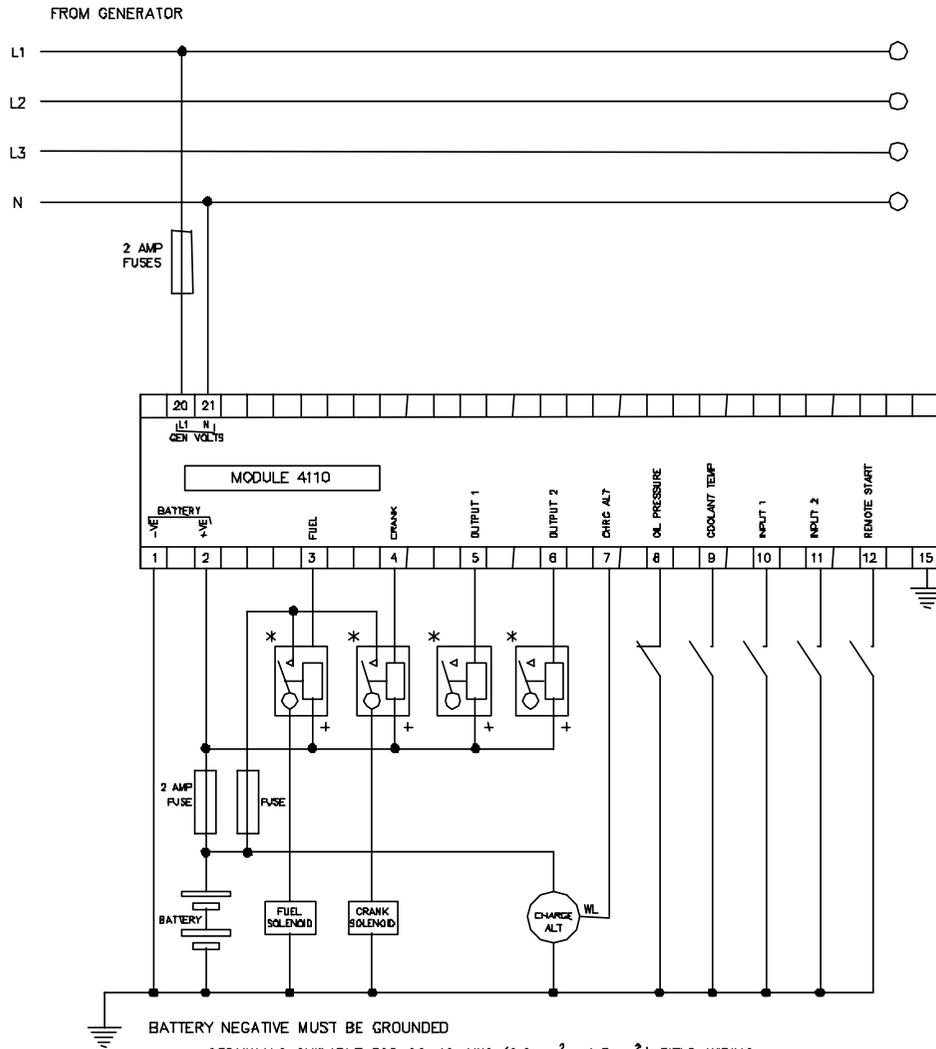


4110 INSTALLATION INSTRUCTIONS



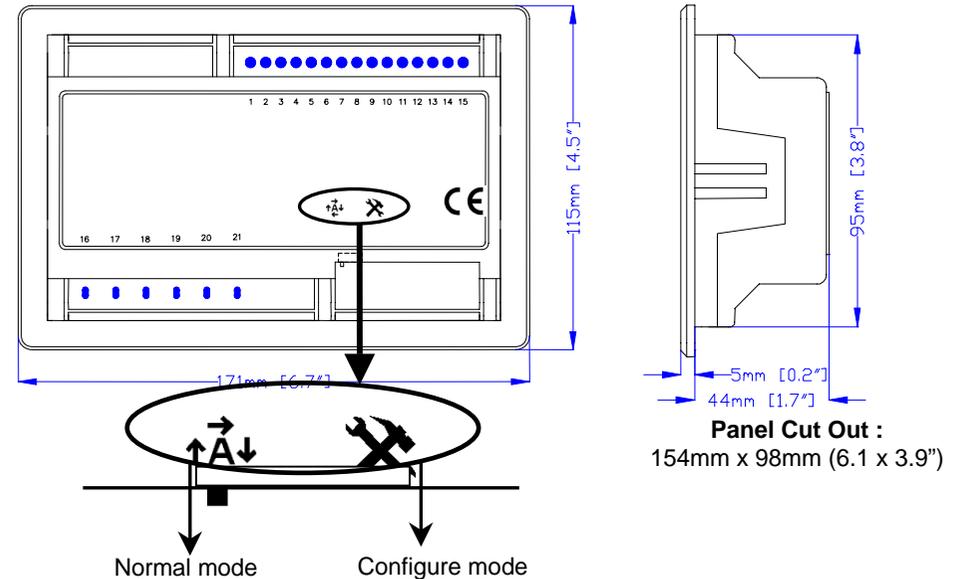
BATTERY NEGATIVE MUST BE GROUNDED

TERMINALS SUITABLE FOR 22-16 AWG (0.6mm² - 1.3mm²) FIELD WIRING

TIGHTENING TORQUE = 0.8Nm (7lb-in)

* NOTE. ALL THE OUTPUTS ARE SOLID STATE AND ARE NEGATIVE SWITCHING

- With the unit in **Stop** mode, **Configuration Mode** is selected by operation of a small switch on the rear, bottom edge of the PCB. This is partially hidden to prevent accidental operation
- Once Configuration Mode is selected, the 'Auto' LED will commence rapid flashing. When in Configuration Mode all normal operation is suspended.
- The 'Stop' pushbutton can be used to select the LED 'code' that corresponds to the required function. The 5 left hand LED's will form the code.
- The 'Manual' pushbutton will allow the user to change the function parameters. The 3 right-hand LED's inform the user of the current setting for the chosen function.
- When the required parameters are displayed, pressing the 'Auto' button will save the new setting. The process is repeated for each function change.
- When configuration is complete, the Configuration Mode Selector Switch should be returned to the 'Normal' position. A key to all configuration options is provided overleaf on the Functions and Parameters table.



Panel Cut Out :
154mm x 98mm (6.1 x 3.9")

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FUNCTIONS AND PARAMETERS TABLE

