

iE 150

Non-sync generator

Operator's manual



Improve
Tomorrow



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1. About the Operator's manual

1.1 Symbols and notation

Symbols for general notes

NOTE This shows general information.



More information

This shows where you can find more information.



Example

This shows an example.



How to ...

This shows a link to a video for help and guidance.

Symbols for hazard statements



DANGER!



This shows dangerous situations.

If the guidelines are not followed, these situations will result in death, serious personal injury, and equipment damage or destruction.



WARNING



This shows potentially dangerous situations.

If the guidelines are not followed, these situations could result in death, serious personal injury, and equipment damage or destruction.



CAUTION



This shows low level risk situation.

If the guidelines are not followed, these situations could result in minor or moderate injury.

NOTICE



This shows an important notice

Make sure to read this information.

1.2 Intended users of the Operator's manual



CAUTION



Read this manual

Read this manual before you operate the system. Failure to do this may result in personal injury and damage to the equipment.

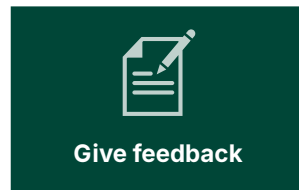
The Operator's manual is for the operator that completes daily operations with the controller. The manual includes information about the LEDs, buttons and screens, and general operator tasks, alarms, and logs.

1.3 Need more information?

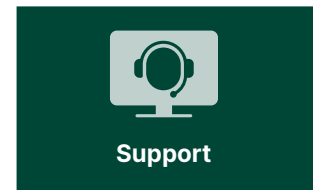
Use the links below to access the available resources.



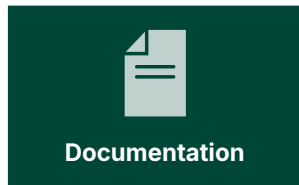
Official DEIF homepage.



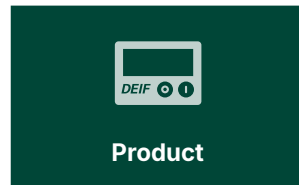
Help improve our documentation with your feedback.



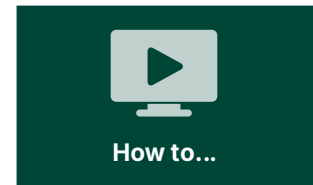
Self-help resources and how to contact DEIF for assistance.



iE 150 documentation.



iE 150 product page.



Learn how to use this product.

1.4 Software versions

The information in this document relates to software versions:

Software	Details	Version
iE 150	Application software	1.38
USW	Multi-line 2 Utility Software	3.66

1.5 Warnings and safety

Safety during operation

When you operate the equipment, you may have to work with dangerous currents and voltages.

**DANGER!**

**Hazardous live currents and voltages**
Do not touch any terminals, especially the AC measurement inputs, as this could lead to injury or death.

Remote-controlled starts

The gensets can be started by remote signals (for example, by sending a Modbus signal, or using PICUS). To avoid personal injury, the genset design, the layout, and maintenance procedures must take this into account.

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 and settings before using the controller.

Data security

To minimise the risk of data security breaches:

- 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.

1.6 Legal information

Warranty

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

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.

Trademarks

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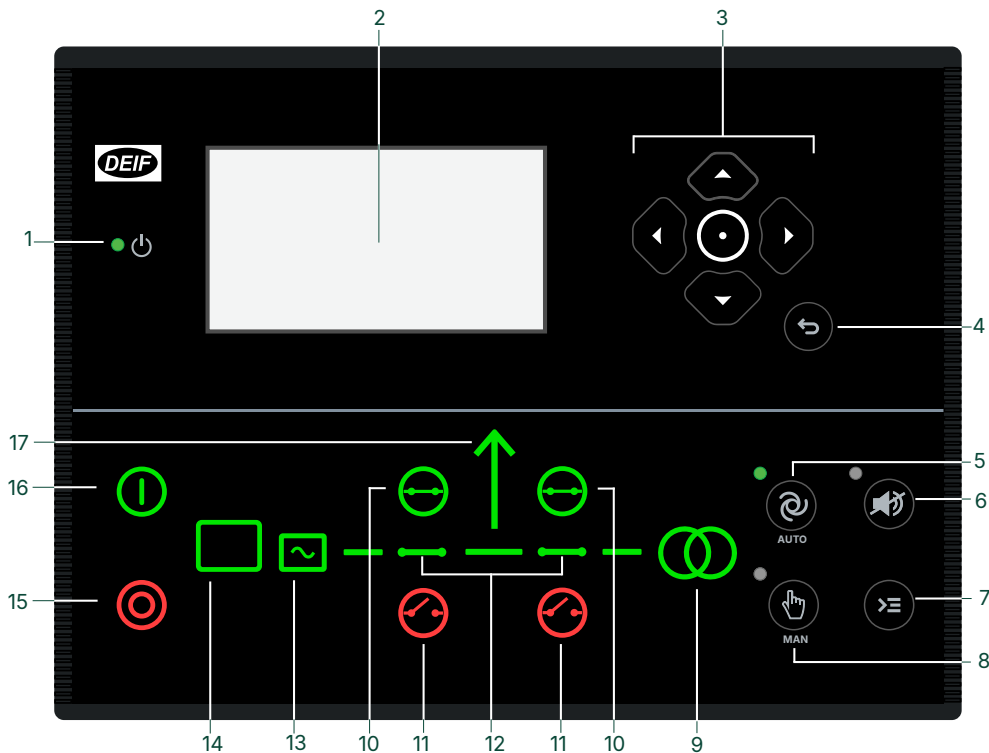
The English version of this document always contains the most recent and up-to-date information about the product. DEIF does not take responsibility for the accuracy of translations, and translations might not be updated at the same time as the English document. If there is a discrepancy, the English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

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2. Getting started

2.1 Display layout



No.	Name	Function
1	Power	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.
	Enter button	Confirms the selection.
4	Back button	Go to the previous page.
5	AUTO mode	The controller automatically starts and stops (and connects and disconnects) the genset. No operator actions are needed. The controller also automatically opens and closes the mains breaker (open transitions, since there is no synchronisation).
6	Silence horn	Turns off an alarm horn (if configured) and enters the Alarm menu.
7	Shortcut menu	Access the Jump menu, Mode selection, Test, Lamp test
8	Manual mode	The operator or an external signal can start, stop, connect or disconnect the genset, or open or close the mains breaker. The controller cannot automatically perform these actions.
9	Mains symbol	Green: Mains voltage and frequency are OK. The controller can close the breaker (open transitions, since there is no synchronisation). Red: Mains failure.

