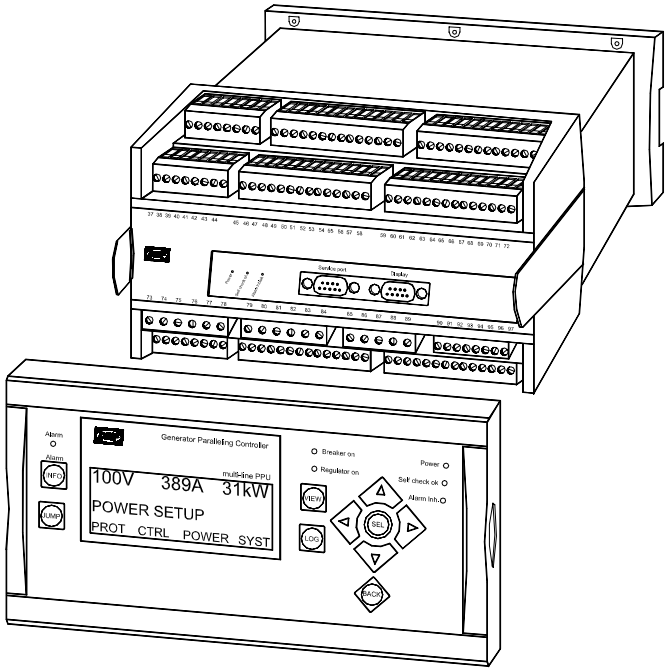
DEIF A/S

Description of options

Option M15
Conf. I/O ext. card – 4 analogue inputs
Multi-line 2 – version 2

4189340285C
SW version 2.4X.X



- *Description of option*
- *Functional description*
- *Parameter list*

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This manual is valid for standard multi-line 2 PPU/GPU/GPC units with firmware version 2.00.0 or later.

1. Warnings and legal information

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 set 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.

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 unit implies 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.

Definitions

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

Notes

The notes provide general information which will be helpful for the reader to bear in mind.

Warning

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

2. Description of option

M15 option

Function	ANSI no.
4 x configurable 4…20mA inputs	-

Terminal description

Term.	Function	Technical data	Description
126	Analogue input 5 -	Common	4...20mA input, configurable
127	Analogue input 5 +	4...20mA in	
128	Analogue input 6 -	Common	4...20mA input, configurable
129	Analogue input 6 +	4...20mA in	
130	Analogue input 7 -	Common	4...20mA input, configurable
131	Analogue input 7 +	4...20mA in	
132	Analogue input 8 -	Common	4...20mA input, configurable
133	Analogue input 8 +	4...20mA in	

Please refer to the Application Notes for the connection of active and passive sensors.

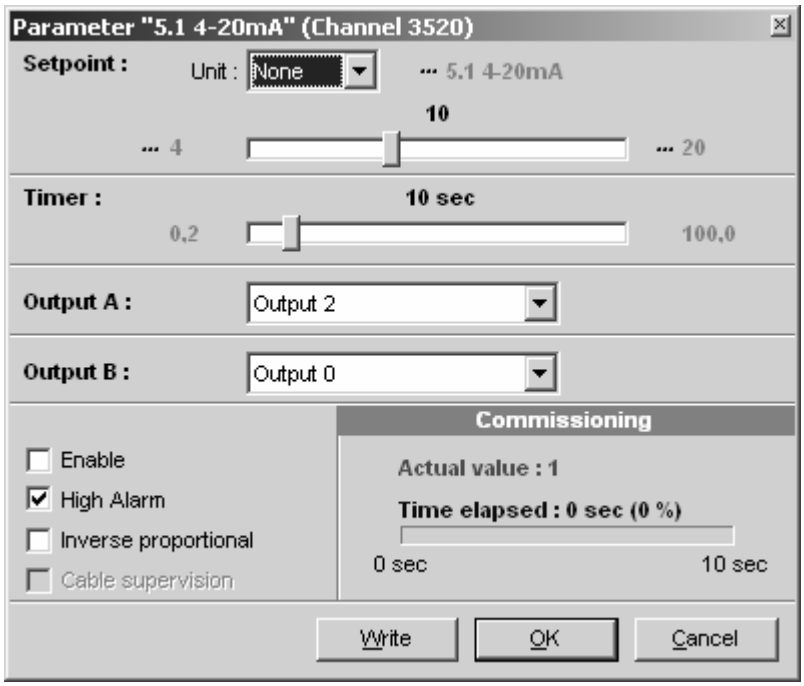
3. Functional description

PC utility software configuration

The PC utility software is a Windows® based software, which can be downloaded from our website www.deif.com. To adjust the inputs via the PC utility software, a computer must be connected to the controller unit. Furthermore, the unit parameters 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 5.1:



Set point

The set point can be adjusted by moving the glider left or right or by clicking the present set point. (Above click '**10**'). The text can be configured by clicking the button ... left of the existing text. The unit can be selected to relevant values, e.g. volt, amp, RPM etc.

