

DSEULTRA[®] STARTING WITH QUALITY.



DSE3110

MANUAL & AUTO START CONTROL MODULE



The DSE3110 can be utilised as a Manual or Auto Start Module for single gen-set applications and forms part of DSE's next generation of control modules. The module has been designed to work with electronic and non electronic engines providing advanced engine monitoring and protection features.

The DSE3110 includes a backlit LCD display which clearly show the status of the engine at all times. The module monitors engine speed, frequency, voltage and run hours and also displays the warning and shutdown status of the engine.

The module includes six digital inputs and four outputs. Two of the outputs are configurable. The module can either be programmed using the front panel or by using the DSE Configuration Suite PC software.

The module is available in two variants: Magnetic Pick-up and Canbus.

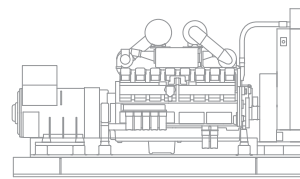
FEATURES

- Back-lit LCD display
- Remote start input
- Electronic engine enabled
- Magnetic pick-up
- Full engine monitoring and protection
- PC programmable
- Protected Solid State Outputs (PSS)
- 6 Digital Inputs
- 4 Outputs (4 configurable on Canbus version, 2 configurable on Magnetic Pick-up version)

BENEFITS

- Hours counter provides accurate information for monitoring maintenance and warranty periods
- Multiple engine parameters are monitored simultaneously
- Suitable for engine only applications
- Module can be configured to suit individual applications
- IP65/NEMA 12 rating offers advanced resistance to water ingress
- No need for additional metering equipment
- Wide range of engines can be specified
- Uses the DSE Configuration Suite PC Software for simplified programming

NEW RELEASE



ELECTRONIC ENGINE CAPABILITY

OPERATION

MANUAL MODE

- The engine is started using the Start **I** button on the front of the module.
- Once pressed the module instructs the engine to initiate its pre-heat sequence and then start the engine.
- To stop the engine the Stop **O** button on the front of the module should be pressed.

AUTOMATIC MODE

- The Auto **AUTO** button needs to be pressed to put the unit in Auto Mode.
- The module start sequence is initiated by the activation of the remote start input.
- The pre-heat sequence is then initiated and the engine is started.
- To stop the engine the remote start signal needs to be removed or the Stop **O** button on the module needs to be pressed.

SPECIFICATION

DC SUPPLY

CONTINUOUS VOLTAGE RATING
8V to 35V Continuous

CRANKING DIP PROTECTION
Able to survive 0V for 50mS, providing supply was at least 10V before dropout and supply recovers to 5V. This is achieved without the need for internal batteries

CHARGE FAIL/ EXCITATION
8V to 35V fixed power source 2.5W

MAXIMUM SHUTDOWN CURRENT
1.5mA at 12V 1.5mA at 24V

NOMINAL STANDBY CURRENT
23mA at 12V 18mA at 24V

MAXIMUM OPERATING CURRENT
35mA at 12V 30mA at 24V

ALTERNATOR INPUT

RANGE
15V - 333V (L-N) 50Hz - 60Hz
(Minimum 15V AC Ph-N)

ACCURACY
1% of full scale true RMS sensing

MAGNETIC PICKUP

VOLTAGE RANGE
0.5V RMS minimum

FREQUENCY RANGE
10,000 Hz (max)

OUTPUTS

OUTPUT A (FUEL)
2 Amp DC at supply voltage

OUTPUT B (START)
2 Amp DC at supply voltage

AUXILIARY OUTPUTS C,D
2 Amp DC at supply voltage

DIMENSIONS

OVERALL
98mm x 79mm x 40mm
3.9" x 3.1" x 1.6"

PANEL CUT-OUT
80mm x 68mm
3.1" x 2.7"