No.	Name	Function
10	 Close breaker	Push to close the breaker.
11	 Open breaker	Push to open the breaker.
12	Breaker symbols	Green: Breaker is closed. Red: Breaker failure.
13	Generator	Green: Generator voltage and frequency are OK. The controller can 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.
14	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.
15	 Stop	Stops the genset if manual is selected.
16	 Start	Starts the genset if manual is selected.
17	Load symbol	Green: The supply voltage and frequency are OK. Red: Supply voltage/frequency failure.

2.2 Controls

You can operate the controller with the following controls:

Control type	Description
6-way navigation	The four arrow buttons plus OK and Back allow full control, selection, and text entry throughout all menus.
Dedicated mode buttons	AUTO and MANUAL buttons give one-press mode switching from any screen.
Dedicated genset buttons	Start and Stop buttons for direct genset control in MANUAL and NoReg mode.
Dedicated breaker buttons	Close and Open buttons for direct breaker control.
Shortcut button	Quick-access menu for Running Modes, Jump to parameter, Test, Lamp test, Engine shortcuts, and General shortcuts.
Silence horn button	Silences the alarm horn output and opens the Alarm list directly.

2.3 Screen layout

The display screen shows six lines of text at a time. The View menu is shown when the controller powers on.

1	DG BLOCKED FOR START	
	U-Supply	25.9V
	G	0.00PF 0kW
2	G	0kVa 0kvar
	Energy Total	0kWh
3	Run absolute	0hrs
		1/20

No.	Notes
1	Shows the controller status text. See Controller status text .
2	Shows measurement values and operating data for the current display view. Use the <i>Up</i> and <i>Down</i> buttons to scroll between the 20 available views.
3	Shows the current page number (for example, 1/20) and any active shortcut indicators.

The View menu has 20 display views. Use the Up and Down arrow buttons to step between views. See Display views for the full list of pre-configured views.



More information

For more information, see [Display views](#).

2.4 Mimic function

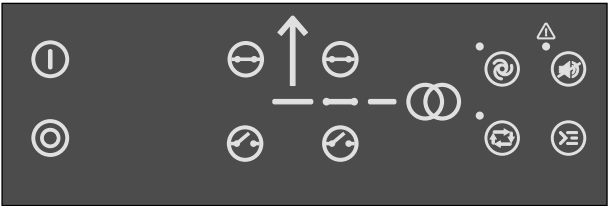
With the mimic function you can select how the control buttons and LEDs are shown on the controller's display.

Parameters > Basic settings > Controller settings > Display > LED mimic

Parameter no.	Item	Range
6082	LED mimic	Standard with genset Standard Guided with genset Guided

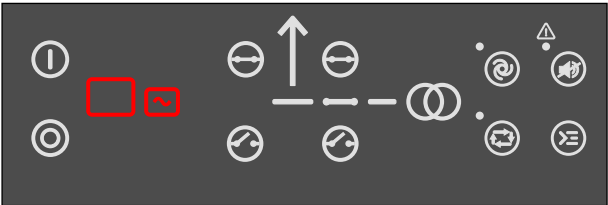
Standard

The control buttons and LEDs are shown.
If you stop the genset, the engine/generator symbols are not shown.



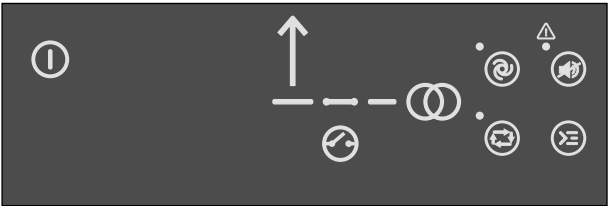
Standard with generator

The control buttons and LEDs are shown.
If you stop the genset, the engine/generator symbols are shown in red.



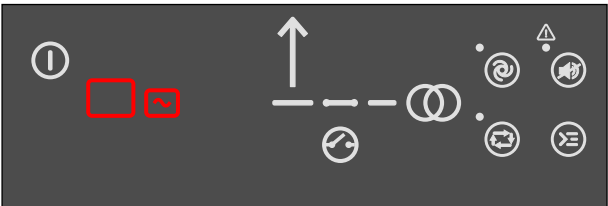
Guided

Active control buttons and LEDs are shown and inactive controls are not shown.
Example: The controller is in MANUAL mode, and the genset is not operating. Only the start button is shown, as this is the only possible action.



Guided with generator

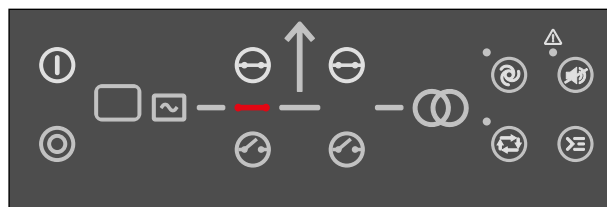
Active control buttons, LEDs and the engine/generator symbols are shown and inactive controls are not shown.
Example: The controller is in MANUAL mode. The genset is not operating. The only possible action is to start the genset, and so only the start button and the red engine/generator symbols are shown.



All Mimic settings

Red breaker symbol:

- Breaker position failure
- Breaker close failure



2.5 Display settings

Adjust the display at your installation.

Parameters > Basic settings > Controller settings > Display > Display control

Parameter	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/Celsius PSI/Fahrenheit	Bar/Celsius

NOTE * Low values indicate minimum brightness. High values indicate maximum brightness.

