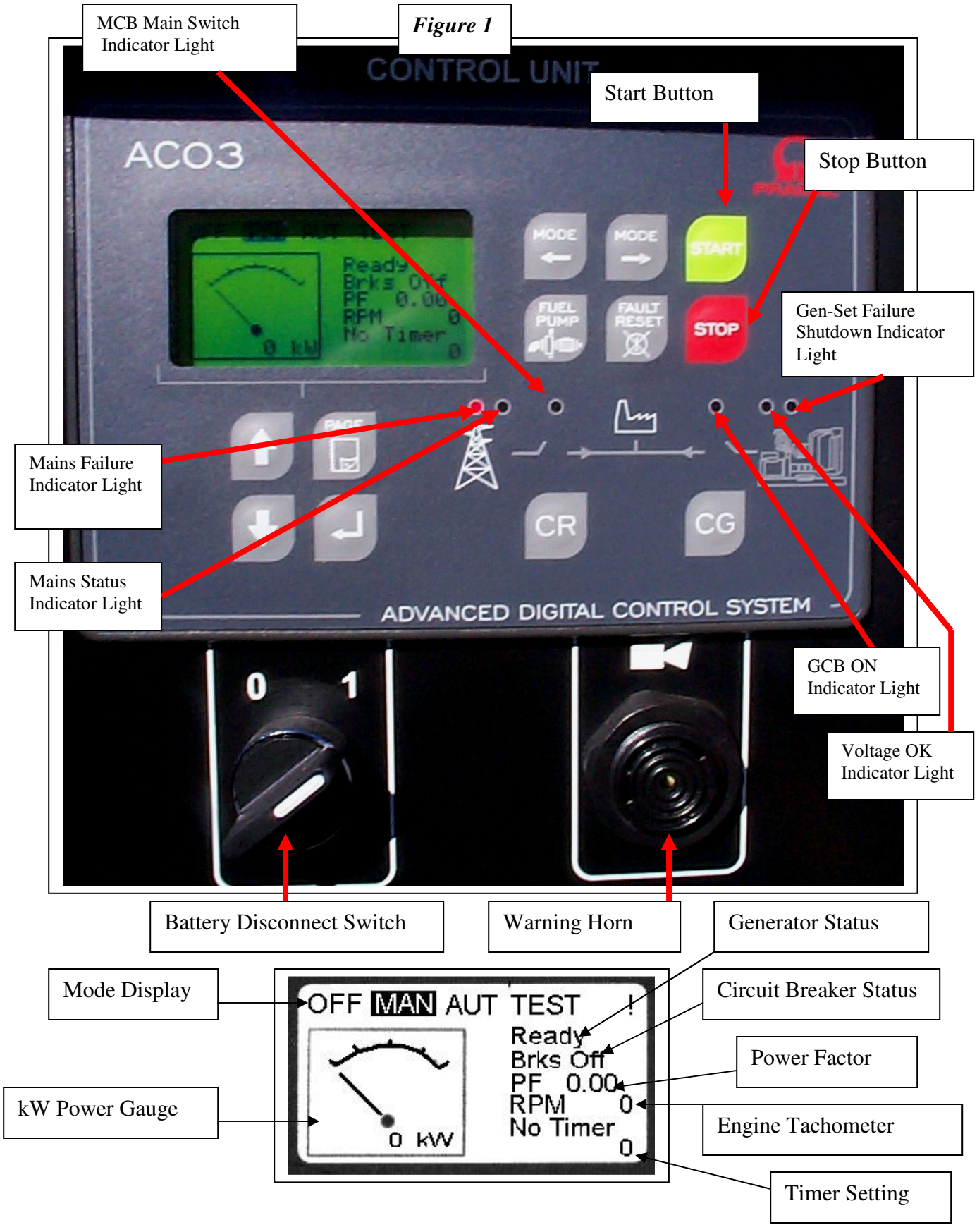
GENERATOR OPERATING INSTRUCTIONS

Figure 1



GENERATOR OPERATING INSTRUCTIONS

GENERATOR STARTING

1. Turn Battery Disconnect switch clockwise to the ON position (OFF =0 & ON=1)
2. The display must show the unit is in the MAN – Manual Mode (Fig. 2). Use the MODE button to change if needed.
3. When the displayed status shows Ready (Fig. 2), push the Start Button. (Fig. 3) There