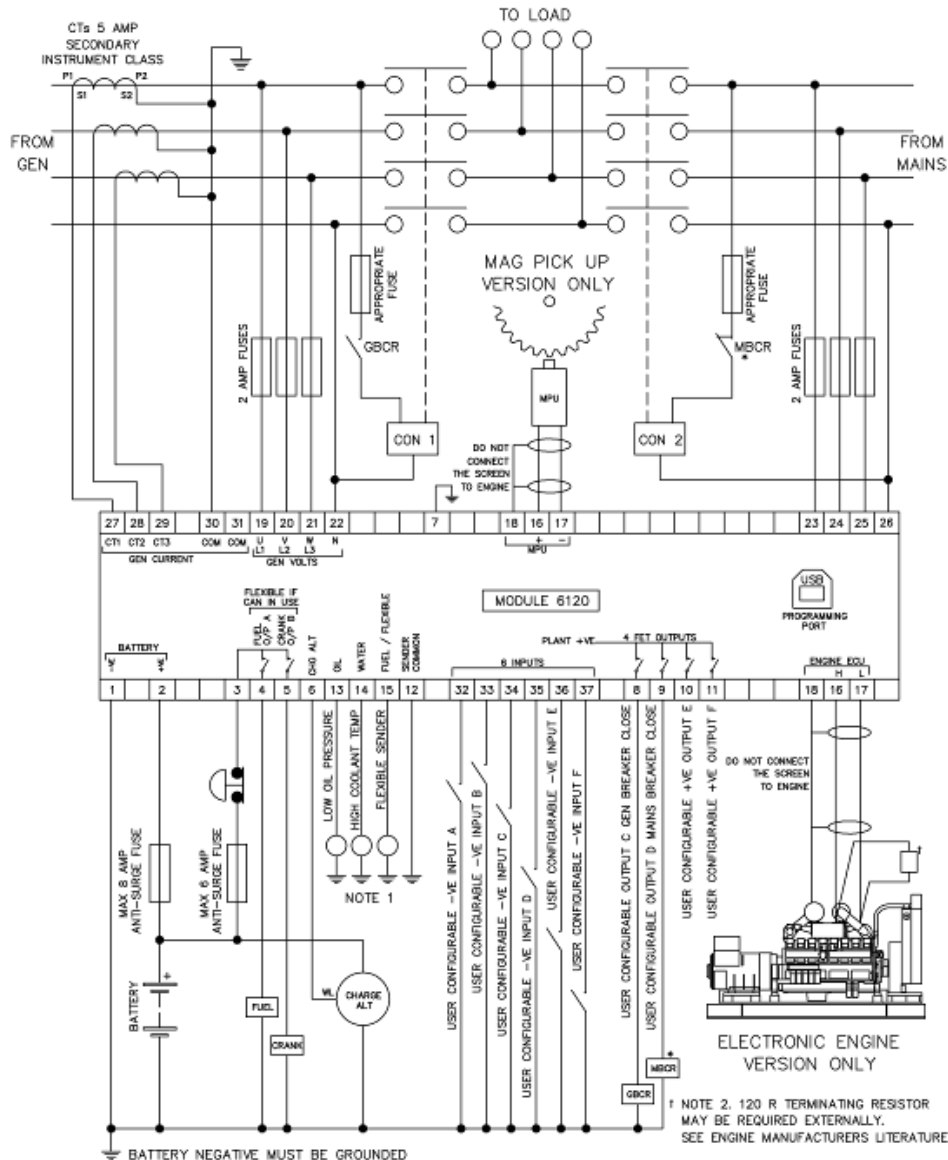




## DSE6120 Installation Instructions



TERMINALS SUITABLE FOR 22-16 AWG (0.6mm - 1.3mm ) FIELD WIRING  
TIGHTENING TORQUE = 0.8Nm (7lb-in)

NOTE 1  
THESE GROUND CONNECTIONS MUST BE ON THE ENGINE BLOCK, AND MUST BE TO THE SENDER BODIES.

\* NOTE 3. MAINS BREAKER CLOSED OUTPUT SHOULD BE CONFIGURED FOR DE-ENERGISE CLOSE MAINS, AND USE THE NORMALLY CLOSED CONTACTS OF MBCR

### ACCESSING THE FRONT PANEL EDITOR (FPE)

The module must be in STOP mode with the engine at rest before configuration mode can be accessed.

To enter the 'configuration mode' press both the **INFO** and **STOP** buttons together.

