

# DSE710/20

## AUTO START AND AUTO MAINS FAILURE CONTROL MODULES

### FEATURES



The DSE710 is an Automatic Start Control Module suitable for a wide variety of single diesel or gas gen-set applications.

Monitoring an advanced list of engine parameters, the DSE710 will automatically shut down the engine, or indicate a warning, on detection of a fault condition, indicating the fault on the module's front panel LCD display or LED.

The module can be easily configured using the DSE810 interface and PC. Front panel editing is also available.

The module can be controlled from a PC that is located up to a maximum distance of 100 meters away.

The DSE720 is an Automatic Mains Failure Control Module incorporating all the features of the DSE710 plus the ability to monitor the mains (utility) supply, automatically controlling the switch-over to generator when the mains (utility) power fails.

### 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 gn

#### 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

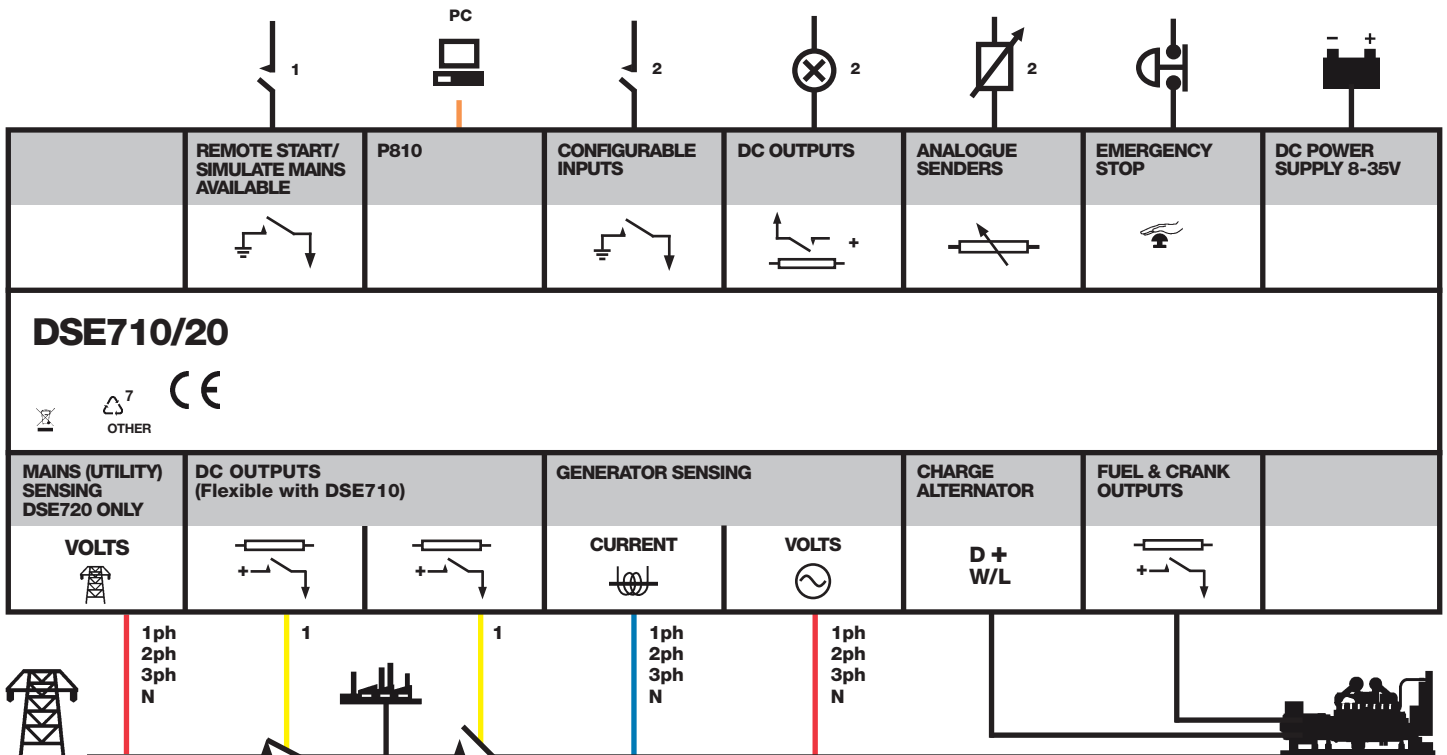
#### SHOCK

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 supplied sealing gasket.

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



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## AUTO START AND AUTO MAINS FAILURE CONTROL MODULES

### FEATURES



DSE710



DSE720



### KEY FEATURES

- PC/Front panel configuration
- Digital and analogue inputs
- Digital outputs
- Automatic mains (utility) supply monitoring (DSE720 only)
- Automatic shutdown or warning when fault conditions are detected
- Automatic/Manual/Remote start
- Engine pre-heat
- Engine monitoring and protection features
- Protected Solid State (PSS) outputs
- Tamper-proof engine hours counter

- LED indicators
- Configurable timers
- Configurable outputs
- Configurable inputs
- Back-lit character/icon LCD display

### KEY BENEFITS

- Automatic transfer between mains (utility) and generator power (DSE720 only)
- On-site module configuration and remote configuration (max 100 meters) using DSE PC software
- User-friendly set-up and button layout

- Multiple engine parameters are monitored simultaneously
- License-free PC software

### 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.

#### MAXIMUM OPERATING CURRENT

180 mA at 12 V. 190 mA at 24 V

#### MAXIMUM STANDBY CURRENT

145 mA at 12 V. 150 mA at 24 V

#### OUTPUTS

##### AUXILIARY

Solid state  
2.4 A DC at supply voltage

##### FUEL/START

Solid state  
3.4 A DC at supply voltage

##### GENERATOR C.T.

5 A secondary 0.5 VA

##### GENERATOR INPUT RANGE

35 V(L-N) to 333 V AC(L-N) absolute maximum  
50 Hz - 60 Hz (min 15 V AC)

##### MAINS (UTILITY) SENSING INPUT RANGE (DSE720 only)

35 V(L-N) to 333 V AC (L-N)  
50 Hz - 60 Hz (min 15 V AC)

#### DIMENSIONS

##### OVERALL

209 mm x 146 mm x 30.3 mm  
8.2" x 5.7" x 1.2"

##### PANEL CUT-OUT

182 mm x 137 mm  
7.2" x 5.4"

##### MAXIMUM PANEL THICKNESS

8 mm  
0.3"

### RELATED MATERIALS

#### TITLE

DSE710 Installation Instructions  
DSE720 Installation Instructions  
DSE710 Operator Manual  
DSE720 Operator Manual  
DSE700 PC Software Manual

#### PART NO'S

053-013  
053-005  
057-066  
057-001  
057-002

### DEEP SEA ELECTRONICS PLC UK

Highfield House, Hunmanby Industrial Estate, Hunmanby YO14 0PH  
**TELEPHONE** +44 (0) 1723 890099 **FACSIMILE** +44 (0) 1723 893303  
**EMAIL** sales@deepseapl.com **WEBSITE** www.deepseapl.com

### DEEP SEA ELECTRONICS INC USA

3230 Williams Avenue, Rockford, IL 61101-2668 USA  
**TELEPHONE** +1 (815) 316 8706 **FACSIMILE** +1 (815) 316 8708  
**EMAIL** sales@deepseausa.com **WEBSITE** www.deepseausa.com