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1. Introduction

1.1 About the operator's manual

1.1.1 General purpose

The general purpose of this document is to give the operator important information to be used in the daily operation of the controller.



DANGER!

Read this document before working with the AGC 150 controller. Failure to do this may result in human injury or damage to the equipment.

1.1.2 Intended users of the Operator's manual

The Operator's manual is primarily intended for the operator that performs daily operations with the controller.

The manual includes an overview of the LEDs, push-buttons and screens on the controller, as well as general operator tasks, alarms, and logs.

1.1.3 List of technical documentation for AGC 150

Document	Contents
Product sheet	 Short description Controller applications Main features and functions Technical data Protections Dimensions
Data sheet	 General description Functions and features Controller applications Controller types and variants Protections Inputs and outputs Technical specifications
Designer's handbook	 Principles General controller sequences, functions and protections GENSET controller Mains controller BTB controller Hybrid controller Protections and alarms AC configuration and nominal settings Breaker and synchronisation Regulation Load sharing Hardware characteristics Modbus
Installation instructions	Tools and materials

Document	Contents			
	 Mounting Minimum wiring for the controller Wiring communication 			
Operator's manual	 Controller equipment (buttons and LEDs) Operating the system Alarms Log 			
Modbus tables	 Modbus address list PLC addresses Corresponding controller functions Descriptions for function codes, function groups 			

1.2 Warnings and safety

1.2.1 Factory settings

The controller is delivered pre-programmed from the factory with a set of default settings. These settings are based on typical values and may not be correct for your system. You must therefore check all parameters before using the controller.

1.2.2 Data security

To minimise the risk of data security breaches DEIF recommends to:

- · As far as possible, avoid exposing controllers and controller networks to public networks and the Internet.
- · Use additional security layers like a VPN for remote access, and install firewall mechanisms.
- Restrict access to authorised persons.

1.3 Legal information

1.3.1 Third party equipment

DEIF takes no responsibility for the installation or operation of any third party equipment, including the **genset**. Contact the **genset** company if you have any doubt about how to install or operate the genset.

1.3.2 Warranty



CAUTION

The AGC 150 controller is not to be opened by unauthorised personnel. If opened anyway, the warranty will be lost.

1.3.3 Disclaimer

DEIF A/S reserves the right to change any of the contents of this document without prior notice.

The English version of this document always contains the most recent and up-to-date information about the product. DEIF does not take responsibility for the accuracy of translations, and translations might not be updated at the same time as the English document. If there is a discrepancy, the English version prevails.

1.3.4 Copyright

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2. Controller overview

2.1 Overview of buttons and LEDs

2.1.1 Front overview



No.	Name	Function
1	Power ON	Green: The controller power is ON. OFF: The controller power is OFF.
2	Display screen	Resolution: 240 x 128 px. Viewing area: 88.50 x 51.40 mm. Six lines, each with 25 characters.
3	Navigation	Move the selector up, down, left and right on the screen.
4	ОК	Enter the Menu system. Confirm the selection on the screen.
5	Back	Go to the previous page.
6	AUTO mode	The controller automatically starts and stops gensets according to the system settings. No operator actions are needed.
7	Silence horn	Turns off an alarm horn (if configured) and enters the Alarm menu.
8	Shortcut menu	Gives access to: Jump menu, Mode selection, Test, Lamp test, Hybrid (PV semi start and stop).
9	SEMI-AUTO mode	The controller cannot automatically start, stop, connect or disconnect the genset. The operator can start, stop, connect or disconnect the genset. The controller automatically synchronises before closing a breaker, and automatically de-loads before opening a breaker.
10	Mains symbol	Green: Mains voltage and frequency are OK. The controller can synchronise and close the breaker. Red: Mains failure.
11	Close breaker	Press to close the breaker.
12	Open breaker	Press to open the breaker.

No.	Name	Function
13	Breaker symbols	Green: Breaker is ON. Green flashing: Synchronising or de-loading. Red: Breaker failure.
14	Generator	Green: Generator voltage and frequency are OK. The controller can synchronise and close the breaker. Green flashing: The generator voltage and frequency are OK, but the V&Hz OK timer is still running. The controller cannot close the breaker. Red: The generator voltage is too low to measure.
15	Engine	Green: There is running feedback. Green flashing: The engine is getting ready. Red: The engine is not running, or there is no running feedback.
16	Stop	Stops the genset if SEMI-AUTO or Manual is selected.
17	Start	Starts the genset if SEMI-AUTO or Manual is selected.
18	Load symbol	OFF: Power management application. Green: The supply voltage and frequency are OK. Red: Supply voltage/frequency failure.

2.1.2 Display settings

It is possible to adjust the settings for the display to compensate for ambient lighting. Configure these settings under **Settings > Basic settings > Controller settings > Display > Display control**.

Parameter no.	Text	Range	Default
9151	Backlight dimmer	0 to 15	12
9152	Green LEDs dimmer	1 to 15	15
9153	Red LEDs dimmer	1 to 15	15
9154	Contrast level	-20 to +20	0
9155	Sleep mode timer	1 to 1800 s	60 s
9156	Enable (Sleep mode timer)	OFF ON	ON
9157	Alarm Jump	OFF ON	ON
9158	Engineering units	Bar/Celcius PSI/Fahrenheit	Bar/Celcius

2.2 Controller types

2.2.1 Genset controller layouts

Single genset controller in Island mode



Single genset controller with Automatic Mains Failure (AMF)



- 1. Power ON
- 2. Display screen (monochrome)
- 3. Navigation
- 4. OK
- 5. Back
- 6. AUTO mode
- 7. Silence horn
- 8. Short cut menu for commands
- 9. SEMI-AUTO mode

10. -

- 11. Close breaker
- 12. Open breaker
- 13. Breaker symbols
- 14. Generator
- 15. Engine
- 16. Stop
- 17. Start
- 18. Load symbol
- 1. Power ON
- 2. Display screen (monochrome)
- 3. Navigation
- 4. OK
- 5. Back
- 6. AUTO mode
- 7. Silence horn
- 8. Short cut menu for commands
- 9. SEMI-AUTO mode
- 10. Mains symbol
- 11. Close breaker
- 12. Open breaker
- 13. Breaker symbols
- 14. Generator
- 15. Engine
- 16. Stop
- 17. Start
- 18. Load symbol



