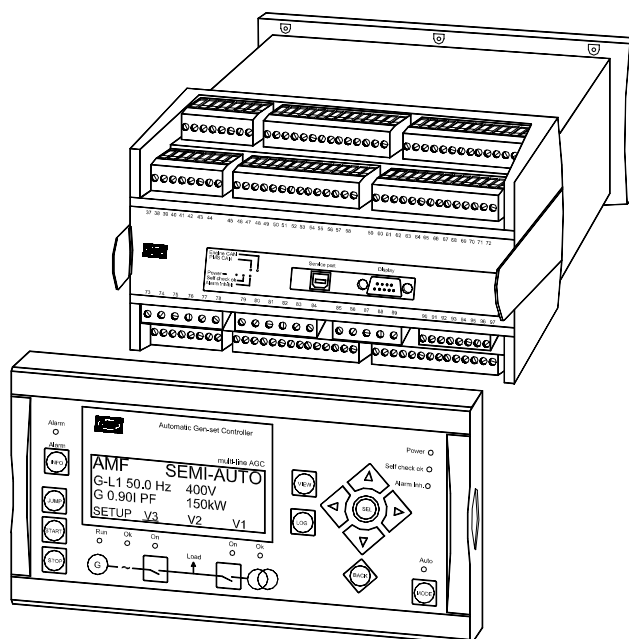


Description of option

Option M13.x, Configurable I/O extension cards 7 binary inputs Multi-line 2

4189340449A

SW version 3.0X.X



- Description of option
- Functional description
- Parameter list



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1. Warnings and legal information

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 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

M13 option

Option M13 is a hardware option, and therefore a separate PCB is installed in addition to the standard-installed hardware. M13.6 is installed in slot #6 and M13.8 is installed in slot #8.

ANSI numbers

Function	ANSI no.
7 x binary inputs for control and/or alarms	77

Terminal description

Option M13.6

Term.	Function	Technical data	Description
90	Com.	Common	Common for terminals 91-97
91	Digital input 91	Optocoupler	Configurable
92	Digital input 92	Optocoupler	Configurable
93	Digital input 93	Optocoupler	Configurable
94	Digital input 94	Optocoupler	Configurable
95	Digital input 95	Optocoupler	Configurable
96	Digital input 96	Optocoupler	Configurable
97	Digital input 97	Optocoupler	Configurable

Option M13.8

Term.	Function	Technical data	Description
126	Com.	Common	Common for terminals 127-133
127	Digital input 127	Optocoupler	Configurable
128	Digital input 128	Optocoupler	Configurable
129	Digital input 129	Optocoupler	Configurable
130	Digital input 130	Optocoupler	Configurable
131	Digital input 131	Optocoupler	Configurable
132	Digital input 132	Optocoupler	Configurable
133	Digital input 133	Optocoupler	Configurable



The binary inputs use fixed signals.



Please refer to the Installation Instructions for a detailed description of the wiring of digital inputs.

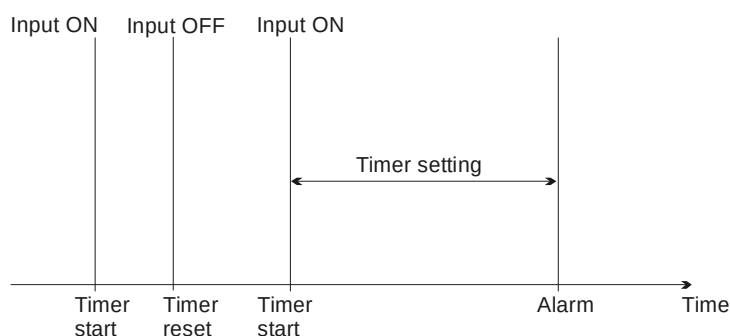
3. Functional description

The digital inputs available in this option can be used for two purposes:

1. Protection (alarm) inputs
2. Function inputs

Protection/alarm inputs

The delay settings are all of the definite time type, i.e. a set time is selected. The delay will be activated if the input goes ON (or OFF if selected to be N/C). If the input is reset before the delay runs out, the delay will be reset.



