ADJUSTABLE PARAMETERS

Front Panel Configuration Editor (Factory default settings are shown in bold italicised text)

Section	Parameter as shown on	Values	
Input settings	Oil Pressure Pre Alarm	0bar - 4bar (**1.17bar**)	
	Oil Pressure Shutdown	0bar - 4bar (**1.03bar**)	
	High Coolant Temp Pre Alarm	80°C - 140°C (**115°C**)	
	High Coolant Temp Shutdown	80°C - 140°C (**120°C**)	
	Low Coolant Temp Alarm	67°C - 137°C (***disabled***)	
	Low Fuel Level Alarm	0% - 100% (***disabled***)	
Timers	Gen Transient Delay	0 -10s (***0s***)	
	Start Delay	0 - 60m (***5s***)	
	Pre Heat Time	0 - 60m (***0s***)	
	Crank Time	0 - 60s (***10s***)	
	Crank Rest Time	0 - 60s (***10s***)	
	Safety On Delay	0 - 30s (***10s***)	
	Overspeed Overshoot Delay	0 - 10s (***0s***)	
	Warm Up Time	0 - 60m (***0s***)	
	Return Delay	0 - 60m (***30s***)	
	Cooling Run Time	0 - 60m (***1m***)	
	Fail To Stop Delay	0 - 30s (***30s***)	
	Low Battery Delay	0-10m (***1m***)	
	High Battery Delay	0 -10m (***1m***)	
	Gen Reverse Power Delay	0- 30s (***2s***)	
Generator	Generator Under Voltage Shutdown	50V-360V ph-N (**184V**)	
	Generator Under Voltage Pre Alarm	50V-360V ph-N (**196V**)	
	Generator Nominal Voltage	52V-330V(***230V***)	
	Generator Over Voltage Pre Alarm	50V-360V ph-N (**265V**)	
	Generator Over Voltage Shutdown	50V-360V ph-N (**277V**)	
	Generator Under Frequency Shutdown	0Hz - 75Hz (***40Hz***)	
	Generator Under Frequency Pre Alarm	0Hz - 75Hz (***42Hz***)	
	Generator Nominal Frequency	0Hz - 74Hz (***50Hz***)	
	Generator Over Frequency Pre Alarm	0Hz - 75Hz (***55Hz***)	
	Generator Over Frequency Shutdown	0Hz - 75Hz (***57Hz***)	
	Generator Over Current Trip	100% - 200% full load rating (***100%***)	
	Generator Short Circuit Trip	50% - 300% full load rating (***200%***)	
	Generator Reverse Power Trip	0% - 200% full load rating (***35kW***)	
	Earth Fault Trip	1% - 100% full load rating (***10%***)	
Engine	Engine Underspeed Shutdown	0RPM - 6000RPM (***disabled***)	
	Engine Underspeed Pre Alarm	0RPM - 6000RPM (***disabled***)	
	Engine Overspeed Pre Alarm	0RPM - 6000RPM (***disabled***)	
	Engine Overspeed Shutdown	0RPM - 6000RPM (***disabled***)	
	Overspeed Overshoot	0% - 10% (***0%***)	
	Plant Battery Under Volt Alarm	0V - 40V (***10V***)	
	Plant Battery Over Volt Alarm	0V - 40V (***30V***)	
	Charge Alternator Failure Alarm	0V - 40V (***6V***)	
Display	Language	***ENGLISH***, OTHERS	
AC System	Alternative Frequency	Enable, ***Disable***	
	Alternative Voltage	Enable, ***Disable***	
	AC System	***3 Phase 4 wire*** 1 Phase 2 wire 3 phase 3 wire 2 phase 3 wire L1 & L2 3 phase 4 wire EDISON DELTA 2 phase 3 wire L1 & L3	
	Generator Full Load Current	0A - 8000A (***500A***)	
	Droop	Enable, ***Disable***	
	Droop %	***0%*** – 5%	Electronic engines only when Droop is enabled
Display	Contrast	☐ | ■	
Clock	Date and Time	dd mmm yyyy hh:mm:ss	
Misc.	Run Priority	1-16 (***1***)	
	Auto Scroll Time	0 - 10s (***2.0s***)	
CT	Generator CT Primary Rating	0A - 8000A (***600A***)	Power Cycle After Exit
	Generator CT Secondary Rating	1A, ***5A***	Power Cycle After Exit
Power	Full kW Rating	0MW - 20MW (***345kW***)	Power Cycle After Exit
	Full kVAr Rating	0MVA - 20MVAr (***258kVAr***)	Power Cycle After Exit
	Load Ramp Rate	0% - 100% (***3.0%***)	
	Load Level For More Sets	0% - 100% (***80%***)	
	Load Level For Less Sets	0% - 100% (***70%***)	
	Load Parallel Power	0% - 100% (***172kW***)	
	Load Power Factor	0% - 100% (***1.0pF 0kVAr 0%***)	
	Ramp with P123 present	Enable, ***Disable***	
	Reactive Load Ctl Mode	None, ***VAr Share***, VAr Fixed Export	

ACCESSING THE FRONT PANEL CONFIGURATION EDITOR

- Ensure the engine is at rest and the module is in STOP mode by pressing the Stop/Reset ⊙ button.