will be a few seconds delay to allow the Air Heater to heat up and fuel pump to prime before the starter cranks.
4. Once the generator is running the display will show the countdown clock for the warm-up period. (Fig. 3A)
5. When the warm-up period is over, the Main Power Switch & Outlet Circuit breakers can be switched on. (Fig. 3B)

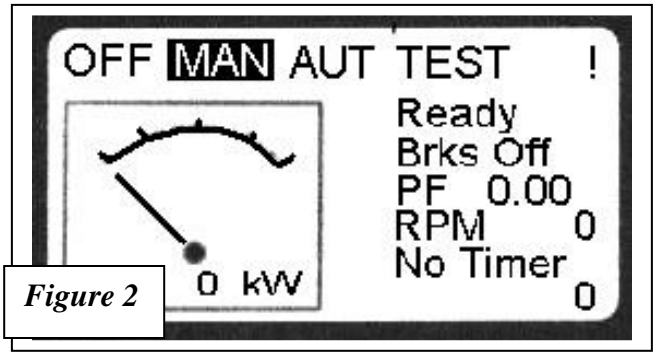
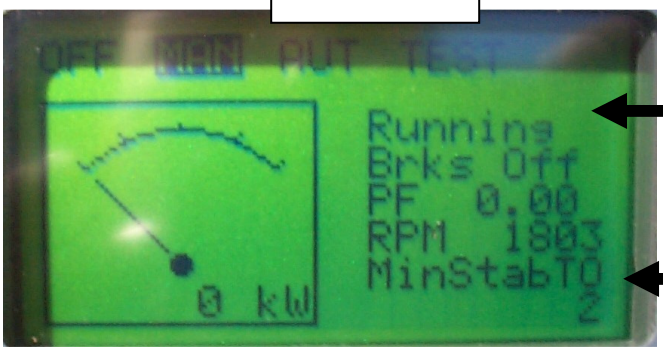