Genset controller in power management systems



- 1. Power ON
- 2. Display screen (monochrome)
- 3. Navigation
- 4. OK
- 5. Back
- 6. AUTO mode
- 7. Silence horn
- 8. Short cut menu for commands
- 9. SEMI-AUTO mode
- 10. Mains symbol
- 11. Close breaker
- 12. Open breaker
- 13. Breaker symbols
- 14. Generator
- 15. Engine
- 16. Stop
- 17. Start
- 18. Load symbol
- 1. Power ON
- 2. Display screen (monochrome)
- 3. Navigation
- 4. OK
- 5. Back
- 6. AUTO mode
- 7. Silence horn
- 8. Short cut menu for commands
- 9. SEMI-AUTO mode
- 10. -
- 11. Close breaker
- 12. Open breaker
- 13. Breaker symbols
- 14. Generator
- 15. Engine
- 16. Stop
- 17. Start

2.2.2 Mains controller layouts

Mains controller



Mains controller with tie breaker



- 1. Power ON
- 2. Display screen (monochrome)
- 3. Navigation
- 4. OK
- 5. Back
- 6. AUTO mode
- 7. Silence horn
- 8. Short cut menu for commands
- 9. SEMI-AUTO mode
- 10. Mains symbol
- 11. Close breaker
- 12. Open breaker
- 13. Breaker symbols
- 14.-
- 15. -
- 16. Stop
- 17. Start
- 18. Load symbol
- 1. Power ON
- 2. Display screen (monochrome)
- 3. Navigation
- 4. OK
- 5. Back
- 6. AUTO mode
- 7. Silence horn
- 8. Short cut menu for commands
- 9. SEMI-AUTO mode
- 10. Mains symbol
- 11. Close breaker
- 12. Open breaker
- 13. Breaker symbols
- 14. -
- 15. -
- 16. Stop
- 17. Start
- 18. Load symbol

2.2.3 Bus tie breaker controller layouts

Bus tie braker controller



2.2.4 Hybrid controller layouts

Single genset controller in Island mode



- 1. Power ON
- 2. Display screen (monochrome)
- 3. Navigation
- 4. OK
- 5. Back
- 6. AUTO mode
- 7. Silence horn
- 8. Short cut menu for commands
- 9. SEMI-AUTO mode
- 10. -
- 11. Close breaker
- 12. Open breaker
- 13. Breaker symbols

- 1. Power ON
- 2. Display screen (monochrome)
- 3. Navigation
- 4. OK
- 5. Back
- 6. AUTO mode
- 7. Silence horn
- 8. Short cut menu for commands
- 9. SEMI-AUTO mode
- 10. -
- 11. Close breaker
- 12. Open breaker
- 13. Breaker symbols
- 14. Generator
- 15. Engine
- 16. Stop
- 17. Start
- 18. Load symbol



Single genset controller in parallel without mains breaker



- 1. Power ON
- 2. Display screen (monochrome)
- 3. Navigation
- 4. OK
- 5. Back
- 6. AUTO mode
- 7. Silence horn
- 8. Short cut menu for commands
- 9. SEMI-AUTO mode
- 10. Mains symbol
- 11. Close breaker
- 12. Open breaker
- 13. Breaker symbols
- 14. Generator
- 15. Engine
- 16. Stop
- 17. Start
- 18. Load symbol
- 1. Power ON
- 2. Display screen (monochrome)
- 3. Navigation
- 4. OK
- 5. Back
- 6. AUTO mode
- 7. Silence horn
- 8. Short cut menu for commands
- 9. SEMI-AUTO mode
- 10. Mains symbol
- 11. Close breaker
- 12. Open breaker
- 13. Breaker symbols
- 14. Generator
- 15. Engine
- 16. Stop
- 17. Start
- 18. Load symbol

2.2.5 Mimic function

With the Mimic function the operator can choose how the control buttons and LED's are shown on AGC 150, and thereby get a better overview of the controller in different applications.

Configure the Mimic function under Settings > Basic settings > Controller settings > Display > LED mimic.

Parameter no.	Item	F	Range		
6082	LED mimic		Standard with genset Standard Guided with genset Guided		
Standard Control buttons and LED's are continuously If the genset is stopped, the motor/generate	/ visible. or symbols are OFF.	0 ©		@. @	_ ● ● ●
Standard with genset Control buttons and LED's are continuously If the genset is stopped, the motor/generate	/ visible. or symbols are shown in red.	() ©		@. @	_ • ● ●
Guided Active control buttons and LED's are visible Example: AGC 150 is in SEMI-AUTO mode The only possible action is to start the gene button is visible.	e, inactive are not shown. e. The generator is stopped. erator, and so only the Start	0	<u>↑</u>	@. ©	_ • ● ●
Guided with genset Active control buttons, LED's and motor/ge inactive are not shown. Example: AGC 150 is in SEMI-AUTO mode The only possible action is to start the gene button and the red motor/generator symbol	nerator symbols are visible, e. The generator is stopped. erator, and so only the Start s are visible.			@. @	▲ ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●

All Mimic settings

The breaker symbol flashes green:

- Controller is synchronising
- Controller is de-loading

The breaker symbol turns red:

- Breaker position failure
- Breaker close failure



3. Menu structure

3.1 About display and menu structures

3.1.1 Menu structure

The AGC 150 has two menu systems, which can be used without password entry:

- **The View menu system**: The commonly used menu system, with 20 configurable windows that can be entered with the arrow buttons.
- **The Settings menu system**: The menu system for setting up the controller, and to see detailed information that is not available in the view menu system.

Changes to the parameter settings are password protected.

3.1.2 The View menu

When AGC 150 is powered up, the View menu appears. It is the daily use menu for the operator, which shows various measured values. If an alarm is present, the event and alarm list is shown at power-up.

Figure 3.1 The View menu

0-						
(U-Suppl	у	25.9V			
	G	0.00PF	0kW			
0{	G	0kVa	0kvar			
	Energy 1	Total	0kWh			
ļ	Run abs	olute	0hrs			
6			 PM-Prio:01 1/20 			

- 1. Status line.
- 2. Operational status or measurements.
- 3. View Page number, Power Management priority (if available) or Engine DEF level (if available).

The View menu contains up to 20 different pages. Navigate through the pages with the Up 🙆 and Down 🥯 buttons.