3. Control and operation

3.1 About controller operation

The iE 150 Non-sync generator controller protects and controls a single genset installation. The controller can automatically or manually start, stop, connect, and disconnect the genset, depending on the selected running mode.

3.2 Controller modes

The selected controller mode determines which actions are performed automatically by the controller and which actions require operator input.

To see the running modes and block mode, push the *Shortcut*  button and select *Running Modes*.

Mode	Description
AUTO	The controller automatically starts, stops, connects, and disconnects the genset. The operator cannot manually start a sequence.
MANUAL	The operator can start, stop, connect, and disconnect the genset. These actions must be initiated by using controller buttons, digital inputs, or Modbus commands. The controller does not automatically perform operating sequences.
NoReg	The operator can use the digital increase/decrease inputs (if they are configured) and the <i>Start</i> and <i>Stop</i> buttons. The controller starts the generator without subsequent regulation.
BLOCK	The controller cannot initiate operating sequences. Use BLOCK mode during maintenance or service work.
Test	The controller performs the configured test sequence. To select the test mode, push the <i>Shortcut</i>  button and select <i>Start Test</i> . Configure the test mode in <i>Parameters > Power set points > Test</i> .

NOTE The genset will shut down if you select the block mode while the engine is running.

3.3 Genset control

3.3.1 Start the genset

Mode	Procedure
AUTO (Automatic)	Genset starting is typically controlled automatically and the display control is not available.
MANUAL	To start the genset: 1. Push  once. 2. The controller runs the start sequence. • If everything is OK, the genset starts. • If the genset does not start, the display shows an info message. 3. If Idle run start is configured: • The controller runs the Idle run start sequence. ◦ If needed, to override the Idle run start push  again.
NoReg	To start the genset: 1. Push  once. 2. The genset starts without subsequent regulation.
BLOCK	The controller cannot start the genset in BLOCK mode. Select a different mode before starting.

NOTE * Idle run may not be permitted or approved by certain classification societies.

3.3.2 Stop the genset

Mode	Procedure
AUTO (Automatic)	The genset stop is controlled automatically and the display control is not available.
MANUAL	To stop the genset: 1. Push  once. 2. The controller activates the cooldown period. • If necessary, to override the cooldown period, push  again. ◦ Note: Stopping without cooldown time increases possible mechanical wear subject to the type of genset controlled. The genset may also have problems if it needs to restart immediately. The genset should only be stopped without cooldown time in emergencies. Contact the genset manufacturer for more information. 3. If Idle run stop is configured: • The controller runs the Idle run stop sequence. ◦ If needed, to override the Idle run stop push  again. 4. If the genset does not stop, the controller activates an alarm.
NoReg	To stop the generator: Push  once.
BLOCK	If BLOCK mode is activated while the engine is running, the genset shuts down immediately.

NOTE * Idle run may not be permitted or approved by certain classification societies.

3.4 Breaker control

3.4.1 Close the breaker

Mode	Procedure
AUTO (Automatic)	The breaker close is controlled automatically and the display control is not available.
MANUAL	The genset must be running to close the breaker. See Start the genset. To close the breaker: Push  once. • If there is no voltage on the busbar, the controller closes the breaker. • If there is voltage on the busbar, the breaker does not close.
NoReg	To close the breaker: Push  once. • If there is no voltage on the busbar, the controller closes the breaker. • If there is voltage on the busbar, the breaker does not close.

3.4.2 Open the breaker

Mode	Procedure
AUTO (Automatic)	The breaker open is controlled automatically and the display control is not available.
MANUAL	To open the breaker: Push  once. The controller opens the breaker.
NoReg	To open the breaker: Push  once.

3.5 Alarms

3.5.1 About alarms

The controller uses alarms to indicate abnormal operating conditions and to protect the genset and electrical installation.

When an alarm is activated, the controller can:

- Display an alarm message.
- Activate the alarm horn.
- Open a breaker.
- Stop the genset.
- Block genset start.

The action taken depends on the alarm configuration. Some alarms provide information only, while others automatically protect the system by stopping operation or disconnecting equipment.

3.5.2 Alarm states

An alarm can be active or inactive and acknowledged or unacknowledged. An alarm is removed from the active alarm list when the alarm condition is no longer present and the alarm has been acknowledged.

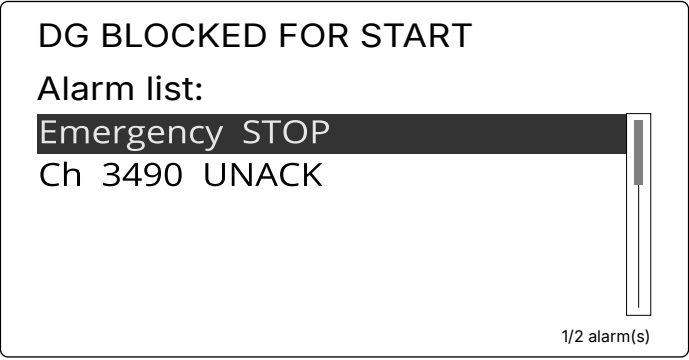
Alarm condition *	Acknowledge status	Notes
Active	Unacknowledged	The alarm condition is present and requires acknowledgement.
Active	Acknowledged	The alarm has been acknowledged, but the condition is still present.
Inactive	Unacknowledged	The alarm condition has cleared, but the alarm has not been acknowledged.
Inactive	Acknowledged	The alarm condition has cleared and the alarm has been acknowledged.

NOTE * An alarm condition usually occurs when the *Set point* is exceeded.

3.5.3 View active alarms

To view active alarms:

1. Push the  button.
2. Select **Alarm list**.
3. Push **OK**.
4. Use the navigation buttons to browse the alarms.



The display shows one alarm at a time. The total number of active alarms is shown on the screen.

3.5.3.1 Acknowledge an alarm

To acknowledge an alarm:

- 1. Open the **Alarm list**.
- 2. Select the alarm.
- 3. Push **OK**.

