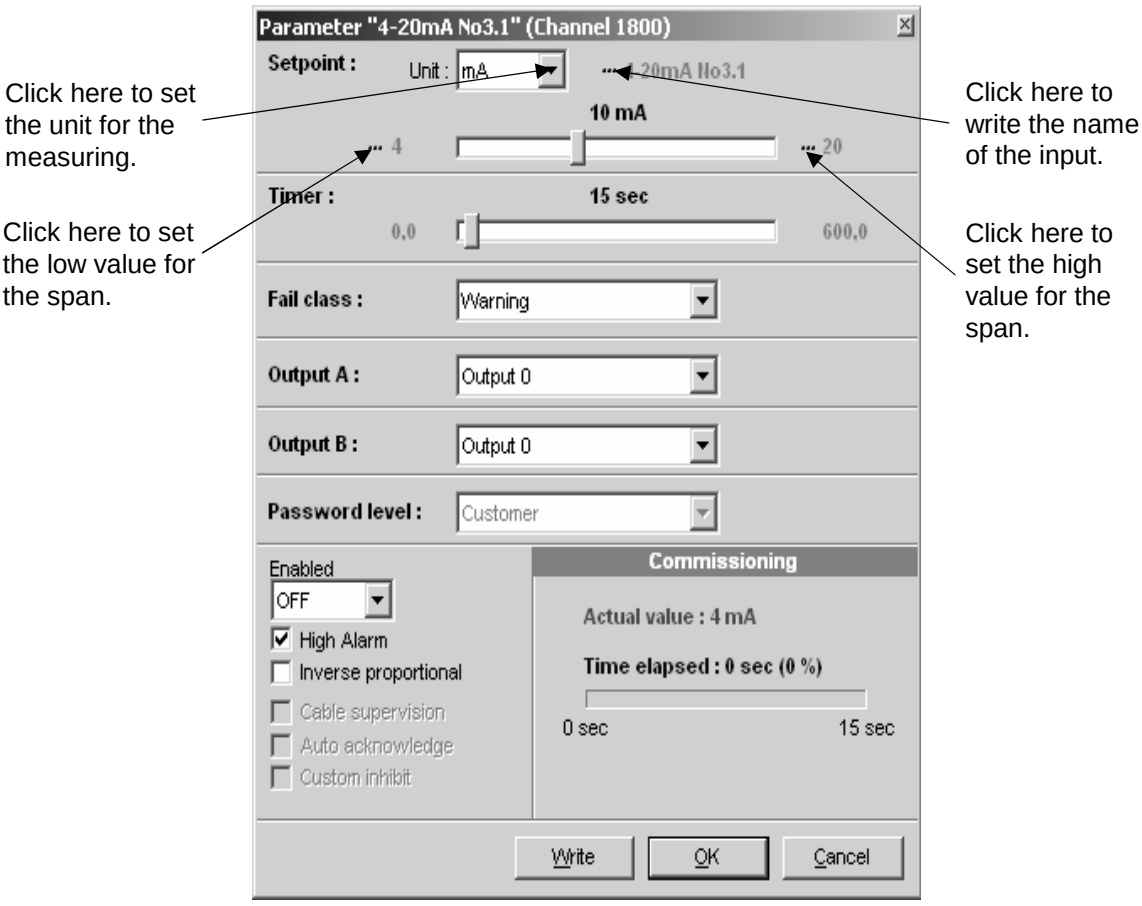
No.	Setting		Min. setting	Max. setting	Third setting	Factory setting
1851	4…20mA input 1	Set point	4mA	20mA	-	10mA
1852	4…20mA input 1	Timer	0.0 s	600.0 s	-	10.0 s
1853	4…20mA input 1	Relay output A	R0 (none)	Option dependent	-	R0 (none)
1854	4…20mA input 1	Relay output B	R0 (none)		-	R0 (none)
1855	4…20mA input 1	Enable	OFF	ON	RUN	OFF
1856	4…20mA input 1	Fail class	Alarm (1)	Shutdown (5)	-	Warning (2)

Utility software configuration

The utility software is a Windows® based software which can be downloaded from the website www.deif.com. To adjust the input via the utility software a computer must be connected to the multi-line 2 unit. Furthermore, the parameters of the multi-line 2 unit must be uploaded to the computer.