Figure 3.2 Example: Navigating the View menu

DG BLOCKED FOR START				DG BLO	Г	
U-Supp	ly	25.9V		BB L1	0.00Hz	0kW
G	0.00PF	0kW	Press	G L1	0.00Hz	0kW
G	0kVa	0kvar	\otimes	G	0.00PF	0kvar
Energy	Total	0kWh		Energy To	otal	0kWh
Run abs	solute	0hrs		Run abso	lute	0hrs
		PM-Prio:01 1/20]			PM-Prio:01 2/20

3.1.3 Status line texts

Status text	Condition	Comment
BLOCK	Block mode is activated.	
SIMPLE TEST		
LOAD TEST	Test mode is activated.	
FULL TEST		
SIMPLE TEST ###.#min		
LOAD TEST ###.#min	Test mode is activated and test timer	
FULL TEST ###.#min		
ISLAND MAN	Genset stopped or running and no other	
ISLAND SEMI	action taking place.	
ISLAND AUTO		
READY ISLAND AUTO	Genset stopped in AUTO.	
ISLAND ACTIVE	Genset running in AUTO.	
AMF MAN	Genset stopped or running and no other	
AMF SEMI	action taking place.	
AMF AUTO		
READY AMF AUTO	Genset stopped in AUTO.	Genset is stopped, ready to auto start with mains failure.
AMF ACTIVE	Genset running in AUTO.	
FIXED POWER MAN	Genset stopped or running and no other	
FIXED POWER SEMI	action taking place.	
READY FIXED P AUTO	Genset stopped in AUTO.	
FIXED POWER ACTIVE	Genset running in AUTO.	
PEAK SHAVING MAN	Genset stopped or running and no other	
PEAK SHAVING SEMI	action taking place.	
PEAK SHAVING AUTO		
READY PEAK SHAV AUTO	Genset stopped in AUTO.	
PEAK SHAVING ACTIVE	Genset running in AUTO.	
LOAD TAKE OVER MAN	Genset stopped or running and no other	
LOAD TAKE OVER SEMI	action taking place.	
LOAD TAKE OVER AUTO		
READY LTO AUTO	Genset stopped in AUTO.	Genset is stopped, ready to start and load take-over.
LTO ACTIVE	Genset running in AUTO.	Genset is running, ready for load take- over.
MAINS P EXPORT MAN	Genset stopped or running and no other	
MAINS P EXPORT SEMI	action taking place.	
MAINS P EXPORT AUTO		
READY MPE AUTO	Genset stopped in AUTO.	

Status text	Condition	Comment
MPE ACTIVE	Genset running in mains power export mode.	
DG BLOCKED FOR START	Generator stopped and active alarm(s) on the generator.	
GB ON BLOCKED	Generator running, GB open and an active Trip GB alarm.	
SHUTDOWN OVERRIDE	The configurable input is active.	
ACCESS LOCK	The configurable input is activated, and the operator tries to activate one of the blocked keys.	
GB TRIP EXTERNALLY	Some external equipment has tripped the breaker.	An external trip is logged in the event log.
MB TRIP EXTERNALLY	Some external equipment has tripped the breaker.	An external trip is logged in the event log.
IDLE RUN	The Idle run function is active. The genset will not stop until a timer has expired.	
IDLE RUN ###.#min	The Idle run function is active and the timer is counting down.	
COMPENSATION FREQ	Compensation is active.	The frequency is not at the nominal setting.
Aux. test ##.#V ####s	Battery test activated, and the timer is counting down.	
DELOAD	Decreasing the load of the genset in order to open the breaker.	
START DG(s) IN ###s	The start genset set point is exceeded.	Genset will start when timer expires.
STOP DG(s) IN ###s	The stop genset set point is exceeded.	Genset will stop when timer expires.
START PREPARE	The start prepare relay is activated.	
START RELAY ON	The start relay is activated.	
START RELAY OFF	The start relay is deactivated during the start sequence.	
MAINS FAILURE	Mains failure and mains failure timer expired.	
MAINS FAILURE IN ###s	Frequency or voltage measurement is outside the limits.	The timer shown is the mains failure delay.
MAINS U OK DEL ####s	Mains voltage is OK after a mains failure.	The timer shown is the mains OK delay.
MAINS f OK DEL ####s	Mains frequency is OK after a mains failure.	The timer shown is the mains OK delay.
Hz/V OK IN ###s	The voltage and frequency on the genset is OK.	When the timer runs out, it is allowed to operate the generator breaker.
COOLING DOWN ###s	Cooling-down period is activated.	
GENSET STOPPING	This info is shown when cooling down has finished.	
EXT. STOP TIME ###s		
xx>00<	Generator is synchronising.	The "xx" marks the actual generator phase angle position in the synchronisation. When the "xx" is aligned

Status text	Condition	Comment
		over the 00 centre, the generator is synchronised.
TOO SLOW 00<	Generator running too slow during synchronisation.	
> 00 TOO FAST	Generator running too fast during synchronisation.	
EXT. START ORDER	A planned AMF sequence is activated.	There is no failure on the mains during this sequence.
SELECT GENSET MODE	Power management has been deactivated and no other genset mode has been selected.	
RAMP TO #####kW	The power ramp is ramping in steps, and the next step that will be reached after the timer has expired will be displayed.	
DERATED TO #####kW	Displays the ramp-down set point.	
UNEXPECTED GB ON BB	Another generator breaker is closed on to the busbar (due to a GB position failure) while no voltage is present on the busbar.	This indicates that other breakers cannot close to the busbar because of position failure on one or more GBs.
WARM UP RAMP	Warm up ramp is active.	The available power is limited until the predefined temperature is reached or when the input which activated warm up ramp is set low.
SUNSPEC IDENTIFYING*	Connecting to PV inverter.	Only Sunspec inverters
SUNSPEC INCOMPATIBLE*	PV inverter is not compatible.	Only Sunspec inverters
SUNSPEC INITIALIZED*	PV inverter is successfully initialized.	Only Sunspec inverters

NOTE *Only AGC 150 Hybrid version.

3.1.4 Texts only related to power management

Table 3.1All controller types

Status text	Condition	Comment
BROADCASTING APPL. #	Broadcast of an application through the CAN line.	Broadcasts one of the four applications from one AGC 150 to the other controllers in the power management system.
RECEIVING APPL. #	Receiving an application.	
BROADCAST COMPLETED	Successful broadcast of an application.	
RECEIVE COMPLETED	Application received successfully.	
BROADCAST ABORTED	Broadcast terminated.	
RECEIVE ERROR	Application is not received correctly.	
QUICK SETUP ERROR	Quick setup of the application failed.	
MOUNT CAN CONNECTOR	Connect the power management CAN line.	
ADAPT IN PROGRESS	The AGC 150 is receiving the application,to which it has just been connected.	

Status text	Condition	Comment
SETUP IN PROGRESS	The new controller is being added to the existing application.	
SETUP COMPLETED	Successful update of the application in all AGC 150 controllers.	
REMOVE CAN CONNECTOR	Remove the power management CAN lines.	