The unit can only be selected in the menus 3520, 3540, 3560 and 3580.

Timer

The timer can be adjusted by moving the glider left or right or by clicking the present set point. (Above click '**10 sec**').

Output A/output B

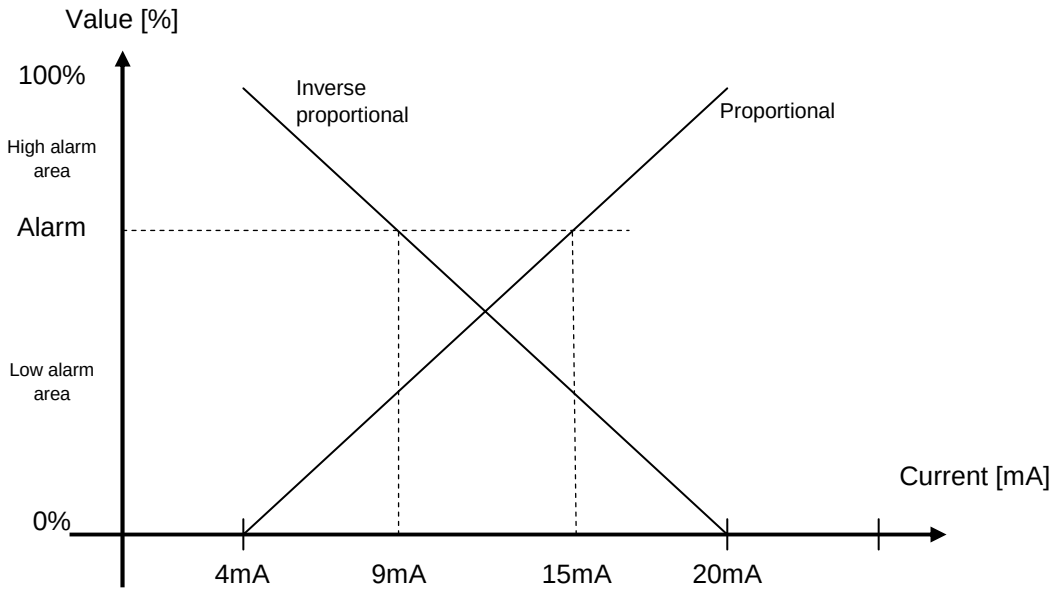
Select which relay to activate in connection with an alarm.

Enable
Mark this check box to enable the alarm function.

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
In situations where the signal of the input is reversed, the 'Inverse proportional' selection can be made. The selection makes sure that the display reading will be correct when an 'inversed' signal is made.

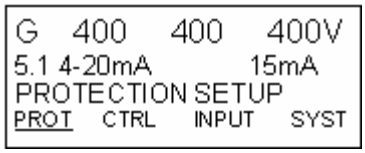
The diagram shows the characteristics of the 'normal' proportional sensor and of the inversed proportional sensor.



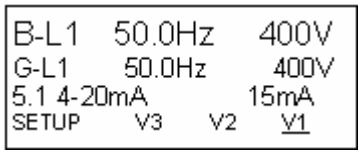
Display readings

In the display, the readings of the 4-20mA input can be read. It can be found in setup menu system in the second line or, if configured, in the view menu system.

Setup menu



View menu



Refer to the Designer's Reference Handbook regarding configuration of the display views.

If the text of the input is changed, you will see the changed text. This could e.g. be 'Oil press. ##bar' instead of '5.1 4-20mA ##mA'

4. Parameter list

For further information about the structure of the parameter descriptions, please see the Designer's Reference Handbook.

3520 4…20mA input 5.1

Input 5 is used by option O1, 'water turbine control' for water level input.

If option O is not present, the input can be used as a normal configurable analogue input.