Figure 2

Figure 3

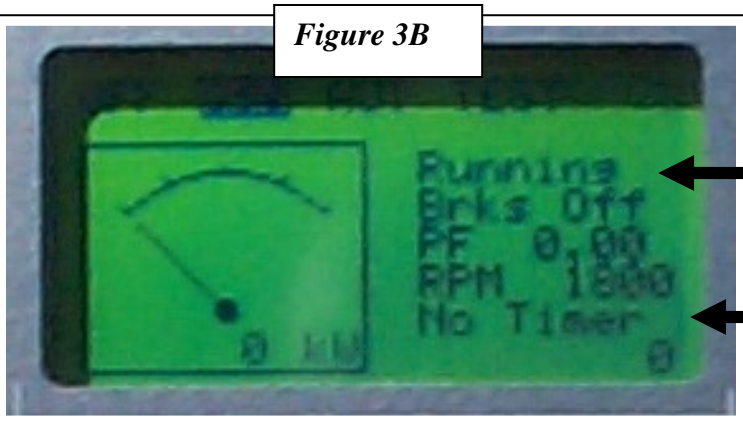
Figure 3A



Generator Status: Running

Warm-Up Period Countdown Clock

Figure 3B



Generator Status: Running

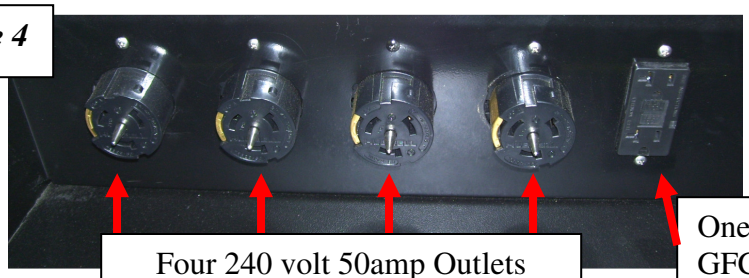
Warm-Up Period Completed

GENERATOR OPERATING INSTRUCTIONS

ELECTRICAL CONNECTIONS

1. Connect the desired power cords to the outlets on the front panel (Fig. 4). Connect desired electrical devices to the power cords. Make sure the power load connected to each circuit is less than the rated capacity of each circuit. The total power load of all circuits cannot exceed the emergency power rating of the generator (40kW or 40,000 watts). For best fuel economy the total power load of all circuits should be below the prime power rating of the generator (36kW or 36,000 watts).

Figure 4



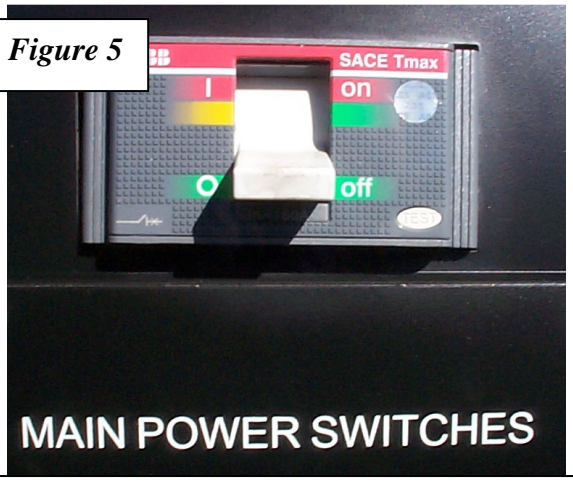
Four 240 volt 50amp Outlets

One Duplex 120 volt 20amp GFCI Protected Outlet

It is recommended to keep the total load on each circuit below 90% of the circuit breaker rating to prevent nuisance tripping of the circuit breaker.
Each of the four 240 volt outlets is rated at 50amps.
The 120 volt outlet is rated at 20amps.

2. Turn the main power switch to the ON position (FIG. 5). On the display, the Main Switch Indicator light will turn ON when Main Power Switch is ON.
3. Turn the individual circuit breakers to the ON position (FIG. 6).
4. Once the generator power has been turned on, reset the GFCI on each accessory power cord if so equipped to assure that power is supplied to each device.
5. Check the operating status of all equipment.

Figure 5

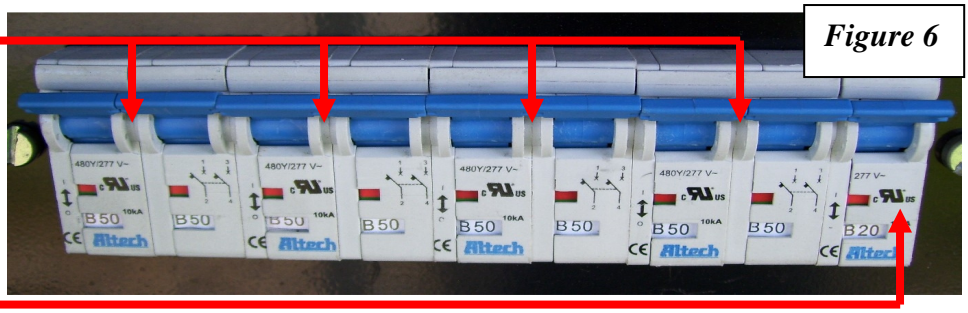


Push lever up to turn main power switch ON

Figure 6

Five 240 volt 50amp Circuit Breakers Double Lever

One 120 volt 20amp Circuit Breaker Single Lever



GENERATOR OPERATING INSTRUCTIONS

GENERATOR SHUTDOWN

1. Turn off the main power switch (Fig. 7)
2. Push the Stop Button. (Fig. 8) This initiates the Stop sequence including cooling run time. (Fig. 9)
   (Press and hold STOP button for more than 2 seconds to by-pass the cooling mode for immediate shutdown.)
3. Turn Battery Disconnect switch counter-clockwise to the OFF position. (Fig. 10)
   (OFF =0 & ON=1)
4. Disconnect the power cords from the front panel. Turn the individual circuit breakers to the OFF position.
5. Close & lock Control Panel door.