Acknowledging an alarm does not remove the alarm condition. The alarm remains active until the cause of the alarm is removed.

NOTE Acknowledging an alarm does not correct the fault that caused the alarm. Before returning the system to operation, identify and correct the cause of the alarm.

3.5.3.2 Silence the alarm horn

If an alarm horn is configured, it activates when an alarm occurs.

To silence the alarm horn: Push the  button.

Silencing the alarm horn does not acknowledge the alarm and does not remove the alarm condition. The alarm remains visible until it is acknowledged and the alarm condition is cleared.

3.5.3.3 Automatic restart after alarm acknowledgement

If an alarm prevents the generator from starting in AUTO mode, the generator can automatically start when:

- 1. The alarm condition is cleared.
- 2. The alarm is acknowledged.
- 3. A valid start condition still exists.

 **NOTE**



Automatic start

The generator can start automatically after an alarm has been acknowledged.

Make sure personnel are clear of the equipment before acknowledging alarms.

3.6 Logs

3.6.1 About logs

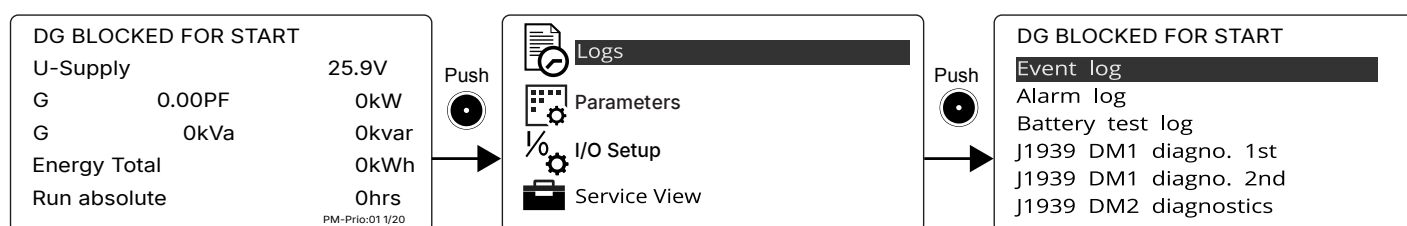
The log menus record a history of controller events, alarms, and test results. Use the logs to investigate the cause of an alarm or to review system behaviour over time.

Log	Capacity	Notes
Event log	Up to 500 events	A historical list of all system and operator events, for example alarm acknowledgements, breaker operations, and parameter changes.
Alarm log	Up to 500 alarms	Records all alarm activations and acknowledgements. Only the latest 100 alarms are shown on the display. All 500 are visible in the utility software.
Battery test log	Up to 52 tests	Records the result of each battery test as either Test OK or Test failed.

3.6.2 Access logs

From the display

1. Push .
2. Use the Up and Down buttons to go to *Logs*.
3. Push  to select *Logs*.
4. Use the Up and Down buttons to select the log you want to see and push .
5. Push  to exit the log.



With the utility software

- Select *Logs* from the menu on the left.
- In the task bar, select Read logs.
- Select the log list you want to view.

TimeStamp	Line Text	Channel	PPower	QPower	PF	Gen. U1	Gen. U2	Gen. U3	Gen. I1	Gen. I2	Gen. I3	Gen. F	Bus U1	Bus U2	Bus U3	Bus F	ddfidt	Vector	Multi input 20	Multi input 21	Multi input 22	Multi input 23	Tacho	Alarm value
2026-07-28 13:24:55.900	0 Emergency STOP	3490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1200	120	120	120	120	100
2026-07-28 13:24:56.435	1 GB Pos fail	2180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1200	120	120	120	120	1

3.7 Controller status texts

The controller status text is shown at the top of the display screen at all times. It tells you what the controller is currently doing. The text shown depends on the active running mode and system conditions.

Status text	Condition
ACCESS LOCK	The configurable input is activated, and the operator tries to activate one of the blocked keys.
AMF ACTIVE	The controller is in auto mode during a mains failure.
AMF AUTO	The mains controller is in auto mode and ready to respond.
AMF MAN	The controller is in manual mode and waiting for operator input.
AMF NoReg	The controller is in NoReg mode and waiting for operator input.
Aux. test ##.#V #####s	The battery test is activated.
BLOCK	Block mode is activated.
COOLING DOWN ###s	Cooling-down period is activated.
DERATED TO #####kW	Displays the ramp-down set point.
DG BLOCKED FOR START	The generator has stopped and has active alarm(s).
EXT. START ORDER	A planned AMF sequence is activated (without a mains failure).
EXT. STOP TIME ###s	The extended stop timer is running.
FULL TEST	Test mode is activated.
FULL TEST ####.#min	Test mode is activated and test timer counting down.
GB ON BLOCKED	The generator is running, the GB is open and there is an active Trip GB alarm.
GB TRIP EXTERNALLY	Some external equipment has tripped the breaker. An external trip is logged in the event log.
GENSET STOPPING	Cooling down has finished.
Hz/V OK IN ###s	The voltage and frequency on the genset is OK. When the timer runs out the generator breaker can be closed.
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. The genset will not stop until the timer has expired.
ISLAND ACTIVE	The controller is in auto mode and supplying power while not connected to a mains supply.
ISLAND AUTO	The mains controller is in auto mode and ready to respond.
ISLAND MAN	The controller is in manual mode and waiting for operator input.
ISLAND NoReg	The controller is in NoReg mode and waiting for operator input.
LOAD TAKE OVER MAN	The controller is in manual mode and waiting for operator input.
LOAD TAKE OVER NoReg	The controller is in NoReg mode and waiting for operator input.
LOAD TEST	Test mode is activated.
LOAD TEST ####.#min	Test mode is activated and test timer counting down.
LTO ACTIVE	The controller is in auto mode and taking over the load.
MAINS FAILURE	Mains failure and mains failure timer expired.
MAINS FAILURE IN ###s	The frequency or voltage measurement is outside the limits. The timer shown is the mains failure delay.
MAINS f OK DEL #####s	Mains frequency is OK after a mains failure. The timer shown is the mains OK delay.
MAINS U OK DEL #####s	The mains voltage is OK after a mains failure. The timer shown is the mains OK delay.
MB TRIP EXTERNALLY	Some external equipment (not the controller) has tripped the breaker. An external trip is logged in the event log.
READY AMF AUTO	The genset controller is in auto mode and the genset is stopped.
READY ISLAND AUTO	The genset controller is in auto mode and the genset is stopped.
READY LTO AUTO	The genset controller is in auto mode and the genset is stopped.