Function							! 1	! 2	Value (Default in <i>Italics</i>)
Pre-heat Timer							<input type="radio"/>	<input type="radio"/>	<i>0 Seconds</i>
							<input type="radio"/>	<input type="radio"/>	5 Seconds
							<input type="radio"/>	<input checked="" type="radio"/>	10 Seconds
							<input type="radio"/>	<input checked="" type="radio"/>	15 Seconds
							<input checked="" type="radio"/>	<input type="radio"/>	20 Seconds
							<input checked="" type="radio"/>	<input type="radio"/>	30 Seconds
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	60 Seconds
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	180 Seconds
Start Delay							<input type="radio"/>	<input type="radio"/>	<i>0 Seconds</i>
							<input type="radio"/>	<input type="radio"/>	5 Seconds
							<input type="radio"/>	<input checked="" type="radio"/>	10 Seconds
							<input type="radio"/>	<input checked="" type="radio"/>	15 Seconds
							<input checked="" type="radio"/>	<input type="radio"/>	20 Seconds
							<input checked="" type="radio"/>	<input type="radio"/>	30 Seconds
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	60 Seconds
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	180 Seconds
Stop Delay							<input type="radio"/>	<input type="radio"/>	<i>0 Seconds</i>
							<input type="radio"/>	<input type="radio"/>	5 Seconds
							<input type="radio"/>	<input checked="" type="radio"/>	10 Seconds
							<input type="radio"/>	<input checked="" type="radio"/>	15 Seconds
							<input checked="" type="radio"/>	<input type="radio"/>	20 Seconds
							<input checked="" type="radio"/>	<input type="radio"/>	30 Seconds
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	60 Seconds
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	180 Seconds
Energise to Stop Timer							<input type="radio"/>	<input type="radio"/>	<i>0 Seconds</i>
							<input type="radio"/>	<input type="radio"/>	5 Seconds
							<input type="radio"/>	<input checked="" type="radio"/>	10 Seconds
							<input type="radio"/>	<input checked="" type="radio"/>	15 Seconds
							<input checked="" type="radio"/>	<input type="radio"/>	20 Seconds
							<input checked="" type="radio"/>	<input type="radio"/>	30 Seconds
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	60 Seconds
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	180 Seconds
Warming							<input type="radio"/>	<input type="radio"/>	<i>0 Seconds</i>
							<input type="radio"/>	<input type="radio"/>	5 Seconds
							<input type="radio"/>	<input checked="" type="radio"/>	10 Seconds
							<input type="radio"/>	<input checked="" type="radio"/>	15 Seconds
							<input checked="" type="radio"/>	<input type="radio"/>	20 Seconds
							<input checked="" type="radio"/>	<input type="radio"/>	30 Seconds
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	60 Seconds
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	180 Seconds
Cooling							<input type="radio"/>	<input type="radio"/>	<i>0 Seconds</i>
							<input type="radio"/>	<input type="radio"/>	5 Seconds
							<input type="radio"/>	<input checked="" type="radio"/>	10 Seconds
							<input type="radio"/>	<input checked="" type="radio"/>	15 Seconds
							<input checked="" type="radio"/>	<input type="radio"/>	20 Seconds
							<input checked="" type="radio"/>	<input type="radio"/>	30 Seconds
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	60 Seconds
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	180 Seconds
Nominal Frequency							<input type="radio"/>	<input type="radio"/>	<i>50 Hz (O/S +14%/ Overshoot +24%)</i>
							<input type="radio"/>	<input type="radio"/>	60 Hz (O/S +14%/ Overshoot +24%)
Nominal DC Voltage							<input type="radio"/>	<input type="radio"/>	<i>12V DC (CF 8V)</i>
							<input type="radio"/>	<input checked="" type="radio"/>	24V DC (CF 16V)
LOP Switch Contact							<input type="radio"/>	<input type="radio"/>	<i>Close on Fault</i>