Figure 7

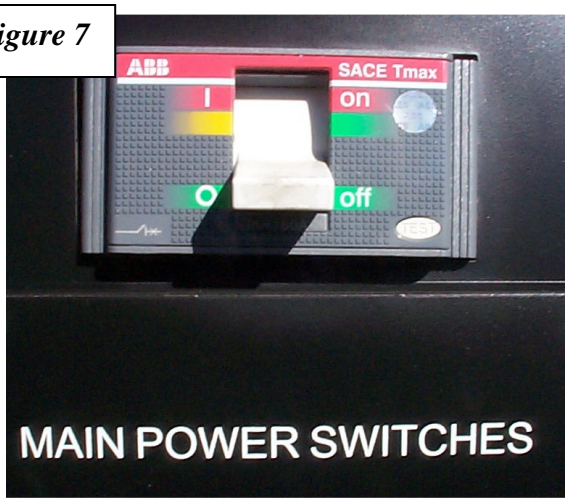


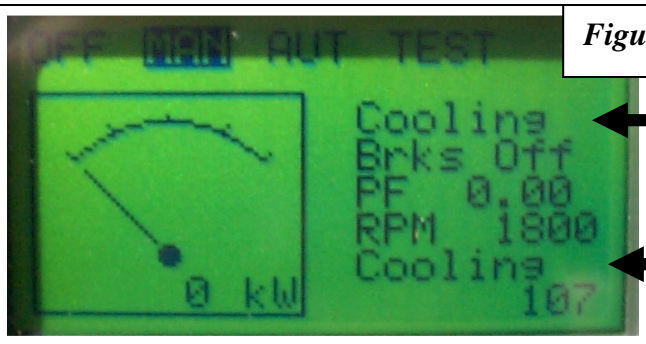
Figure 8

Push the STOP button to initiate the stop sequence with cool down run time. Hold STOP button for immediate shutdown without cooling run time.

Figure 10

Turn Battery Disconnect Switch to the OFF (()) Position.

