

# DSE6110/20 AUTO START & AUTO MAINS FAILURE CONTROL MODULES

# FEATURES

The DSE6110 is an Auto Start Control Module and the DSE6120 is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single gen-set applications.

Monitoring speed, frequency, voltage, current, oil pressure, coolant temperature and fuel level, the modules will display warnings, shutdown and engine status information on the back-lit LCD screen and illuminated LED. Both modules offer electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engine versions and offer a number of flexible inputs, outputs and engine protections so the system can be easily adapted to suit a wide range of application demands.

The modules can be easily configured using the DSE Configuration Suite PC software. Selected front panel editing is also available.



### ENVIRONMENTAL TESTING STANDARDS

## ELECTRO-MAGNETIC COMPATIBILITY

BS EN 61000-6-2 EMC Generic Immunity Standard for the Industrial Environment BS EN 61000-6-4 EMC Generic Emission Standard for the Industrial Environment

## ELECTRICAL SAFETY

BS EN 60950 Safety of Information Technology Equipment, including Electrical Business Equipment

**TEMPERATURE** BS EN 60068-2-1 Ab/Ae Cold Test -30 °C BS EN 60068-2-2 Bb/Be Dry Heat +70 °C

#### VIBRATION

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

## HUMIDITY

BS EN 60068-2-30 Db Damp Heat Cyclic 20/55 °C @ 95% RH 48 Hours BS EN 60068-2-78 Cab Damp Heat Static 40 °C @ 93% RH 48 Hours

#### SHOCK BS EN 60068-2-27

Three shocks in each of three major axes 15 gn in 11 mS

#### DEGREES OF PROTECTION PROVIDED BY ENCLOSURES

BS EN 60529

IP65 - Front of module when installed into the control panel with the optional sealing gasket.

ISSUE 2

## COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF GEN-SET APPLICATIONS

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		PC	6	★ 4	Į, L		<b>i</b>
		USB PORT	CONFIGURABLE INPUTS	DC OUTPUTS	ANALOGUE SENDERS	EMERGENCY STOP	DC POWER SUPPLY 8-35V
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DSE6110/20 $\sum_{other} \sum_{other} C \in C$							
MAINS (UTILITY) DC OUTPUTS SENSING DSE6120 ONLY		GENERATOR SENSING		CHARGE ALTERNATOR	FUEL & CRANK OUTPUTS (Flexible with CAN)	ELECTRONIC ENGINES OR MAGNETIC PICK-UP	
VOLTS 晋 邑	+ + -	ļ,			D+ W/L	ţ, ţ	<u></u>
1ph 2ph 3ph N			1ph 2ph 3ph N	1ph 2ph 3ph N			



# DSE6110/20 **AUTO START & AUTO MAINS FAILURE CONTROL MODULES**



DSE6120

### DSF6110

**KEY FEATURES** 

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Back-lit text LCD display

LED and LCD alarm indication

CAN and Magnetic Pick-up/Alt.

versions available (specify on

6 Outputs (4 configurable on

configurable on CAN version)

Configurable timers and alarms

Magnetic Pick-up/Alt., 6

Alternative configuration

· 3 Phase generator monitoring

Front panel editing

Power Save mode

PC and front panel

configuration

6 Digital inputs 3 Analogue inputs

Event Log (10)

Remote Start input

**RELATED MATERIALS** 



## Current Monitoring and protection

- 3 Phase Mains (Utility) monitoring (DSE6120 only)
- Test button (DSE6120 only)
- · Battery voltage monitoring
- Engine pre-heat
- · Hours counter
- Comprehensive shutdown or warning on fault condition

### **KEY BENEFITS**

- Automatically transfers between mains (utility) and generator power (DSE6120 only)
- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout

- Multiple engine parameters are monitored simultaneously
- Module can be configured to suit individual applications Compatible with a wide range
- of CAN engines Uses DSE Configuration Suite
- PC software for simplified configuration IP65 rating (with optional
- gasket) offers increased resistance to water ingress
- Licence-free PC software

PART NO'S

053-059 053-060 057-102 057-095

057-096



SPECIFICATION

### DC SUPPLY CONTINUOUS VOLTAGE RATING

8 V to 35 V Continuous

## CRANKING DROPOUTS

Able to survive 0 V for 50 mS, providing supply was at least 10 V before dropout and supply recovers to 5 V. This is achieved without the need for internal batteries. LEDs and backlight will not be maintained during cranking.

MAXIMUM OPERATING CURRENT 178 mA at 12 V. 95 mA at 24 V

MAXIMUM STANDBY CURRENT 88 mA at 12 V, 50 mA at 24 V

CHARGE FAIL/EXCITATION RANGE 0 V to 35 V

## MAINS (UTILITY) DSE6120 ONLY VOLTAGE RANGE 15 V - 333 V AC (L-N)

FREQUENCY RANGE 3.5 Hz to 75 Hz

OUTPUTS **OUTPUT A (FUEL)** 2 A DC at supply voltage

**OUTPUT B (START)** 2 A DC at supply voltage

**AUXILIARY OUTPUTS C,D,E & F** 2 A DC at supply voltage

GENERATOR VOLTAGE RANGE 15 V - 333 V AC (L-N)

FREQUENCY RANGE 3.5 Hz to 75 Hz

MAGNETIC PICK UP VOLTAGE RANGE +/- 0.5 V to 70 V

#### FREQUENCY RANGE 10.000 Hz (max)

DIMENSIONS OVERALL

215 mm x 158 mm x 42 mm 8.5" x 6.2" x 1.6"

PANEL CUT-OUT 182 mm x 137 mm 7.2" x 5.4"

MAXIMUM PANEL THICKNESS 8 mm 0.3"

## TITLE DSE6110 Installation Instructions

DSE6120 Installation Instructions
DSE6100 Quick Start Guide
DSE6100 Operator Manual
DSE6100 Configuration Suite PC Manual

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#### Deep Sea Electronics Plc 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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