When the delay runs out, the output will be activated.

Function inputs

The function inputs can be set up via the PC utility software.

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.



Please refer to the Designer's Reference Handbook for a complete list of the available input functions.

4. Parameter list



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



Please refer to the Designer's Reference Handbook for a description of the fail class selections.



Please refer to the Help function in the PC utility software for a description of inhibit functions.

Option M13.6

3330 Dig. input 91

No.	Setting		Min. setting	Max. setting	Factory setting
3331	Dig. input 91	Delay	0.0 s	100.0 s	10.0 s
3332	Dig. input 91	Relay output A	Not used	Option dependent	Not used
3333	Dig. input 91	Relay output B	Not used		Not used
3334	Dig. input 91	Enable	OFF	ON	OFF
3335	Dig. input 91	Fail class	Alarm	Trip MB	Warning
3336	Dig. input 91	N/X	N/O	N/C	N/O

3340 Dig. input 92

No.	Setting		Min. setting	Max. setting	Factory setting
3341	Dig. input 92	Delay	0.0 s	100.0 s	10.0 s
3342	Dig. input 92	Relay output A	Not used	Option dependent	Not used
3343	Dig. input 92	Relay output B	Not used		Not used
3344	Dig. input 92	Enable	OFF	ON	OFF
3345	Dig. input 92	Fail class	Alarm	Trip MB	Warning
3346	Dig. input 92	N/X	N/O	N/C	N/O

3350 Dig. input 93

No.	Setting		Min. setting	Max. setting	Factory setting
3351	Dig. input 93	Delay	0.0 s	100.0 s	10.0 s
3352	Dig. input 93	Relay output A	Not used	Option dependent	Not used
3353	Dig. input 93	Relay output B	Not used		Not used
3354	Dig. input 93	Enable	OFF	ON	OFF
3355	Dig. input 93	Fail class	Alarm	Trip MB	Warning
3356	Dig. input 93	N/X	N/O	N/C	N/O

3360 Dig. input 94

No.	Setting		Min. setting	Max. setting	Factory setting
3361	Dig. input 94	Delay	0.0 s	100.0 s	10.0 s
3362	Dig. input 94	Relay output A	Not used	Option dependent	Not used
3363	Dig. input 94	Relay output B	Not used		Not used
3364	Dig. input 94	Enable	OFF	ON	OFF
3365	Dig. input 94	Fail class	Alarm	Trip MB	Warning
3366	Dig. input 94	N/X	N/O	N/C	N/O

3370 Dig. input 95

No.	Setting		Min. setting	Max. setting	Factory setting
3371	Dig. input 95	Delay	0.0 s	100.0 s	10.0 s
3372	Dig. input 95	Relay output A	Not used	Option dependent	Not used
3373	Dig. input 95	Relay output B	Not used		Not used
3374	Dig. input 95	Enable	OFF	ON	OFF
3375	Dig. input 95	Fail class	Alarm	Trip MB	Warning
3376	Dig. input 95	N/X	N/O	N/C	N/O

3380 Dig. input 96

No.	Setting		Min. setting	Max. setting	Factory setting
3381	Dig. input 96	Delay	0.0 s	100.0 s	10.0 s
3382	Dig. input 96	Relay output A	Not used	Option dependent	Not used
3383	Dig. input 96	Relay output B	Not used		Not used
3384	Dig. input 96	Enable	OFF	ON	OFF
3385	Dig. input 96	Fail class	Alarm	Trip MB	Warning
3386	Dig. input 96	N/X	N/O	N/C	N/O

3390 Dig. input 97

No.	Setting		Min. setting	Max. setting	Factory setting
3391	Dig. input 97	Delay	0.0 s	100.0 s	10.0 s
3392	Dig. input 97	Relay output A	Not used	Option dependent	Not used
3393	Dig. input 97	Relay output B	Not used		Not used
3394	Dig. input 97	Enable	OFF	ON	OFF
3395	Dig. Input 97	Fail class	Alarm	Trip MB	Warning
3396	Dig. input 97	N/X	N/O	N/C	N/O