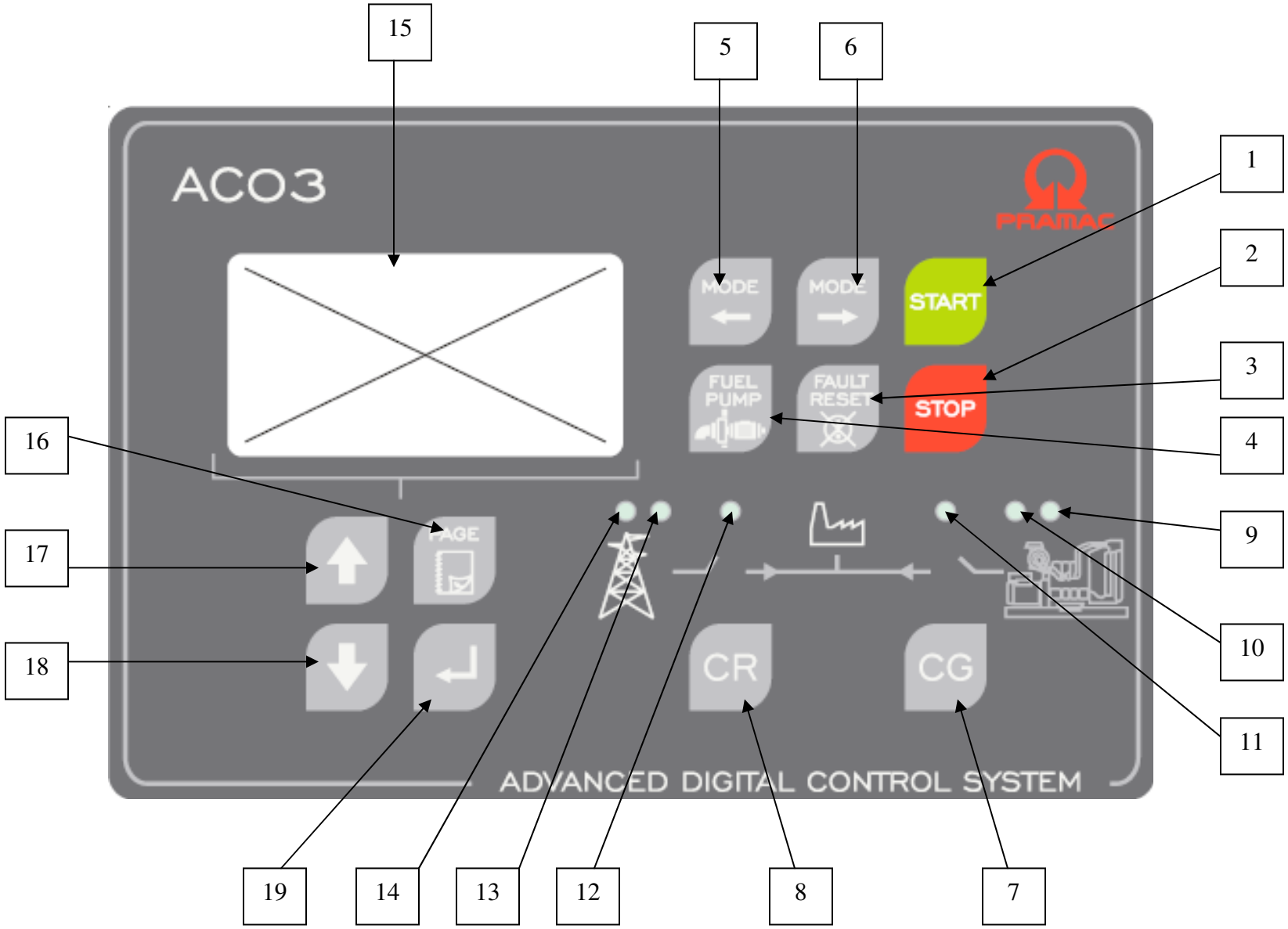
Figure 9



Generator Status: Cooling

Cooling Period Countdown Clock

GENERATOR OPERATING INSTRUCTIONS



GENERATOR OPERATING INSTRUCTIONS

POSITION	BUTTON	DESCRIPTION
1		START button. Works in MAN mode only. Press this button to initiate the start sequence of the engine.
2		STOP button. Works in MAN mode only. Press this button to initiate the stop sequence of the gen-set. Repeated pressing or holding the button for more than 2s will cancel current phase of stop sequence (like cooling) and next phase will continue.
3		FAULT RESET button. Use this button to acknowledge alarms and deactivate the horn output. Inactive alarms will disappear immediately and status of active alarms will be changed to "confirmed" so they will disappear as soon as their reasons dismiss.
4		FUEL PUMP button. While this button is pressed FUEL PUMP is activated until Fuel Pump OFF level is reached.
5		MODE LEFT button. Use this button to change the mode. The button works only if the main screen with the indicator of currently selected mode is displayed. NOTE: This button will not work if the controller mode is forced by one of binary inputs Remote OFF, Remote MAN, Remote AUT, Remote TEST.

POSITION	BUTTON	DESCRIPTION
7		GCB button. Works in MAN and TEST modes only. Press this button to open or close the GCB manually. Note that certain conditions must be valid otherwise GCB closing is blocked.