Alarm input configuration

The alarm input is configured by selecting the correct input in the parameter file (in this example analogue input 3.1). It is possible to configure the set point span, unit and name as explained below:



Unit:
The unit can be set in the drop-down box. The following units are possible: None, V, A, mA, Hz, kW, kVA, kvar, %, ms, 4-20mA, %/s, RPM, Per, mbar, C, deg, kV, bar, °C, °F.

Name:
The name of the input is freely configurable. The name that the input has been given is the name that will be displayed in the parameter list and in the display.

Set point span:
The span can e.g. be set to 0-100. With this setting an input of 4mA will give the displayed value 0, and with the input 20mA the displayed value 100.

If the set point unit is set to mA, input values less than 4mA will also be displayed. If the unit is not mA, a 4mA input equals the span low value.

Set point:
The set point can be adjusted by moving the glider left or right or by clicking the present set point. (Above click "**10mA**").

Timer:
The timer can be adjusted by moving the glider left or right or by clicking the present set point. (Above click "**15 sec**").

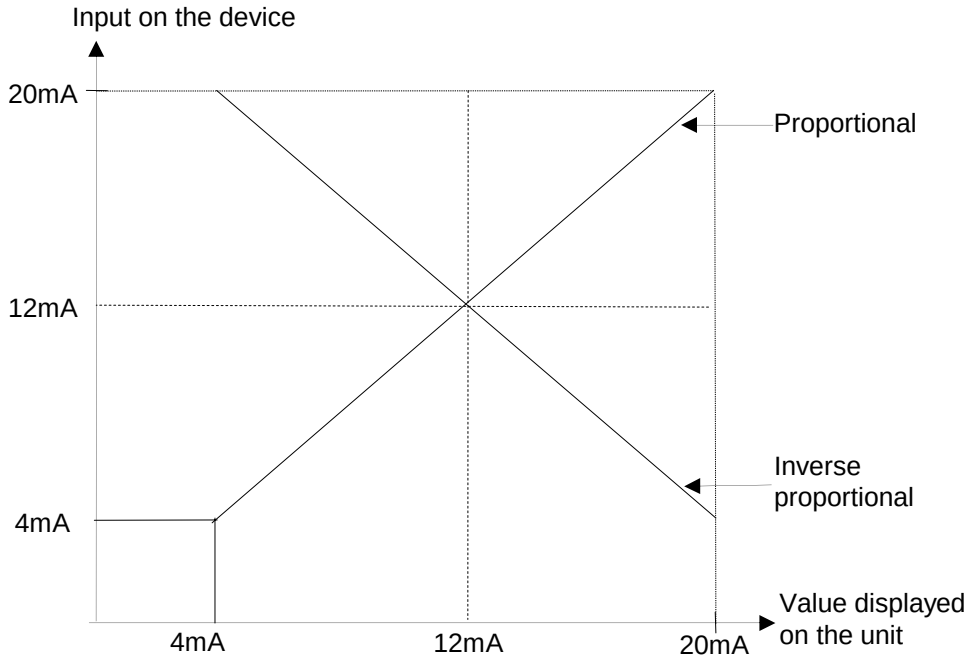
Fail class:
Select the appropriate fail class.

Output A/output B:
Select which relay to activate in connection with an alarm.

Enable:
Mark this check box to enable the alarm function. Possible settings are Off, On and Run.

High alarm:
Mark this check box to receive an alarm, when the input is above the set point. Unmark this check box to receive an alarm, when the input is below the set point.

Inverse proportional:
Mark this check box to inverse the input proportionally. This means that the BGC will see an input on 4mA as an input on 20mA and vice versa. Therefore 12mA is still seen as 12mA as illustrated in the diagram below.



DEIF A/S reserves the right to change any of the above