Option M13.8

3500 Dig. input 127

No.	Setting		Min. setting	Max. setting	Factory setting
3501	Dig. input 127	Delay	0.0 s	100.0 s	10.0 s
3502	Dig. input 127	Relay output A	Not used	Option dependent	Not used
3503	Dig. input 127	Relay output B	Not used		Not used
3504	Dig. input 127	Enable	OFF	ON	OFF
3505	Dig. input 127	Fail class	Alarm	Trip MB	Warning
3506	Dig. input 127	N/X	N/O	N/C	N/O

3510 Dig. input 128

No.	Setting		Min. setting	Max. setting	Factory setting
3511	Dig. input 128	Delay	0.0 s	100.0 s	10.0 s
3512	Dig. input 128	Relay output A	Not used	Option dependent	Not used
3513	Dig. input 128	Relay output B	Not used		Not used
3514	Dig. input 128	Enable	OFF	ON	OFF
3515	Dig. input 128	Fail class	Alarm	Trip MB	Warning
3516	Dig. input 128	N/X	N/O	N/C	N/O

3520 Dig. input 129

No.	Setting		Min. setting	Max. setting	Factory setting
3521	Dig. input 129	Delay	0.0 s	100.0 s	10.0 s
3522	Dig. input 129	Relay output A	Not used	Option dependent	Not used
3523	Dig. input 129	Relay output B	Not used		Not used
3524	Dig. input 129	Enable	OFF	ON	OFF
3525	Dig. input 129	Fail class	Alarm	Trip MB	Warning
3526	Dig. input 129	N/X	N/O	N/C	N/O

3530 Dig. input 130

No.	Setting		Min. setting	Max. setting	Factory setting
3531	Dig. input 130	Delay	0.0 s	100.0 s	10.0 s
3532	Dig. input 130	Relay output A	Not used	Option dependent	Not used
3533	Dig. input 130	Relay output B	Not used		Not used
3534	Dig. input 130	Enable	OFF	ON	OFF
3535	Dig. input 130	Fail class	Alarm	Trip MB	Warning
3536	Dig. input 130	N/X	N/O	N/C	N/O

3540 Dig. input 131

No.	Setting		Min. setting	Max. setting	Factory setting
3541	Dig. input 131	Delay	0.0 s	100.0 s	10.0 s
3542	Dig. input 131	Relay output A	Not used	Option dependent	Not used
3543	Dig. input 131	Relay output B	Not used		Not used
3544	Dig. input 131	Enable	OFF	ON	OFF
3545	Dig. input 131	Fail class	Alarm	Trip MB	Warning
3546	Dig. input 131	N/X	N/O	N/C	N/O

3550 Dig. input 132

No.	Setting		Min. setting	Max. setting	Factory setting
3551	Dig. input 132	Delay	0.0 s	100.0 s	10.0 s
3552	Dig. input 132	Relay output A	Not used	Option dependent	Not used
3553	Dig. input 132	Relay output B	Not used		Not used
3554	Dig. input 132	Enable	OFF	ON	OFF
3555	Dig. input 132	Fail class	Alarm	Trip MB	Warning
3556	Dig. input 132	N/X	N/O	N/C	N/O

3560 Dig. input 133

No.	Setting		Min. setting	Max. setting	Factory setting
3561	Dig. input 133	Delay	0.0 s	100.0 s	10.0 s
3562	Dig. input 133	Relay output A	Not used	Option dependent	Not used
3563	Dig. input 133	Relay output B	Not used		Not used
3564	Dig. input 133	Enable	OFF	ON	OFF
3565	Dig. input 133	Fail class	Alarm	Trip MB	Warning
3566	Dig. input 133	N/X	N/O	N/C	N/O

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