Status text	Condition
SELECT GENSET MODE	No genset mode has been selected.
SHUTDOWN OVERRIDE	The configurable input is active.
SIMPLE TEST	Test mode is activated.
SIMPLE TEST ###.##min	Test mode is activated and test timer counting down.
START DG(s) IN ###s	The start genset set point has been exceeded. The genset will start when the timer expires.
START PREPARE	The start prepare relay is activated.
START RELAY OFF	The start relay is deactivated during the start sequence.
START RELAY ON	The start relay is activated.
STOP DG(s) IN ###s	The stop genset set point has been exceeded. The genset will stop when the timer expires.

4. Configuration

4.1 Parameters

4.1.1 About Parameters menu

The controller provides access to operating parameters and settings through the Parameters menu.

Some parameters can be viewed only, while others can be modified if the required access level is available. Depending on the controller configuration, a password may be required to change parameter values.

4.1.2 Access the parameters menu

To access the Parameters menu:

1. From the View menu, push the  button.
2. Use the Up and Down buttons to navigate to **Parameters**.
3. Push  to select a category or parameter.
4. Use Up and Down buttons to browse the menu structure.

This is an example of how to change the nominal voltage settings.



4.1.3 Parameter number

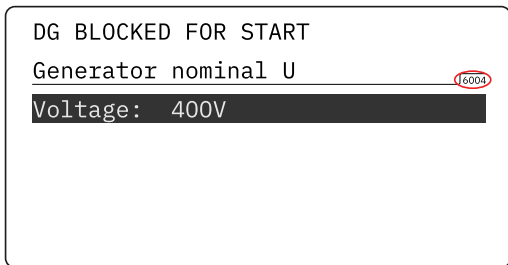
Each parameter has a unique parameter number.

The parameter number uniquely identifies a setting in the controller and makes it easier to locate the correct parameter when following instructions, troubleshooting, or receiving support. The same parameter number is used in the controller display and the utility software.

You can use the parameter number when:

- Looking up a specific setting.
- Following instructions from DEIF Support.
- Reviewing commissioning documentation.
- Comparing settings between controllers.
- Navigating directly to a parameter using the *Jump to parameter* function.

The parameter number is shown on the parameter screen.



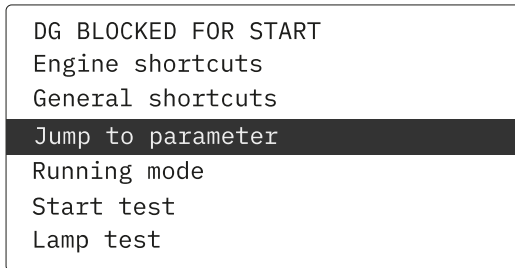
You can also find the menu number with the utility software:

1. Select *Parameters* from the toolbar on the left.
2. Set the view mode to list. The view mode can be found in the left corner of the screen.
3. The menu numbers are in the *Channel* column.

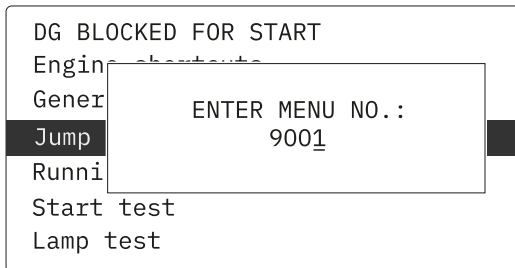
4.1.4 Jump to parameter

If you know the parameter number, you can use the jump to parameter function to go directly to the parameter.

1. From the view menu, push the  button to see the jump to parameter function:



2. Use the Up and Down buttons to go to *Jump to parameter* and push the  button.



3. Use the Up and Down buttons to change the numbers, and push the  button to save. Use the Left and Right buttons to move to the next digit.

4.2 Display views

Display views show operating information, measurements, counters, engine information, and application-specific data. The controller has 20 different display views and 17 of the views are pre-configured. You can configure the views with the utility software.

Navigate display views

To move between display views:

1. Go to the View menu.
2. Push the *Up* or *Down* navigation button.
3. Continue until the required display view is shown.

Line	View 1	View 2	View 3	View 4	View 5
1	G 0.00PF 0kW	Speed detection	Run absolute 0hrs	G 0 0 0V	Energy total 0kWh
2	G 0.00kVA 0kvar	Water temp. detection	Serv 1 0d 0h	G 0 0 0A	Date and Time
3	G L1 0.0Hz 0V	Oil pres. detection	Start attempts 0	G 0.00 0.00 0.00Hz	MB operations 0
4	G 0 0 0A	Fuel level detection	D+ Voltage 0V	G PF 0.00 0.00 0.00	GB operations 0
5	BB L1 0.0Hz 0V	U-Supply 0.0V	-	G 0 0 0kW	-

Line	View 6	View 7	View 8	View 9	View 10
1	-	After treatment	Engine dashboard	EIC T. Coolant	L-L and P total
2	Synchroniser II	EIC Tier 4 Icons	EIC Engine Icons	EIC T. Turbo Oil	Current and Q total
3	-	-	-	EIC T. Exh. Right	Pf and kW %
4	-	-	-	EIC T. Oil	GOV and AVR output
5	-	EIC Regeneration info	-	EIC T. Fuel	Ramp down/up setpoint