8		**MCB button. Works in MAN and TEST modes only. Press this button to open or close the MCB manually.** **CAUTION!** **You can disconnect the load from the mains supply with this button! Be sure you know well what you are about to do!**
16		**PAGE button. Use this button to switch over display pages. See Display Screens and Pages Structure chapter below this table for more details.**
17		**UP button. Use this button to move up or increase a value.**
18		**DOWN button. Use this button to move down or decrease a value.**
19		**ENTER button. Use this button to finish editing a set-point or moving right in the history page.**

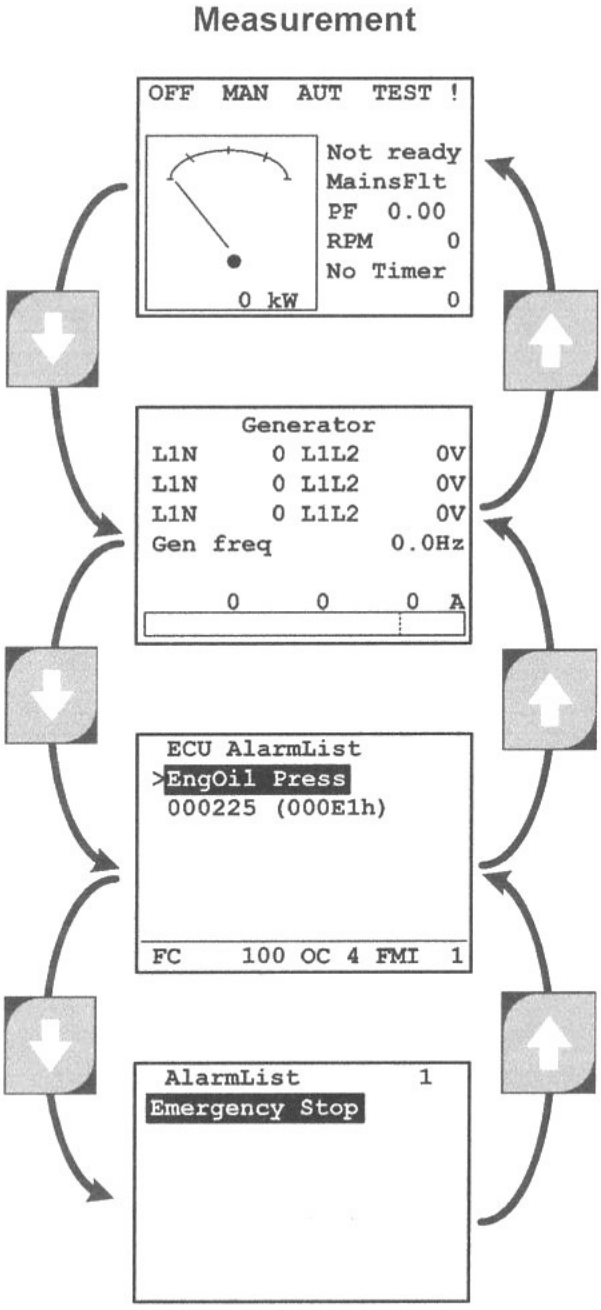
GENERATOR OPERATING INSTRUCTIONS

POSITION	INDICATOR DESCRIPTION
9	Gen-set failure. Red LED starts flashing when gen-set failure occurs. After FAULT RESET button is pressed, goes to steady light (if an alarm is still active) or is off (if no alarm is active).
10	Gen-set voltage OK. Green LED is on if the generator voltage is present and within limits.
11	GCB ON. Green LED is on, if GCB is closed. It is driven by GCB CLOSE/OPEN output (AMF 8/9) or by GCB feedback signal (AMF 20/25).
12	MCB ON. Green LED is on, if MCB is closed. It is driven by MCB CLOSE/OPEN output (AMF 8/9) or by MCB feedback signal (AMF 20/25).
13	Mains voltage OK. Green LED is on, if mains is present and within limits.
14	Mains failure. Red LED starts blinking when the mains failure is detected and after the gen-set has started it lights permanently until the mains failure disappears.
15	Graphic B/W display, 128x64 pixels