No.	Setting		Min. setting	Max. setting	Factory setting
3521	4…20mA input 5.1	Set point	0mA	20mA	10mA
3522	4…20mA input 5.1	Timer	0.2 s	100.0 s	10.0 s
3523	4…20mA input 5.1	Relay output A	R0 (none)	Option dependent	R2 (relay 2)
3524	4…20mA input 5.1	Relay output B	R0 (none)		R0 (none)
3525	4…20mA input 5.1	Enable	OFF	ON	OFF

3530 4…20mA input 5.2

Input 5 is used by option O1, 'water turbine control' for water level input.

If option O is not present, the input can be used as a normal configurable analogue input.

No.	Setting		Min. setting	Max. setting	Factory setting
3531	4…20mA input 5.2	Set point	0mA	20mA	10mA
3532	4…20mA input 5.2	Timer	0.2 s	100.0 s	10.0 s
3533	4…20mA input 5.2	Relay output A	R0 (none)	Option dependent	R2 (relay 2)
3534	4…20mA input 5.2	Relay output B	R0 (none)		R0 (none)
3535	4…20mA input 5.2	Enable	OFF	ON	OFF

3540 4…20mA input 6.1

No.	Setting		Min. setting	Max. setting	Factory setting
3541	4…20mA input 6.1	Set point	0mA	20mA	10mA
3542	4…20mA input 6.1	Timer	0.2 s	100.0 s	10.0 s
3543	4…20mA input 6.1	Relay output A	R0 (none)	Option dependent	R2 (relay 2)
3544	4…20mA input 6.1	Relay output B	R0 (none)		R0 (none)
3545	4…20mA input 6.1	Enable	OFF	ON	OFF

3550 4…20mA input 6.2

No.	Setting		Min. setting	Max. setting	Factory setting
3551	4…20mA input 6.2	Set point	0mA	20mA	10mA
3552	4…20mA input 6.2	Timer	0.2 s	100.0 s	10.0 s
3553	4…20mA input 6.2	Relay output A	R0 (none)	Option dependent	R2 (relay 2)
3554	4…20mA input 6.2	Relay output B	R0 (none)		R0 (none)
3555	4…20mA input 6.2	Enable	OFF	ON	OFF

3560 4…20mA input 7.1

No.	Setting		Min. setting	Max. setting	Factory setting
3561	4…20mA input 7.1	Set point	0mA	20mA	10mA
3562	4…20mA input 7.1	Timer	0.2 s	100.0 s	10.0 s
3563	4…20mA input 7.1	Relay output A	R0 (none)	Option dependent	R2 (relay 2)
3564	4…20mA input 7.1	Relay output B	R0 (none)		R0 (none)
3565	4…20mA input 7.1	Enable	OFF	ON	OFF

3570 4…20mA input 7.2

No.	Setting		Min. setting	Max. setting	Factory setting
3571	4…20mA input 7.2	Set point	0mA	20mA	10mA
3572	4…20mA input 7.2	Timer	0.2 s	100.0 s	10.0 s
3573	4…20mA input 7.2	Relay output A	R0 (none)	Option dependent	R2 (relay 2)
3574	4…20mA input 7.2	Relay output B	R0 (none)		R0 (none)
3575	4…20mA input 7.2	Enable	OFF	ON	OFF

3580 4…20mA input 8.1

No.	Setting		Min. setting	Max. setting	Factory setting
3581	4…20mA input 8.1	Set point	0mA	20mA	10mA
3582	4…20mA input 8.1	Timer	0.2 s	100.0 s	10.0 s
3583	4…20mA input 8.1	Relay output A	R0 (none)	Option dependent	R2 (relay 2)
3584	4…20mA input 8.1	Relay output B	R0 (none)		R0 (none)
3585	4…20mA input 8.1	Enable	OFF	ON	OFF

3590 4…20mA input 8.2

No.	Setting		Min. setting	Max. setting	Factory setting
3591	4…20mA input 8.2	Set point	0mA	20mA	10mA
3592	4…20mA input 8.2	Timer	0.2 s	100.0 s	10.0 s
3593	4…20mA input 8.2	Relay output A	R0 (none)	Option dependent	R2 (relay 2)
3594	4…20mA input 8.2	Relay output B	R0 (none)		R0 (none)
3595	4…20mA input 8.2	Enable	OFF	ON	OFF