### ENTERING THE CONFIGURATION EDITOR PIN NUMBER

If the module PIN number has been set, the PIN number request is then shown. The configuration cannot be viewed or changed until the PIN number is correctly entered.



- The first \* is flashing. Press + or - buttons to adjust it to the correct value for the first digit of the PIN number.
- Press ✓ when the first digit is correctly entered.
- The entered digit will turn back to a \* to maintain security.
- Enter the remaining digits of the pin number using the same method.

If the Configuration PIN has been entered successfully (or the PIN number has not been set in the module) the first configurable parameter is displayed.

**NOTE:-** 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.

### EDITING A PARAMETER

Enter the editor as described above.

- Press to select the required 'page' as detailed below.
- Press (+) to select the next parameter or (-) to select the previous parameter within the current page.
- When viewing the parameter to be changed, press the **INFO** (✓) button. The value begins to flash.
- Press (+) or (-) to adjust the value to the required setting.
- Press **INFO** (✓) the save the current value, the value ceases flashing.
- Press and hold the **INFO** (✓) button to exit the editor.

**NOTE:-** Values representing pressure will be displayed in Bar. Values representing temperature are displayed in degrees Celsius.

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

**NOTE:-** To exit the front panel configuration editor at any time, press and hold the **INFO** (✓) button. Ensure you have saved any changes you have made by pressing the ✓ button first.

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

## ADJUSTABLE PARAMETERS (Configuration editor)

(Factory default settings are shown in bold italicised text)

Section	Parameter as shown on display	Values
PIN	Pin Entry	###
DISPLAY	Contrast	0% - 100% ( <b>53%</b> )
	Language	<b>English</b> - Others
	LCD Page Timer	hh:mm:ss ( <b>5m</b> )
	Auto Scroll Delay	1s - 1hr ( <b>2s</b> )
	Day and Time	Day - hh:mm:ss
ALT CONFIG	Default Config	Default Config
ENGINE	Oil Pressure Low Shutdown	0bar - 9.97bar ( <b>1.03bar</b> )
	Coolant Temperature High Shutdown	2°C - 140°C ( <b>95°C</b> )
	Start Delay Timer	0 - 10hr ( <b>5s</b> )
	Pre Heat Timer	0 - 5m ( <b>0s</b> )
	Crank Duration Timer	0 - 1m ( <b>10s</b> )
	Crank Rest Timer	0 - 1m ( <b>10s</b> )
	Safety On Delay	0 - 1m ( <b>10s</b> )
	Smoke Limiting	0 - 15m ( <b>0s</b> )
	Smoke Limiting Off	0 - 1m ( <b>0s</b> )
	Warm Up Timer	0 - 1hr ( <b>0s</b> )
	Cool Down Timer	0 - 1hr ( <b>1m</b> )
	Speed Low Shutdown	Active, <b>Inactive</b>
	Speed Low Shutdown	0RPM - 6000RPM ( <b>1270RPM</b> )
	Speed High Shutdown	0RPM - 6000RPM ( <b>1740RPM</b> )
	Speed Overshoot Delay	0-10s ( <b>2s</b> )
	Speed Overshoot	0% - 10% ( <b>0s</b> )
	Fail To Stop Delay	0 - 2m ( <b>30s</b> )
	Battery Voltage Low Warning	<b>Active</b> , Inactive
	Battery Low Voltage	0V - 40V ( <b>10V</b> )
	Battery voltage Low Warning Delay	0 - 24hr ( <b>1m</b> )
	Battery Voltage High Warning	<b>Active</b> , Inactive
	Battery Voltage High warning Delay	0V - 24hr ( <b>1m</b> )
	Battery Voltage High warning	0V - 40V ( <b>30V</b> )
	Charge Alternator Failure warning	<b>Active</b> , Inactive
	Charge Alternator Failure warning	0V - 39V ( <b>6V</b> )
	Charge Alternator Failure Warning Delay	0 - 24hr ( <b>5s</b> )
	Charge Alternator Failure Shutdown	<b>Active</b> , Inactive
	Charge Alternator Failure Shutdown	0V - 5.9V ( <b>4.0V</b> )
	Charge Alternator Failure Shutdown Delay	0 - 24hr ( <b>5s</b> )
	Low Battery Start	Active, <b>Inactive</b>
	Low Battery Level	0V - 40.0V ( <b>18.0V</b> )
	Low Battery Start Delay	hh:mm:ss ( <b>10s</b> )
	Low Battery Run Time	hh:mm:ss ( <b>30s</b> )

### FIXING CLIPS

The module is held into the panel fascia using the supplied fixing clips.