TESTING STANDARDS

ELECTRICAL SAFETY/ ELECTROMAGNETIC COMPATIBILITY

BS EN 61000-6-2
EMC Generic Emission Standard for the Industrial Environment

BS EN 61000-6-4
EMC Generic Emission Standard for the Industrial Environment

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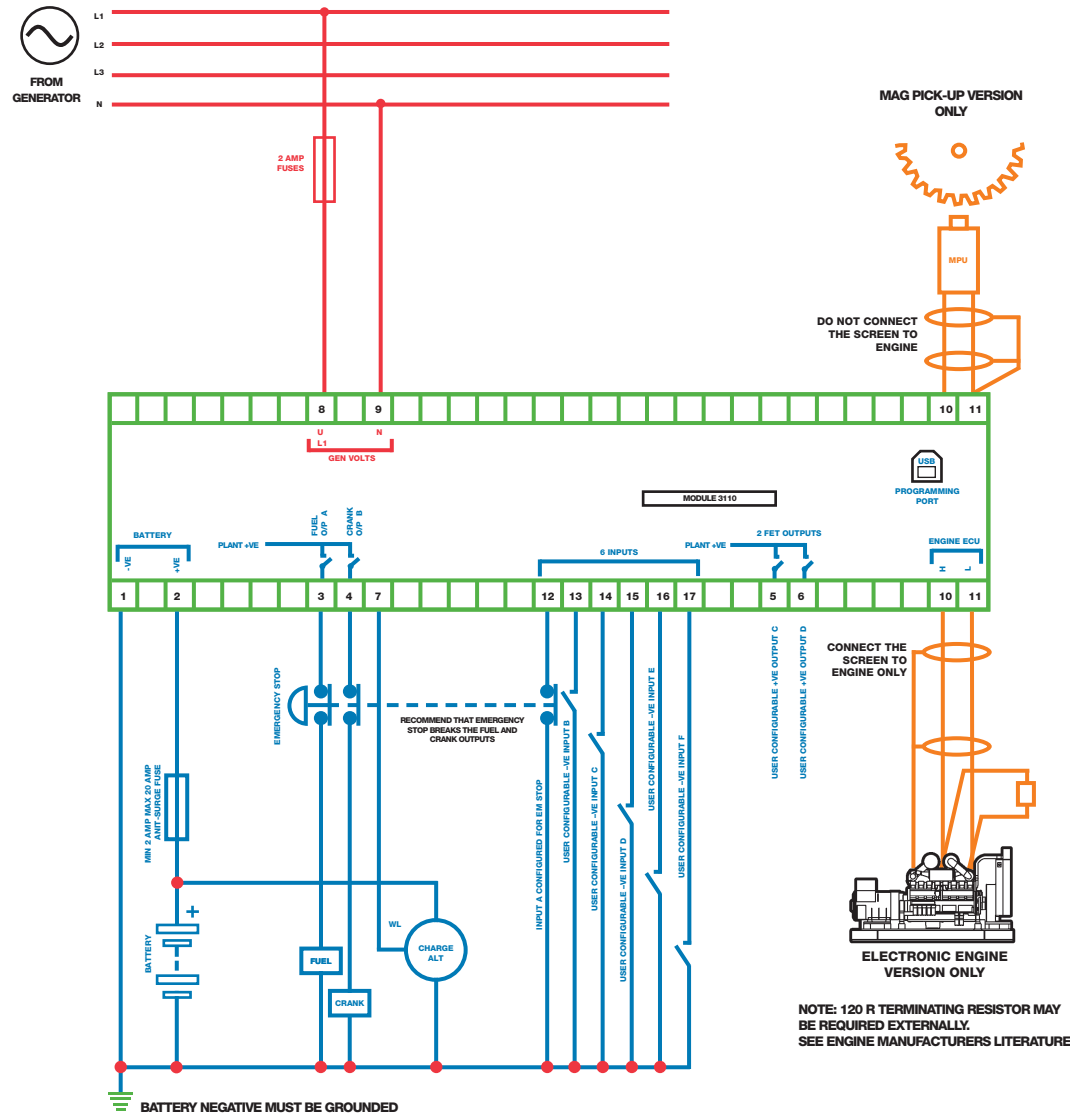
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DSE3110



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

TESTING STANDARDS**ENVIRONMENTAL**

BS EN 60068-2-1
Cold Temperature -30°C

BS EN 60068-2-2
Hot Temperature +70°C

BS EN 60068-2-6 VIBRATION
Ten sweeps in each of three major axes
5Hz to 8Hz @ +/-7.5mm, 8Hz to 500Hz @ 2gn

BS 2011 part 2.1 60068-2-30 HUMIDITY
Test Cb Ob Cyclic
93% RH @ 40°C for 48 hours

BS EN 60068-2-27 SHOCK
Three shocks in each of three major axes
15gn in 11ms

ELECTRONIC ENGINE COMPATIBILITY

- CAT
- Cummins
- Deutz
- John Deere
- MTU
- Perkins
- Scania
- Volvo
- Generic
- Plus additional manufacturers

RELATED MATERIALS

TITLE	PART NO'S
DSE3110 Installation Instructions	053-050
DSE3110 Manual	057-086
DSE3110 PC Software Manual	057-087

DEEP SEA ELECTRONICS maintains a policy of continuous development and reserves the right to change the details shown on this data sheet without prior notice. The contents are intended for guidance only.

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