Table 3.2DG controller

Status text	Condition	Comment
BLACKOUT ENABLE	This info is shown if a CAN failure is present in a power management application.	
UNIT STANDBY	If redundant mains units are present, this message is shown on the redundant unit.	
DELOADING BTB XX	DG units are load sharing asymmetrically to de-load BTB XX dividing two sections in an island application.	
BTB XX DIVIDING SEC.	BTB XX is dividing two sections in an island application.	
SYNCHRONISING TB XX	TB XX is synchronising.	
SYNCHRONISING MB XX	MB XX is synchronising.	
SYNCHRONISING BTB XX	BTB XX is synchronising.	
De-loading TB XX	Displays that a tie breaker is being de- loaded in SEMI-AUTO mode.	

Table 3.3Mains controller

Status text	Condition	Comment
UNIT STANDBY	If redundant mains units are present this message is shown on the redundant unit.	
TB TRIP EXTERNALLY	Some external equipment has tripped the breaker.	An external trip is logged in the event log.

Table 3.4BTB controller

Status text	Condition	Comment
DIVIDING SECTION	A BTB unit is dividing two sections in an island application.	
READY AUTO OPERATION	BTB unit in AUTO and ready for breaker operation (no active BTB trip alarm).	
SEMI OPERATION	BTB unit in SEMI-AUTO.	
AUTO OPERATION	BTB unit in Auto, but not ready for breaker operation (active BTB trip alarm).	
BLOCKED FOR CLOSING	Last open BTB in a ring bus.	
BTB TRIP EXTERNALLY	Some external equipment has tripped the breaker.	An external trip is logged in the event log.

3.1.5 Default display views

Overview of the default display views 1 to 20. The display views are customisable via the Utility Software .

Table 3.5Display view 1

Line	Generator	Mains	ВТВ	Hybrid
1	U-Supply 0.0V	U-Supply 0.0V	U-Supply 0.0V	PV OFF 0kvar 0kW
2	G 0.00PF 0kW	M 0.00PF 0kW	BA L1 0.00Hz 0V	G 0.00PF 0kW
3	G 0kVA 0kvar	M 0kVA 0kvar	BA 0kVA 0kvar	G 0kVA 0kvar
4	Energy Total 0kWh	Energy Total 0kWh	BA 0.00PF 0kW	G energy Total 0kWh
5	Run absolute 0 hrs	M 0.00PF 0kW	BA 0 0 0A	Run absolute 0hrs

Table 3.6Display view 2

Line	Generator	Mains	ВТВ	Hybrid
1	BB L1 0.00Hz 0V			
2	G L1 0.00Hz 0V	M L1 0.00Hz 0V	BA L1 0.00Hz 0V	G L1 0.00Hz 0V
3	G 0.00PF 0kW	M 0.00PF 0kW	BA 0kVA 0kvar	G 0.00PF 0kW
4	G 0kVA 0kvar	M 0kVA 0kvar	BA 0.00PF 0kW	G 0kVA 0kvar
5	G 0 0 0A	M 0 0 0A	BA 0 0 0A	G 0 0 0A

Table 3.7Display view 3

Line	Generator	Mains	ВТВ	Hybrid
1	-	-	-	-
2	Synchroniser (graphic)	Synchroniser (graphic)	Synchroniser (graphic)	Synchroniser (graphic)
3	-	-	-	-
4	-	-	-	-
5	-	-	-	-

Table 3.8Display view 4

Line	Generator	Mains	ВТВ	Hybrid
1	BB L1 0.00Hz 0V	M 0 0 0V	BA 0 0 0V	BB L1 0.00Hz 0V
2	G 0.00PF 0kW	M L1 0.00Hz 0V	BA f-L1 0.00Hz	G 0.00PF 0kW
3	G 0kVA 0kvar	-	-	G 0kVA 0kvar
4	G 0 0 0A	BB 0 0 0V	BB 0 0 0V	G 0 0 0A
5	G L1 0.00Hz 0V	BB L1 0.00Hz 0V	BB f-L1 0.00Hz	G L1 0.00Hz 0V

Table 3.9Display view 5

Line	Generator	Mains	ВТВ	Hybrid
1	G U-L1L2 0V	M P 0kW	BA P 0kW	G U-L1L2 0V
2	G U-L2L3 0V	M Q 0kvar	BA Q 0kvar	G U-L2L3 0V

Line	Generator	Mains	втв	Hybrid
3	G U-L3L1 0V	M S 0kVA	BA S 0kVA	G U-L3L1 0V
4	G U-Max 0V	M 0 0 0V	BA 0 0 0V	G U-Max 0V
5	G U-Min 0V	M 0 0 0A	BA 0 0 0A	G U-Min 0V

Table 3.10Display view 6

Line	Generator	Mains	втв	Hybrid
1	G I-L1 0A	M I-L1 0A	BA I-L1 0A	G I-L1 0A
2	G I-L2 0A	M I-L2 0A	BA I-L2 0A	G I-L2 0A
3	G I-L3 0A	M I-L3 0A	BA I-L3 0A	G I-L3 0A
4	-	M 0.00PF 0kW	BA 0.00PF 0kW	-
5	-	M 0 0 0V	BA 0 0 0V	-

Table 3.11Display view 7

Line	Generator	Mains	ВТВ	Hybrid
1	G f-L1 0.00Hz	M f-L1 0.00Hz	BA f-L1 0.00Hz	G f-L1 0.00Hz
2	G f-L2 0.00Hz	M f-L2 0.00Hz	BA f-L2 0.00Hz	G f-L2 0.00Hz
3	G f-L3 0.00Hz	M f-L3 0.00Hz	BA f-L3 0.00Hz	G f-L3 0.00Hz
4	-	M 0.00PF 0kW	BA 0.00PF 0kW	-
5	-	M 0 0 0V	BA 0 0 0A	-

Table 3.12Display view 8

Line	Generator	Mains	втв	Hybrid
1	G P 0kW	M U-L1N 0V	BA U-L1L2 0V	G P 0kW
2	G Q 0kvar	M U-L2N 0V	BA U-L2L3 0V	G Q 0kvar
3	G S 0kVA	M U-L3N 0V	BA U-L3L1 0V	G S 0kVA
4	G PF 0.00	M f-L1 0.00Hz	BA f-L1 0.00Hz	G PF 0.00
5	-	M 0 0 0A	BA 0 0 0A	PV Q reference 0kvar