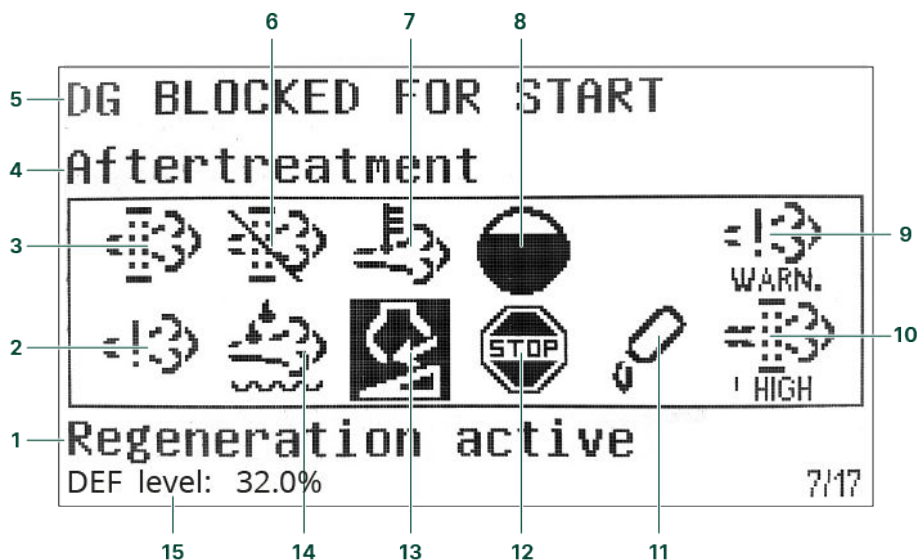
Line	View 11	View 12	View 13	View 14	View 15
1	P GTot and P %	G Angle L1L2 0deg	P 0kW 0%	P available 0kW	BB-Gen Angle 0deg
2	Q GTot and Q %	G Angle L2L3 0deg	Q 0kvar 0%	P available 0%	G Angle L1L2 0deg
3	BB freq and G freq	G Angle L3L1 0deg	S 0kVA 0%	P consumed 0kW	BB Angle L1L2 0deg
4	BB L-N and G L-N	AVR reg. type	-	P consumed 0%	BB Angle L2L3 0deg
5	kW % and kvar %	GOV reg. type	-	-	-

Line	View 16	View 17	View 18	View 19	View 20
1	G U-L1L2	G f-L1 0.00Hz	-	-	-
2	G U-L2L3 0V	G f-L2 0.00Hz	-	-	-
3	G U-L3L1 0V	G f-L3 0.00Hz	-	-	-
4	G U-Max 0V	-	-	-	-
5	G U-Min	-	-	-	-

Exhaust after-treatment (Tier 4/Stage V)

The controller meets the Tier 4 (Final)/Stage V requirements. The user can use the display to monitor (and control) both the engine, and the exhaust after-treatment system.

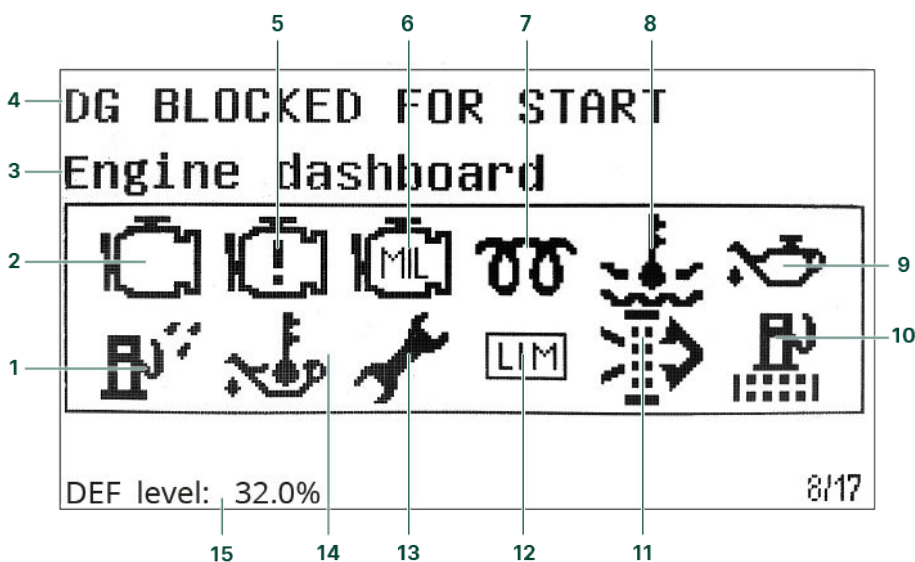
After-treatment page



No.	Referent	Symbol	Description
1	After-treatment status	-	
2	Engine emission system failure		Emission failure or malfunction.
3	Diesel Particle Filter (DPF)		Regeneration is needed.
4	Page name	-	
5	Controller status	-	
6	Diesel Particle Filter (DPF) Inhibit		Regeneration is inhibited.
7	High temperature - Regeneration		There is a high temperature and regeneration is in process.
8	HC burn-off		Hydrocarbon accumulation that requires burn-off.
9	Engine emission system failure level	 LOW HIGH WARN.	Emission failure or malfunction, with the severity.

No.	Referent	Symbol	Description
10	Diesel Particle Filter (DPF) level		Regeneration needed, with the severity.
11	DEF level warning		Low DEF level.
12	DEF shutdown		DEF problem stops normal operation.
13	DEF level inducement		Mid-level inducement. Severe inducement.
14	Diesel Exhaust Fluid (DEF)		DEF quality is low.
15	Diesel Exhaust Fluid (DEF) % level		Shows the level (%) of the Diesel Exhaust Fluid.

Engine dashboard



No.	Referent	Symbol	Description
1	Water in fuel		There is water in the fuel.
2	Engine interface status		An engine warning.
3	Page name	-	-
4	Controller status	-	-
5	Engine interface status		An engine shutdown.
6	Engine interface status		An engine malfunction.
7	Cold start		The engine is cold.
8	High engine coolant temperature		The engine coolant temperature is high.
9	Low engine oil pressure		The engine oil pressure is low.
10	Fuel filter clogging		The fuel filter is blocked.
11	Air filter clogging		The air filter is blocked.
12	LIMIT lamp		Only for MTU engines.
13	Oil change		The engine needs an oil change.
14	High engine oil temperature		The engine oil temperature is high.
15	Diesel Exhaust Fluid (DEF) % level		Shows the level (%) of the Diesel Exhaust Fluid.