- Withdraw the fixing clip screw (turn anticlockwise) until only the pointed end is protruding from the clip.
- Insert the three 'prongs' of the fixing clip into the slots in the side of the 6000 series module case.
- Pull the fixing clip backwards (towards the back of the module) ensuring all three prongs of the clip are inside their allotted slots.
- Turn the fixing clip screws clockwise until they make contact with the panel fascia.
- Turn the screws a little more to secure the module into the panel fascia. Care should be taken not to over tighten the fixing clip screws.

**NOTE:- In conditions of excessive vibration, mount the panel on suitable anti-vibration mountings.**

## ADJUSTABLE PARAMETERS (Configuration Editor - Continued)

(Factory default settings are shown in bold italicised text)

Section	Parameter as shown on display	Values	
GENERATOR	Voltage Low Shutdown	50V - 360V ( <b>184V</b> )	
	Voltage Nominal	50V - 276V ( <b>230V</b> )	
	Voltage High Shutdown	231V - 360V ( <b>277V</b> )	
	Frequency Low Shutdown	0Hz - 75Hz ( <b>43Hz</b> )	
	Frequency Nominal	0Hz - 75Hz ( <b>50Hz</b> )	
	Frequency High Shutdown	0Hz - 75Hz ( <b>58Hz</b> )	
	Full Load Rating	5A - 6000A ( <b>500A</b> )	
	Delayed Over Current	<b>Active</b> , Inactive	
	Delayed Over Current	50% - 120% ( <b>100%</b> )	
	AC System	Single Phase, 2 Wire <b>3 Phase, 4 Wire</b> 2 Phase, 3 Wire (L1 & L3) 3 Phase, 4 Wire (Delta) 2 Phase, 3 Wire (L1 & L2) 3 Phase, 3 Wire	
	CT Primary	5A - 6000A ( <b>600A</b> )	
	Generator Transient Delay	0 - 10m ( <b>0.7s</b> )	
	MAINS	Voltage Low Trip	50V - 360V ( <b>184V</b> )
		Voltage High Trip	50V - 360V ( <b>276V</b> )
Frequency Low Trip		0Hz - 75Hz ( <b>45Hz</b> )	
Frequency High Trip		0Hz - 75Hz ( <b>55Hz</b> )	
Mains Transient Delay		0 - 30s ( <b>2s</b> )	
Return Delay		0 - 1hr ( <b>30s</b> )	
Mains Transfer Time		0 - 10m ( <b>0.7s</b> )	
TIMERS	LCD Page Timer	hh:mm:ss ( <b>5m</b> )	
	Auto Scroll Delay	1s - 1hr ( <b>2s</b> )	
	Pre Heat Timer	0 - 5m ( <b>0s</b> )	
	Crank Duration Timer	0 - 1m ( <b>10s</b> )	
	Crank Rest Timer	0 - 1m ( <b>10s</b> )	
	Safety On Delay	0 - 1m ( <b>10s</b> )	
	Smoke Limiting	0 - 15m ( <b>0s</b> )	
	Smoke Limiting Off	0 - 1m ( <b>0s</b> )	
	Warm Up Timer	0 - 1hr ( <b>0s</b> )	
	Cool Down Timer	0 - 1hr ( <b>1m</b> )	
	Fail To Stop Delay	0 - 2m ( <b>30s</b> )	
	Battery voltage Low warning Delay	0 - 24hr ( <b>1m</b> )	
	Battery Voltage High warning Delay	0V - 24hr ( <b>1m</b> )	
	Return Delay	0 - 5hr ( <b>30s</b> )	
Generator Transient Delay	0 - 10m ( <b>0.7s</b> )		
Mains Transient Delay	0 - 30s ( <b>2s</b> )		
Mains Transfer Time	0 - 10m ( <b>0.7s</b> )		
SCHEDULER	Scheduler	Active, <b>Inactive</b>	
	Schedule On Load	Active, <b>Inactive</b>	
	Schedule Start	Day - hh:mm	
	Schedule Period	hh:mm ( <b>5m</b> )	

### DIMENSIONS AND MOUNTING

For flat surface mounting in a Type 1 enclosure to meet UL requirements.

#### DIMENSIONS

216mm x 158mm x 42mm  
(8.5" x 6.2" x 1.6")

#### PANEL CUTOUT

182mm x 137mm  
(7.2" x 5.4")

#### WEIGHT

510g (0.51kg)