  `Enter Pin Number`
  `****`

- Press the Stop/Reset ⊙ and Info ⓘ buttons simultaneously.
- If a module security PIN has been set, the PIN number request is then shown (The first * is flashing) :
- Press **+** or **–** buttons to adjust it to the correct value. Press ✓ when the first digit is correctly entered. Repeat this process for the other digits of the PIN number.
- When ✓ is pressed after editing the final PIN digit, the PIN is checked for validity. If the number is not correct, the editor is automatically exited. To retry you must re-enter the editor as described above.
- If the PIN has been successfully entered (or the module PIN has not been enabled), CONFIGURATION is displayed :

  `CONFIGURATION`

EDITING A PARAMETER

- Enter the editor as described above.
- Press the **+** and **–** buttons to cycle to the parameter you wish to change.
- Press the ✓ button to enter edit mode. When in edit mode (indicated by the flashing parameter)
- Pressing the **+** and **–** buttons will adjust the parameter to the desired value.

  `CONFIGURATION`
  `Oil pressure pre-alarm`
  `2bar 30PSI 200kPa`

- For *date and time* editing only: press 🔼 to select between day, month, year, hours and minutes.
- Press the ✓ button to 'save' the value. The value will stop flashing to confirm that it has been saved.
- To select another value to edit, press the **+** button. Continuing to press the **+** and **–** buttons will cycle through the adjustable parameters as shown overleaf.

- To exit the front panel configuration editor at any time, press the Stop/Reset ⊙ button. Ensure you have saved any changes you have made by pressing the ✓ button first.

⚠ **NOTE: - When the editor is visible, it is automatically exited after 5 minutes of inactivity to ensure security.**

⚠ **NOTE: - The PIN number is automatically reset when the editor is exited (manually or automatically) to ensure security.**

⚠ **NOTE: - More comprehensive module configuration is possible using the 5xxx series PC configuration software in conjunction with the P810 PC interface. Please contact us for further details.**
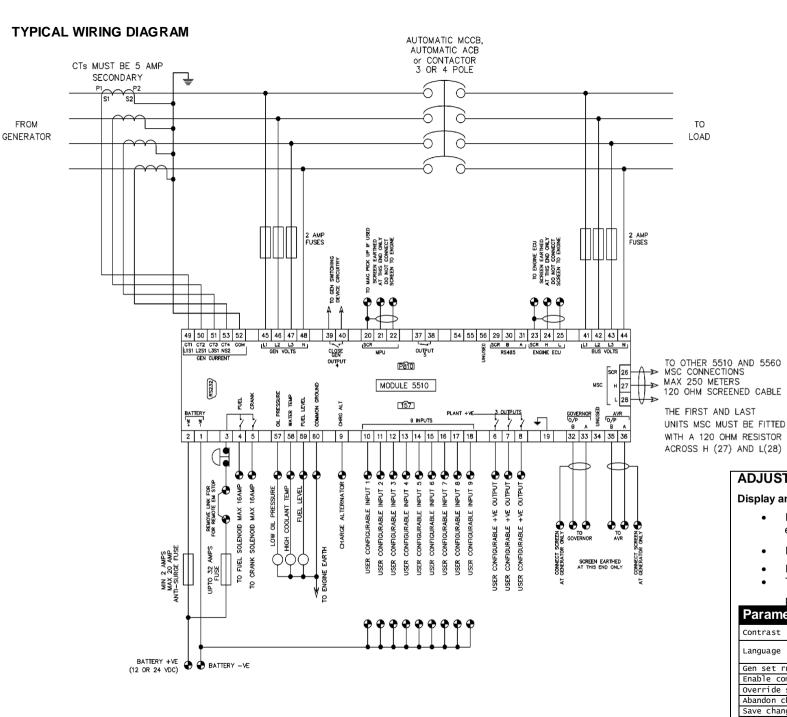
⚠ **NOTE: - Languages are subject to change as the modules are updated. Please contact us for the list of latest supported languages.**