Table 3.13Display view 9

Line	Generator	Mains	втв	Hybrid
1	P Available 0kW	P Available 0kW	BB U-L1L2 0V	P Available 0kW
2	P Consumed 0kW	P Consumed 0kW	BB U-L1L2 0V	P Consumed 0kW
3	P 0kW 0%	P 0kW 0%	BB U-L3L1 0V	P 0kW 0%
4	-	Q 0kvar 0%	BB f-L1 0.00Hz	PV P reference 0kW
5	-	S 0kva 0%	BA 0 0 0A	PV actual nom. P 0kW

Table 3.14Display view 10

Line	Generator	Mains	втв	Hybrid
1	G U-L1N 0V	M U-L1L2 0V	Multi input 20 0.0V	G U-L1N 0V
2	G U-L2N 0V	M U-L2L3 0V	Multi input 21 0.0V	G U-L2N 0V
3	G U-L3N 0V	M U-L3L1 0V	Multi input 22 0.0V	G U-L3N 0V
4	G energy total 0kWh	M f-L1 0.00Hz	Multi input 23 0.0V	G energy total 0kWh
5	Run absolute 0hrs	M 0 0 0A	-	Run absolute 0hrs

Table 3.15Display view 11

Line	Generator	Mains	втв	Hybrid
1	BB U-L1L2 0V	BB U-L1L2 0V	-	BB U-L1L2 0V
2	BB U-L2L3 0V	BB U-L2L3 0V	Date and Time	BB U-L2L3 0V
3	BB U-L3L1 0V	BB U-L3L1 0V	-	BB U-L3L1 0V
4	BB U-Max 0V	BB f-L1 0.00Hz	BTB Operations 0	BB U-Max 0V
5	BB U-Min 0V	M 0 0 0A	-	BB U-Min 0V

Table 3.16Display view 12

Line	Generator	Mains	ВТВ	Hybrid
1	G Angle L1L2 -179.9deg	M U-L1N 0V	BB-BA Ang -180.0deg	G Angle L1L2 -179.9deg
2	G Angle L2L3 -179.9deg	M U-L2N 0V	BA AngL1L2 -179.9deg	G Angle L2L3 -179.9deg
3	G Angle L3L1 -179.9deg	M U-L3N 0V	BA AngL2L3 -179.9deg	G Angle L3L1 -179.9deg
4	BB-G Angle -180.0deg	M 0.00PF 0kW	BB AngL1L2 -179.9deg	BB-G Angle -180.0deg
5	-	Energy Total 0kWh	BB AngL3L1 -179.9deg	-

Table 3.17Display view 13

Line	Generator	Mains	ВТВ	Hybrid
1	Run absolute 0hrs	Multi input 20 0.0V	-	Run absolute 0hrs
2	GB Operations 0	Multi input 21 0.0V	-	GB Operations 0
3	MB Operations 0	Multi input 22 0.0V	-	MB Operations 0
4	-	Multi input 23 0.0V	-	-
5	-	-	-	-

Table 3.18Display view 14

Line	Generator	Mains	втв	Hybrid
1	U-Supply 0.0V	-	-	PV E total 0kWh
2	Date and Time	Date and Time	-	PV E year 0kWh
3	-	-	-	PV E month 0kWh
4	-	MB Operations 0	-	PV E week 0kWh
5	-	TB Operations 0	-	PV E day 0kWh

Table 3.19Display view 15

Line	Generator	Mains	ВТВ	Hybrid
1	BB-G Ang -180.0deg	BB-M Angle -180.0deg	-	PV E total 0kvar
2	G Ang L1L2 -179.9deg	M Angle L1L2 -179.9deg	-	PV E year 0kvar
3	BB Ang L1L2 -179.9deg	M Angle L1L2 -179.9deg	-	PV E month 0kvar
4	BB Ang L2L3 -179.9deg	BB Ang L1L2 -179.9deg	-	PV E week 0kvar
5	-	BB Ang L3L1 -179.9deg	-	PV E day 0kvar

Table 3.20Display view 16

Line	Generator	Mains	ВТВ	Hybrid
1	T. Coolant N.A.	-	-	PV E curta. total 0kWh
2	T. TurboOil N.A.	-	-	PV E curta. year 0kWh
3	T. Exh. R N.A.	-	-	PV E curta. month 0kWh
4	T. Oil N.A.	-	-	PV E curta. week 0kWh
5	T. Fuel N.A.	-	-	PV E curta. day 0kWh

Table 3.21Display view 17

Line	Generator	Mains	ВТВ	Hybrid
1	Start attempts 0	-	-	Start attempts 0
2	GB Operations 0	-	-	GB Operations 0
3	MB Operations 0	-	-	MB Operations 0
4	-	-	-	U-Supply 0V
5	-	-	-	[yyyy-mm-dd time]

Table 3.22Display view 18

Line	Generator	Mains	ВТВ	Hybrid
1	Multi input 20 0.0V	-	-	Multi input 20 0.0V
2	Multi input 21 0.0V	-	-	Multi input 21 0.0V
3	Multi input 22 0.0V	-	-	Multi input 22 0.0V
4	Multi input 23 0.0V	-	-	Multi input 23 0.0V
5	MPU 0rpm	-	-	MPU 0rpm

Table 3.23Display view 19

Line	Generator	Mains	ВТВ	Hybrid
1	P available 100%	-	-	P available 100%
2	P consumed 0%	-	-	P consumed 0%
3	G 0.00PF 0%P	-	-	G 0.00PF 0%P
4	BB f-L1 0.00Hz	-	-	BB f-L1 0.00Hz
5	BB Ang L1L2 -179.9deg	-	-	BB Ang L1L2 -179.9deg

Table 3.24Display view 20

Line	Generator	Mains	ВТВ	Hybrid
1	P 0kW 0%	-	-	P 0kW 0%
2	Q 0kvar 0%	-	-	Q 0kvar 0%
3	S 0kVA 0%	-	-	S 0kVA 0%
4	BB Ang L3L1 -179.9deg	-	-	BB Ang L3L1 -179.9deg
5	BB-G Ang -180.0deg	-	-	BB-G Ang -180.0deg

3.1.6 Available display texts

The display views can be configured to apply with the user's wishes. This is made with the Utility Software:

- In the toolbar, select the *Configuration of the user views* button.
- In the pop-up box, select the display view to be changed.

🕖 Device display		X
n 🤧 🤧 🍕 🖪 🕰	D	
Display Views : View 1	1	~
DEIP		
U-Supply	0.0V	
U-Supply G 0.00PF	0.0V 0kW	
U-Supply G 0.00PF G 0kVA	0.0V OkW Okvar	
U-Supply G 0.00PF G 0kVA Energy Total	0.0V OkW Okvar OkWh	

- Select the display line to be changed.
- In the new pop-up box, navigate to the desired text line, then select OK.