							<input type="radio"/>	<input type="radio"/>	Open on Fault
HET Switch Contact							<input type="radio"/>	<input type="radio"/>	<i>Close on Fault</i>
							<input type="radio"/>	<input type="radio"/>	Open on Fault
Crank disconnect on Oil Pressure							<input type="radio"/>	<input type="radio"/>	<i>Disabled</i>
							<input type="radio"/>	<input type="radio"/>	Enabled (2 Second delay)
Underspeed detection							<input type="radio"/>	<input type="radio"/>	<i>Disabled</i>
							<input type="radio"/>	<input type="radio"/>	Enabled (U/S – 20%)
Auxiliary Input 1 Function							<input type="radio"/>	<input type="radio"/>	<i>Immediate Warning Close on Fault</i>
							<input type="radio"/>	<input type="radio"/>	Immediate Warning Open on Fault
							<input type="radio"/>	<input checked="" type="radio"/>	Immediate Shutdown Close on Fault
							<input type="radio"/>	<input checked="" type="radio"/>	Immediate Shutdown Open on Fault
							<input checked="" type="radio"/>	<input type="radio"/>	Delayed Warning Close on Fault
							<input checked="" type="radio"/>	<input type="radio"/>	Delayed Warning Open on Fault
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Delayed Shutdown Close on Fault
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Delayed Shutdown Open on Fault
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Delayed Shutdown Open on Fault
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Delayed Shutdown Open on Fault
Auxiliary Input 2 Function							<input type="radio"/>	<input type="radio"/>	<i>Immediate Warning Close on Fault</i>
							<input type="radio"/>	<input type="radio"/>	Immediate Warning Open on Fault
							<input type="radio"/>	<input checked="" type="radio"/>	Immediate Shutdown Close on Fault
							<input type="radio"/>	<input checked="" type="radio"/>	Immediate Shutdown Open on Fault
							<input checked="" type="radio"/>	<input type="radio"/>	Delayed Warning Close on Fault
							<input checked="" type="radio"/>	<input type="radio"/>	Delayed Warning Open on Fault
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Delayed Shutdown Close on Fault
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Delayed Shutdown Open on Fault
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Delayed Shutdown Open on Fault
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Delayed Shutdown Open on Fault
Auxiliary Output 1 Function							<input type="radio"/>	<input type="radio"/>	Not used
							<input type="radio"/>	<input type="radio"/>	Pre-heat
							<input type="radio"/>	<input checked="" type="radio"/>	Load transfer
							<input type="radio"/>	<input checked="" type="radio"/>	Common Warning
							<input checked="" type="radio"/>	<input type="radio"/>	Common Shutdown
							<input checked="" type="radio"/>	<input type="radio"/>	System in Auto
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Common Alarm
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Energise to Stop
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Energise to Stop
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Energise to Stop
Auxiliary Output 2 Function							<input type="radio"/>	<input type="radio"/>	Not used
							<input type="radio"/>	<input type="radio"/>	Pre-heat
							<input type="radio"/>	<input checked="" type="radio"/>	Load transfer
							<input type="radio"/>	<input checked="" type="radio"/>	Common Warning
							<input checked="" type="radio"/>	<input type="radio"/>	Common Shutdown
							<input checked="" type="radio"/>	<input type="radio"/>	System in Auto
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Common Alarm
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Energise to Stop
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Energise to Stop
							<input checked="" type="radio"/>	<input checked="" type="radio"/>	Energise to Stop