TYPICAL WIRING DIAGRAM

CTs MUST BE 5 AMP SECONDARY

AUTOMATIC MCCB, AUTOMATIC ACB or CONTACTOR 3 OR 4 POLE

FROM GENERATOR

TO LOAD

2 AMP FUSES

TO GEN SWITCHING DEVICE CIRCUITRY

TO MAG PICK UP IF USED SCREEN EARTHED AT THIS END ONLY DO NOT CONNECT SCREEN TO ENGINE

TO ENGINE ECU SCREEN EARTHED AT THIS END ONLY DO NOT CONNECT SCREEN TO ENGINE

2 AMP FUSES

| 49 | 50 | 51 | 53 | 52 | | 45 | 46 | 47 | 48 | | 39 | 40 | | 20 | 21 | 22 | | 37 | 38 | | 54 | 55 | 56 | 29 | 30 | 31 | 23 | 24 | 25 | | 41 | 42 | 43 | 44 |

CT1 CT2 CT3 CT4 COM
L1S1 L2S1 L3S1 NS2
GEN CURRENT

L1 L2 L3 N
GEN VOLTS

CLOSE GEN OUTPUT 4

SCR
MPU

OUTPUT 5

UNUSED

SCR B A
RS485

SCR H L
ENGINE ECU

L1 L2 L3 N
BUS VOLTS

P810

MODULE 5510

157

RS232

SCR 26 / H 27 / L 28
MSC

TO OTHER 5510 AND 5560 MSC CONNECTIONS MAX 250 METERS 120 OHM SCREENED CABLE

THE FIRST AND LAST UNITS MSC MUST BE FITTED WITH A 120 OHM RESISTOR ACROSS H (27) AND L(28)

BATTERY +VE -VE

FUEL CRANK

OIL PRESSURE WATER TEMP FUEL LEVEL COMMON GROUND

CHRG ALT

9 INPUTS

PLANT +VE

3 OUTPUTS

GOVERNOR O/P B A

UNUSED

AVR O/P B A

| 2 | 1 | | 3 | 4 | 5 | | 57 | 58 | 59 | 60 | | 9 | | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | 6 | 7 | 8 | | 19 | | 32 | 33 | 34 | | 35 | 36 |

MIN 2 AMPS MAX 20 AMP ANTI-SURGE FUSE

REMOVE LINK FOR FOR REMOTE EM STOP

UPTO 32 AMPS FUSE

TO FUEL SOLENOID MAX 16AMP

TO CRANK SOLENOID MAX 16AMP

LOW OIL PRESSURE
HIGH COOLANT TEMP
FUEL LEVEL

TO ENGINE EARTH

CHARGE ALTERNATOR

USER CONFIGURABLE INPUT 1
USER CONFIGURABLE INPUT 2
USER CONFIGURABLE INPUT 3
USER CONFIGURABLE INPUT 4
USER CONFIGURABLE INPUT 5
USER CONFIGURABLE INPUT 6
USER CONFIGURABLE INPUT 7
USER CONFIGURABLE INPUT 8
USER CONFIGURABLE INPUT 9

USER CONFIGURABLE +VE OUTPUT
USER CONFIGURABLE +VE OUTPUT
USER CONFIGURABLE +VE OUTPUT

CONNECT SCREEN AT GENERATOR ONLY
TO GOVERNOR

SCREEN EARTHED AT THIS END ONLY

TO AVR
CONNECT SCREEN AT GENERATOR ONLY

BATTERY +VE (12 OR 24 VDC)
BATTERY -VE

DIMENSIONS
240mm x 172mm x 57mm
(9.5" x 6.8" x 2.25")

PANEL CUTOUT:
220mm x 160mm
(8.7" x 6.3")

SCREW TERMINALS
Suitable for: 0.6mm² - 1.3mm²
(22 – 16 AWG)
Tightening torque: 0.8Nm
(7 lb / sq in)

ADJUSTABLE PARAMETERS Continued

Display and Engine running settings editor

- Press the ⬆⬇ buttons simultaneously to enter the editor.
- Press ⓘ button to cycle round the available parameters.
- Press ⬆⬇ to change the visible parameter.
- To exit select *Abandon* or *Save* changes and exit and press either ⬆⬇ button.

Parameter	Values
Contrast	□ | ■
Language	**ENGLISH**, OTHERS
Gen set run priority	1-16 (*1*)
Enable commissioning screens?	YES, **NO**
Override starting alarms?	YES, **NO**
Abandon changes & exit	
Save changes & exit	