NOTE Grey symbols show that communication is available for the referent. An engine type might not support all of the referents.

4.3 Service View

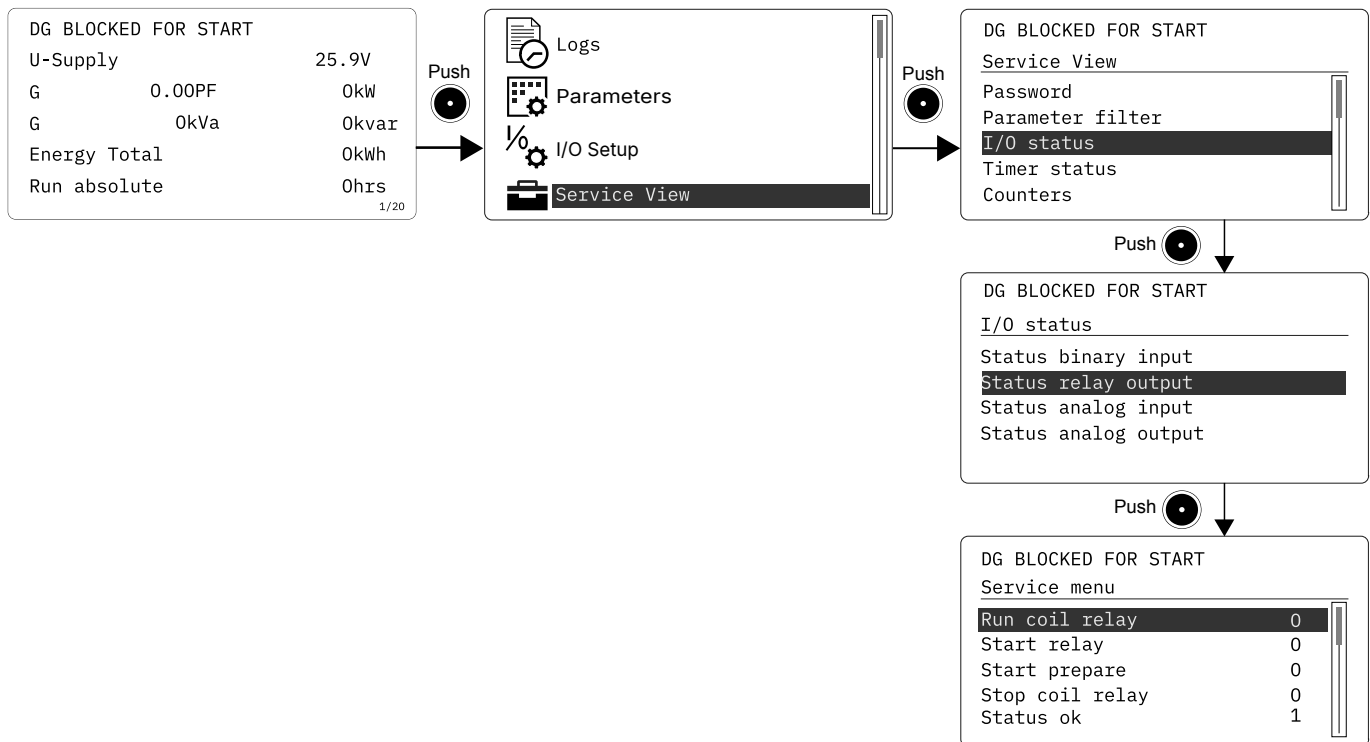
Use the service view to access controller information used for monitoring, maintenance, and troubleshooting, and change the passwords.

To access Service View:

1. From the view menu, push  button
2. Select *Service View*
3. Push  button.

4. Browse the available information using the navigation buttons.

Example



4.4 I/O Setup

The I/O Setup menu provides access to the controller inputs and outputs.

Depending on the access level and controller configuration, you can use I/O Setup to:

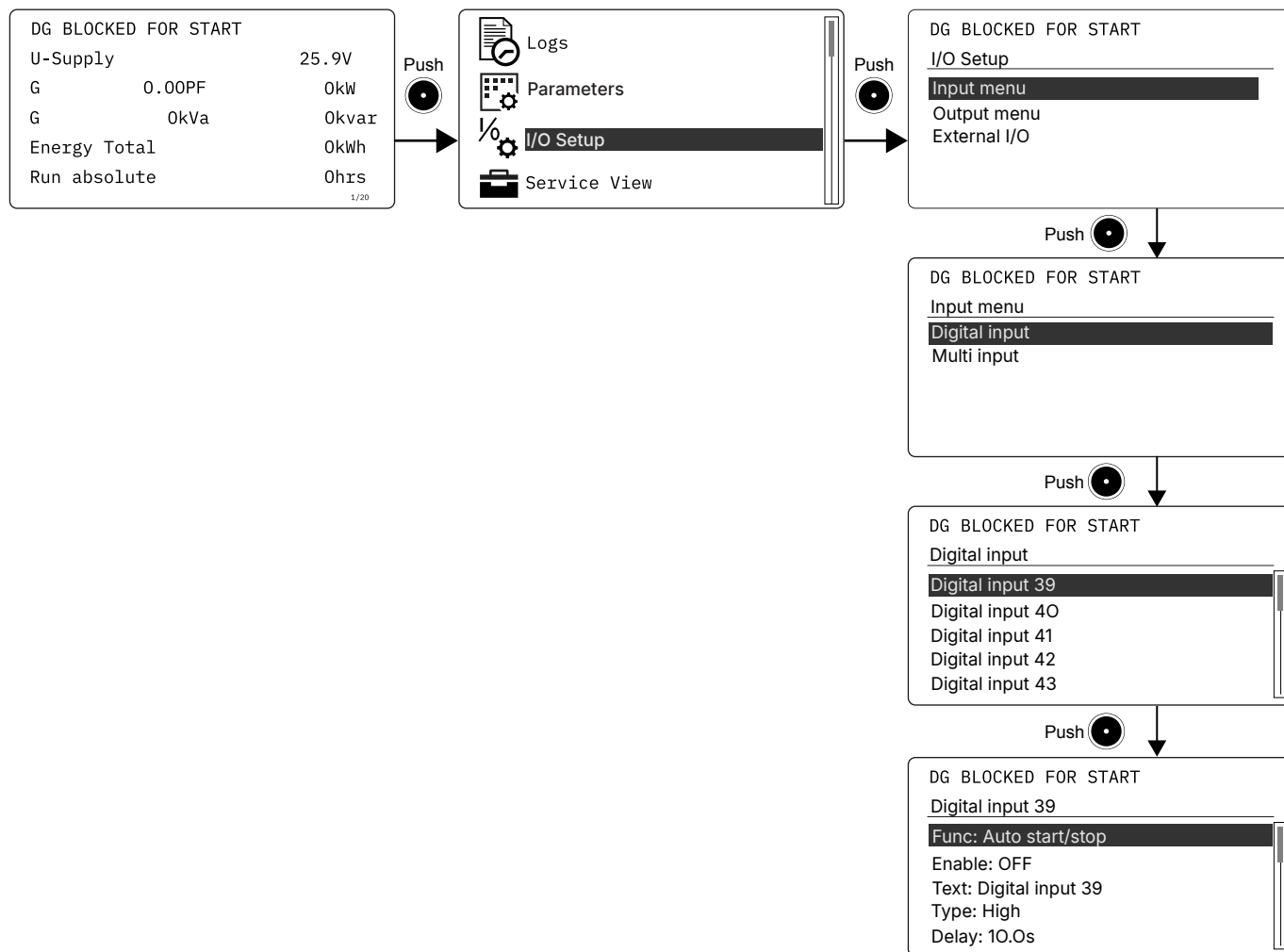
- View input and output status.
- Verify signal values.
- Check configured input and output functions.
- Modify I/O settings and parameters.

Typical signal types include digital inputs, digital outputs, multi-inputs, and external I/O.

To access I/O Setup:

1. Push  button.
2. Select *I/O Setup*.
3. Push  button.
4. Select the required I/O type.
5. Browse the available channels and settings using navigation buttons.

Example



4.5 General shortcuts

You can see your configured shortcuts in the General shortcuts menu. If you have not configured a shortcut, then the menu is empty. Use the shortcuts when the controller is in MANUAL and NoReg mode.

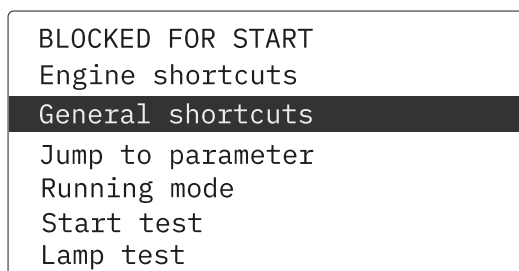


More information

See **General shortcuts** in the **Designer's handbook** for how to configure the general shortcuts.

Example

1. From the view menu, push the *Shortcut*  button.



2. Select *General shortcuts* using the navigation buttons
3. Push the  button.

BLOCKED FOR START	
SC Switch 1	off
SC Pulse 1	

4. Use the navigation buttons to select a shortcut.

4.6 Engine shortcuts

4.6.1 ECU Diagnose

Use ECU Diagnose to read ECU information without starting the engine.

Use ECU Diagnose to read ECU data without starting the engine.

To access ECU Diagnose:

1. Push the *Shortcut*  button.
2. Select *Engine shortcuts*.
3. Select *ECU Diagnose*.

When ECU Diagnose is selected, the controller activates the *diagnostics timer*. When the timer expires, the controller starts reading ECU data. The diagnostics timer can be configured using parameter 6701.

NOTE ECU data is not available until the diagnostics timer expires and communication with the ECU has been established.

4.6.2 Force regeneration

For supported engines, regeneration can be started or inhibited manually.

To access regeneration controls:

1. Push  button.
2. Select *Engine shortcuts*.
3. Select *Force Regeneration*.
4. Select *Inhibit* or *Force*.



More information

For more information about regeneration and exhaust after-treatment, see [Exhaust after-treatment](#).

4.6.3 Engine data

The Engine data page displays information received from the engine ECU.

Available data groups may include:

- Engine Info
- Speed (RPM)
- Engine Load
- Lube Oil
- Air Cooler

- Cooling
- Turbo Charger
- Air
- Exhaust Gas
- DPF Treatment
- Fuel
- Faults
- CVT
- Cylinders

Use the page to monitor engine operating conditions, review engine and exhaust after-treatment information, and support troubleshooting activities. Not all data groups are available on all engines.

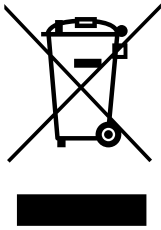
To access Engine data:

1. Push  button.
2. Select *Engine shortcuts*.
3. Select *Engine Data*.

5. End-of-life

5.1 Disposal of waste electrical and electronic equipment

WEEE symbol



All products that are marked with the crossed-out wheeled bin (the WEEE symbol) are electrical and electronic equipment (EEE). EEE contains materials, components and substances that can be dangerous and harmful to people's health and to the environment. Waste electrical and electronic equipment (WEEE) must therefore be disposed of properly. In the EU, the disposal of WEEE is governed by the WEEE directive issued by the European Parliament. DEIF complies with this directive.

You must not dispose of WEEE as unsorted municipal waste. Instead, WEEE must be collected separately, to minimise the load on the environment, and to improve the opportunities to recycle, reuse and/or recover the WEEE. In the EU, local governments are responsible for facilities to receive WEEE. If you need more information on how to dispose of DEIF WEEE, please contact DEIF.