Generator	Mains	ВТВ	Hybrid
No text	No text	No text	No text
G 0 0 0V	M 0 0 0V	BA 0 0 0V	G 0 0 0V
BB 0 0 0V	M 0 0 0V	BB 0 0 0V	BB 0 0 0V
G 0 0 0A	M 0 0 0A	BA 0 0 0A	G 0 0 0A
G 0.00PF 0kW	M 0.00PF 0kW	BA 0.00PF 0kW	G 0.00PF 0kW

Generator	Mains	ВТВ	Hybrid	
G 0.00cosphi	M 0.00cosphi	BA 0.00cosphi	G 0.00cosphi	
G 0kVA 0kvar	M 0kVA 0kvar	BA 0kVA 0kvar	G 0kVA 0kvar	
G L1 0.0Hz 0V	M L1 0.0Hz 0V	BA L1 0.0Hz 0V	G L1 0.0Hz 0V	
BB L1 0.0Hz 0V	BB L1 0.0Hz 0V	BB L1 0.0Hz 0V	BB L1 0.0Hz 0V	
G U-L1N 0V	M U-L1N 0V	BA U-L1N 0V	G U-L1N 0V	
G U-L2N 0V	M U-L2N 0V	BA U-L2N 0V	G U-L2N 0V	
G U-L3N 0V	M U-L3N 0V	BA U-L3N 0V	G U-L3N 0V	
G U-L1L2 0V	M U-L1L2 0V	BA U-L1L2 0V	G U-L1L2 0V	
G U-L2L3 0V	M U-L2L3 0V	BA U-L2L3 0V	G U-L2L3 0V	
G U-L3L1 0V	M U-L3L1 0V	BA U-L3L1 0V	G U-L3L1 0V	
G U-Max 0V	M U-Max 0V	BA U-Max 0V	G U-Max 0V	
G U-Min 0V	M U-Min 0V	BA U-Min 0V	G U-Min 0V	
G I-L1 0A	M I-L1 0A	BA I-L1 0A	G I-L1 0A	
G I-L2 0A	M I-L2 0A	BA I-L2 0A	G I-L2 0A	
G I-L3 0A	M I-L3 0A	BA I-L3 0A	G I-L3 0A	
G f-L1 0.00Hz	M f-L1 0.00Hz	BA f-L1 0.00Hz	G f-L1 0.00Hz	
G f-L2 0.00Hz	M f-L2 0.00Hz	BA f-L2 0.00Hz	G f-L2 0.00Hz	
G f-L3 0.00Hz	M f-L3 0.00Hz	BA f-L3 0.00Hz	G f-L3 0.00Hz	
G P 0kW	M P 0kW	BA P 0kW	G P 0kW	
G P L1 0kW	M P L1 0kW	BA P L1 0kW	G P L1 0kW	
G P L2 0kW	M P L2 0kW	BA P L2 0kW	G P L2 0kW	
G P L3 0kW	M P L3 0kW	BA P L3 0kW	G P L3 0kW	
P 0kW U-Gen L1N 0V			P 0kW U-Gen L1N 0V	
G Q 0kvar	M Q 0kvar	BA Q 0kvar	G Q 0kvar	
G Q L1 0kvar	M Q L1 0kvar	BA Q L1 0kvar	G Q L1 0kvar	
G Q L2 0kvar	M Q L2 0kvar	BA Q L2 0kvar	G Q L2 0kvar	
G Q L3 0kvar	M Q L3 0kvar	BA Q L3 0kvar	G Q L3 0kvar	
G S 0kVA	M S 0kVA	BA S 0kVA	G S 0kVA	
G S L1 0kVA	M S L1 0kVA	BA S L1 0kVA	G S L1 0kVA	
G S L2 0kVA	M S L2 0kVA	BA S L2 0kVA	G S L2 0kVA	
G S L3 0kVA	M S L3 0kVA	BA S L3 0kVA	G S L3 0kVA	
G PF 0.00	M PF 0.00	BA PF 0.00	G PF 0.00	
G Angle L1L2 0deg	M Angle L1L2 0deg	BA Angle L1L2 0deg	G Angle L1L2 0deg	
G Angle L2L3 0deg	M Angle L2L3 0deg	BA Angle L2L3 0deg	G Angle L2L3 0deg	
G Angle L3L1 0deg	M Angle L3L1 0deg	BA Angle L3L1 0deg	G Angle L3L1 0deg	
BB U-L1N 0V	BB U-L1N 0V	BB U-L1N 0V	BB U-L1N 0V	
BB U-L2N 0V	BB U-L2N 0V	BB U-L2N 0V	BB U-L2N 0V	
BB U-L3N 0V	BB U-L3N 0V	BB U-L3N 0V	BB U-L3N 0V	
BB U-L1L2 0V	BB U-L1L2 0V	BB U-L1L2 0V	BB U-L1L2 0V	