GENERATOR OPERATING INSTRUCTIONS

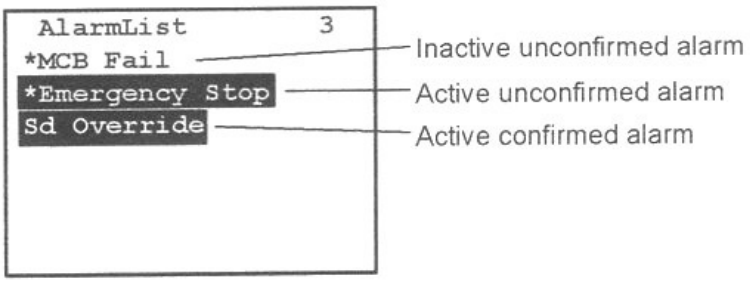
Display Screens and Pages Structure

The displayed information is structured into "pages" and "screens".
The page *Measurement* consists of screens which display measured values like voltages, current, oil pressure etc., computed values like i.e. gen-set power, statistic data and the alarm list on the last screen.

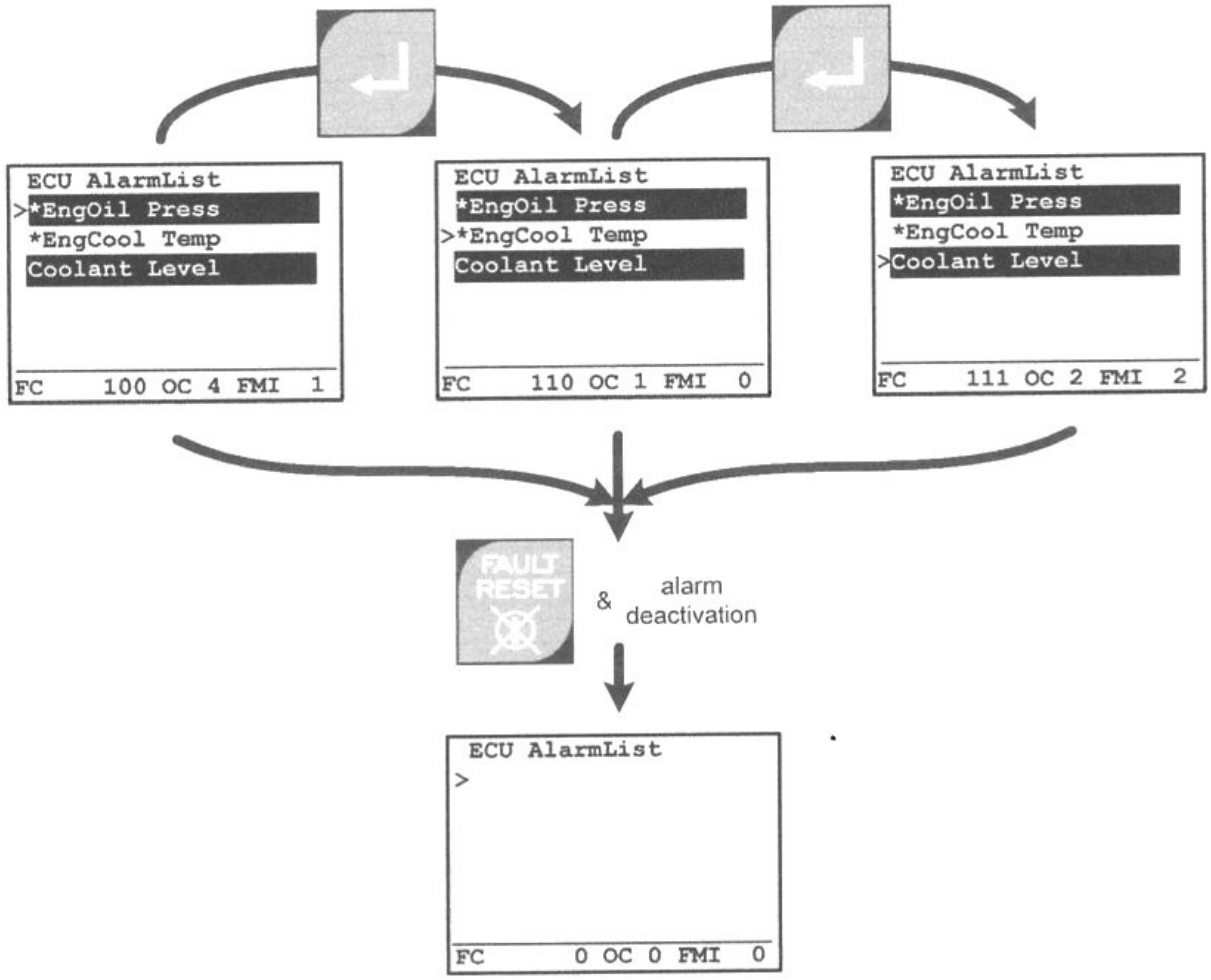


GENERATOR OPERATING INSTRUCTIONS

Alarms

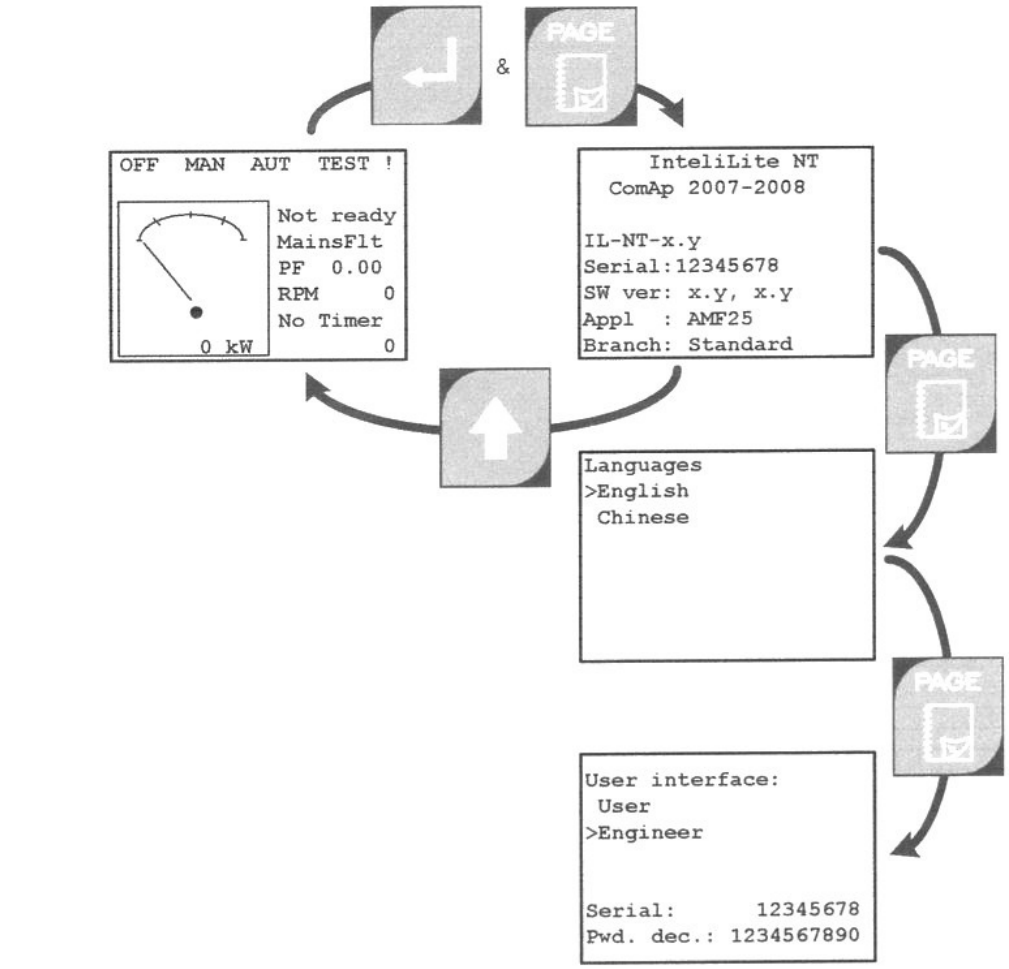


Browsing ECU Alarms



GENERATOR OPERATING INSTRUCTIONS

Controller Information Screen



Display Contrast Adjustment