Generator	Mains	втв	Hybrid
BB U-L2L3 0V	BB U-L2L3 0V	BB U-L2L3 0V	BB U-L2L3 0V
BB U-L3L1 0V	BB U-L3L1 0V	BB U-L3L1 0V	BB U-L3L1 0V
BB U-Max 0V	BB U-Max 0V	BB U-Max 0V	BB U-Max 0V
BB U-Min 0V	BB U-Min 0V	BB U-Min 0V	BB U-Min 0V
BB f-L1 0.00Hz	BB f-L1 0.00Hz	BB f-L1 0.00Hz	BB f-L1 0.00Hz
BB f-L2 0.00Hz	BB f-L2 0.00Hz	BB f-L2 0.00Hz	BB f-L2 0.00Hz
BB f-L3 0.00Hz	BB f-L3 0.00Hz	BB f-L3 0.00Hz	BB f-L3 0.00Hz
BB Angle L1L2 0deg			
BB Angle L2L3 0deg			
BB-Gen Angle 0deg	BB-M Angle 0deg	Angle BB-BA 0deg	BB-Gen Angle 0deg
I neutral 0A	I neutral 0A	I neutral 0A	I neutral 0A
I earth 0A	I earth 0A	I earth 0A	I earth 0A
4th CT P 0kW			
Energy Total 0kWh	Energy Total 0kWh	Energy Total 0kWh	Energy Total 0kWh
Energy Day 0kWh	Energy Day 0kWh	Energy Day 0kWh	Energy Day 0kWh
Energy Week 0kWh	Energy Week 0kWh	Energy Week 0kWh	Energy Week 0kWh
Energy Month 0kWh	Energy Month 0kWh	Energy Month 0kWh	Energy Month 0kWh
Import Total 0kWh	Import Total 0kWh	Import Total 0kWh	Import Total 0kWh
Import day 0kWh	Import day 0kWh	Import day 0kWh	Import day 0kWh
Import week 0kWh	Import week 0kWh	Import week 0kWh	Import week 0kWh
Import month 0kWh	Import month 0kWh	Import month 0kWh	Import month 0kWh
Energy Total 0kvarh	Energy Total 0kvarh	Energy Total 0kvarh	Energy Total 0kvarh
Energy Day 0kvarh	Energy Day 0kvarh	Energy Day 0kvarh	Energy Day 0kvarh
Energy Week 0kvarh	Energy Week 0kvarh	Energy Week 0kvarh	Energy Week 0kvarh
Energy Month 0kvarh	Energy Month 0kvarh	Energy Month 0kvarh	Energy Month 0kvarh
Import Total 0kvarh	Import Total 0kvarh	Import Total 0kvarh	Import Total 0kvarh
Import day 0kvarh	Import day 0kvarh	Import day 0kvarh	Import day 0kvarh
Import week 0kvarh	Import week 0kvarh	Import week 0kvarh	Import week 0kvarh
Import month 0kvarh	Import month 0kvarh	Import month 0kvarh	Import month 0kvarh
I max. demand L1 0A			
I max. demand L2 0A			
I max. demand L3 0A			
I thermal demand L1 0A			
I thermal demand L2 0A			
I thermal demand L3 0A			
Pulse counter 1 0			
Pulse counter 2 0			
P consumed 0kW	P consumed 0kW		P consumed 0kW
P available 0%	P available 0%		P available 0%

Generator	Mains	ВТВ	Hybrid
P consumed 0%	P consumed 0%		P consumed 0%
G 0%S 0%Q	M 0%S 0%Q		G 0%S 0%Q
G 0.00PF 0%P	M 0.00PF 0%P		G 0.00PF 0%P
P 0kW 0%	P 0kW 0%		P 0kW 0%
Q 0kvar 0%	Q 0kvar 0%		Q 0kvar 0%
S 0kVA 0%	S 0kVA 0%		S 0kVA 0%
Multi Input 20 0	Multi Input 20 0	Multi Input 20 0	Multi Input 20 0
Multi Input 21 0	Multi Input 21 0	Multi Input 21 0	Multi Input 21 0
Multi Input 22 0	Multi Input 22 0	Multi Input 22 0	Multi Input 22 0
Multi Input 23 0	Multi Input 23 0	Multi Input 23 0	Multi Input 23 0
MPU 0rpm			MPU 0rpm
U-Supply 0.0V	U-Supply 0.0V	U-Supply 0.0V	U-Supply 0.0V
Gov Mode Text	Gov Mode Text	Gov Mode Text	Gov Mode Text
Synchroniser	Synchroniser	Synchroniser	Synchroniser
Date and Time	Date and Time	Date and Time	Date and Time
MB operations 0	MB operations 0		MB operations 0
GB Operations 0	TB Operations 0	BTB Operations 0	GB Operations 0
Start attempts 0			Start attempts 0
Start att Std 0			Start att Std 0
Start att Dbl 0			Start att Dbl 0
Run absolute 0hrs			Run absolute 0hrs
Run relative 0Hour			Run relative 0Hour
Run Time load profile 0Hour			Run Time load profile 0Hour
Run ShtD 0H 0m			Run ShtD 0H 0m
Next prio 0H 0m			Next prio 0H 0m
Serv 1 0d 0h			Serv 1 0d 0h
Serv 2 0d 0h			Serv 2 0d 0h
P mains 0kW	P mains 0kW		P mains 0kW
P available 0kW	P available 0kW		P available 0kW
P mains (PM) 0kW	P mains (PM) 0kW		P mains (PM) 0kW
P DG total 0kW	P DG total 0kW		P DG total 0kW
Negtive volt. 0.0%	Negtive volt. 0.0%	Negtive volt. 0.0%	Negtive volt. 0.0%
Negtive curr. 0.0%	Negtive curr. 0.0%	Negtive curr. 0.0%	Negtive curr. 0.0%
Zero volt. 0.0%	Zero volt. 0.0%	Zero volt. 0.0%	Zero volt. 0.0%
Zero curr. 0.0%	Zero curr. 0.0%	Zero curr. 0.0%	Zero curr. 0.0%
Positive volt 0.0%	Positive volt 0.0%	Positive volt 0.0%	Positive volt 0.0%
P ref. actual 0kW			P ref. actual 0kW
P ref. current 0kW	P ref. current 0kW		P ref. current 0kW
	P tie breaker 0kW	P BTB Ana21 0kW	

Generator	Mains	ВТВ	Hybrid
Cosphi ref. current 0.00	Cosphi ref. current 0.00		Cosphi ref. current 0.00
Fan A pr: 0 0hrs			Fan A pr: 0 0hrs
Fan B pr: 0 0hrs			Fan B pr: 0 0hrs
Fan C pr: 0 0hrs			Fan C pr: 0 0hrs
Fan D pr: 0 0hrs			Fan D pr: 0 0hrs
Parameter ID	Parameter ID	Parameter ID	Parameter ID
GOV reg. type			GOV reg. type
AVR reg. type			AVR reg. type
External analogue readings			External analogue readings
EIC readings			EIC readings
			PV P energy, total
			PV P energy, year
			PV P energy, month
			PV P energy, week
			PV P energy, day
			PV Q energy, total
			PV Q energy, year
			PV Q energy, month
			PV Q energy, week
			PV Q energy, day
			PV curtailed energy, total
			PV curtailed energy, year
			PV curtailed energy, month
			PV curtailed energy, week
			PV curtailed energy, day
			PV P reference
			PV Q reference
			PV actual Q and P
			PV actual Nom. P

3.1.7 The Settings menu

The Settings menu is used for setting up the controller, and if the operator needs detailed information that is not available in the view menu system. Navigate through the different setup parameters with the $Up \bigotimes$, $Down \bigotimes$ and $OK \bigotimes$ buttons.





3.1.8 The Service View

The Service View is used to view the status of the controller. The controller settings can not be changed through the Service View, except for changing the Passwords.

Navigate through the different status views with the $Up \bigotimes$, $Determined a first the the the the the the the the the th$	own 🎯 and	OK OR buttons
--	-----------	---------------

Figure 3.4 Example: Navigating the Service View



3.1.9 Menu numbers

In AGC 150 each setting or parameter has a unique menu number. On the display screen, the menu number can be seen in the upper right corner:

DG BLOCKED FOR START	
Generator nominal U	6004
Voltage: 400V	

Menu numbers can also be found in the Utility Software:

- 1. From the toolbar, select the *Parameters* button.
- 2. In View mode, choose the List view.
- 3. The menu numbers are shown in the Channel column.

3.1.10 Jump function

If you know the menu number for a setting, you can use the Jump function to select and display settings without navigating through the menus.

To activate the Jump function from the controller, press the Shortcut 😕 button.

Scroll to the Jump menu with the Up \bigcirc and Down \bigcirc buttons, and select the menu with the OK \bigcirc button.

DG BLOCKED FOR START			
Jump		1	
Mod	ENTER MENU NO.:		
Test	9001		
Lam			
Hybrid			
-			

Enter the menu number and select with the OK^{OR} button.

To activate the Jump function in the Utility Software, select the Parameter page and then the Jump menu.

3.1.11 Exhaust after-treatment (Tier 4 Final/Stage V)

AGC 150 supports Tier 4 Final/Stage V requirements, and provides monitoring and control of the exhaust after-treatment system, as requested by the standard.

Figure 3.5 AGC 150 Tier 4 Final screen



No.	Item	Symbol	Notes
1.	Engine emission system failure	:!3)	Shows an emission failure or malfunction.
2.	Diesel Particle Filter (DPF)	-∰3>	Shows that a regeneration is needed.

No.	Item	Symbol	Notes
3.	Application mode	-	-
4.	Diesel Particle Filter (DPF) Inhibit	慾	Shows that regeneration is inhibited.
5.	High temperature - Regeneration	£3	Shows a high temperature and regeneration is in process.
6.	Engine interface status	Ū	Shows an engine warning.
7.	Operation mode	-	-
8.	Engine emission system failure level	=13 HIGH =13 WARN.	Shows the severity of an emission failure or malfunction.
9.	Diesel Particle Filter (DPF) level		Shows the severity of a needed regeneration.
10.	Page number	-	Shows the number of the View menu screens.
11.	Engine interface status	Ē	Indicates a malfunction.
12.	Engine interface status	Ū	Shows an engine shutdown.
13.	LIMIT lamp	LIM	Only for MTU engines.
14.	Diesel Exhaust Fluid (DEF)	÷.	Shows the fluid tank level is low.
15.	Diesel Exhaust Fluid (DEF) % level	-	Shows the level (%) of the Diesel Exhaust Fluid.

NOTE Grey symbols show that communication for the item is available. Not all types of engines support all items shown.

3.1.12 Mode overview

AGC 150 has four different running modes and one block mode:

- AUTO: In AUTO mode, the controller will operate automatically, and the operator cannot initiate any sequences manually.
- **SEMI-AUTO**: In SEMI-AUTO mode, the operator has to initiate all sequences. This can be done via the push-button functions, Modbus commands or digital inputs. When started in SEMI-AUTO mode, the genset will run at nominal values.
- Test: The test sequence will start when the test mode is selected.
- **Manual**: When Manual mode is selected, the digital increase/decrease inputs can be used (if they have been configured) as well as the *Start* and *Stop* push-buttons. When starting in Manual mode, the genset will start without any subsequent regulation.

• **Block**: When the block mode is selected, the controller is not able to initiate any sequences, for example the start sequence. Block mode must be selected when maintenance work is carried out on the genset.



CAUTION

The genset will shut down if block mode is selected while the genset is running.

3.1.13 Hybrid shortcut menu

The AGC 150 has a shortcut menu for start/stop of the PV plant in SEMI-AUTO mode. To activate the Hybrid shortcut menu, press the *Shortcut* button.

DG BLOCKED FOR START Jump Mode Test Lamp test Hybrid

Select PV semi start/PV semi stop with the Up \bigcirc and Down \bigcirc buttons, and select the menu with the OK \bigcirc button.

DG BLOCKED FOR START

PV semi start PV semi stop

4. Alarm handling and log list

4.1 Alarm handling and log list

4.1.1 Alarm handling

If the function *Alarm Jump* is ON, the controller will automatically show the *Alarm list* on the display screen, when an alarm occurs. Activate the function under **Service View > Display > Alarm Jump**.

Table 4.1 Parameters for Alarm jump

Parameter	Text	Range	Default
9157	Alarm Jump	OFF ON	ON

Access the Alarm list from the display unit

- 1. From the *View menu*, press the button.
- 2. Scroll to the Alarm list with the \bigcirc and \bigcirc buttons.



- 3. Press the button to select the Alarm list.
- 4. Press the button to leave the Alarm list.

The *Alarm list* contains both acknowledged and unacknowledged alarms that are active (that is, the alarm condition is still present). Once an alarm is acknowledged and the condition has disappeared, the alarm will no longer be displayed in the *Alarm list*.

If no alarms are present, the Alarm list will read No alarms.

The display screen can show only one alarm at a time. The number of alarms is shown in the bottom line.



DG BLOCKED FOR START	
Alarm list:	
Emergency STOP	
Ch 3490 UNACK	
	1/2 alarm(s)

To see the other alarms, scroll with the \bigodot and \bigotimes buttons.

To acknowledge an alarm, select the alarm and press the $\textcircled{\text{OR}}$ button.

Access the Alarm list with the Utility Software

To open the Alarm list with the Utility Software, press the Alarms button.

CAUTION

If an alarm is blocking a genset in AUTO mode from starting, the genset will automatically start and close the breaker if the condition that triggered the alarm has disappeared and the alarm has been acknowledged.

4.1.2 Logs menu

The log shows three menus:

- 1. Event log: Shows up to 500 events, for example: Auto Mains Failure.
- 2. Alarm log: Shows up to 500 alarms, for example: *Emergency STOP*. Only the latest 100 alarms are shown on the display unit, while the remaining alarms is shown in the Utility Software.
- 3. Battery test log: Shows up to 52 tests, either Test OK or Test failed.

Access the Log menu from the display unit

- 1. From the *View menu*, press the ^{OK} button.
- 2. Scroll to *Logs* with the \bigcirc and \bigcirc buttons.



- 3. Press the button to select *Logs*.
- 4. Choose the preferred Log list.



5. Press the button to select the preferred *Log list*.

Press the 🕲 button to leave the *Log list*.

Access the Log list with the Utility Software

Open the Log menu with the Utility Software:

- 1. In the left menu, press the *Logs* button.
- 2. In the task bar, press the Read logs 22 button.
- 3. Choose the preferred *Log list*.