

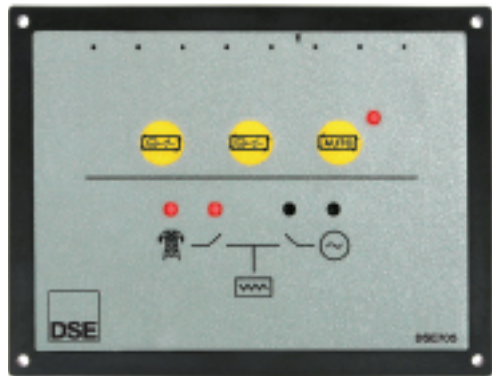
# DSEULTRA<sup>®</sup> STARTING WITH QUALITY.

## DSE705 & DSE4130

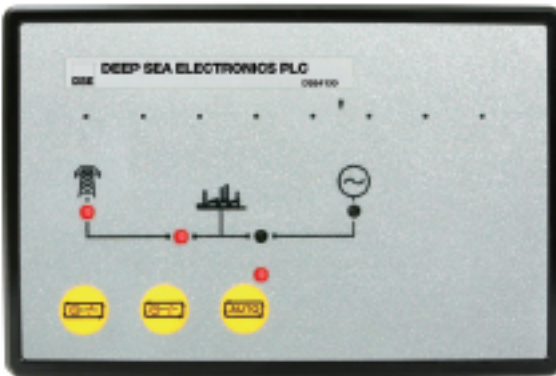
AUTO TRANSFER SWITCH CONTROL MODULES

# DSE

DSE705



DSE4130



The DSE705 and DSE4130 are Auto Transfer Switch Control Modules that have been designed to monitor the mains (utility) supply.

When the mains (utility) power fails the modules send a start request to the generator control unit.

When the generator is up and running the modules transfer the load across. When the mains (utility) returns, the modules transfer the load back and remove the start command. The generator should then begin its shutdown procedure.

Both modules can be configured so that they follow the users pre-set start and stop sequences. The DSE4130 enclosure has a closed back.

### FEATURES

- Automatic mains (utility) supply monitoring
- Load changeover control
- Manual start
- Protected Solid State (PSS) outputs
- Front panel mounting
- Front panel programming
- LED indicators
- Configurable timers
- Configurable outputs
- Single/three phase mains sensing
- Remote start input

### BENEFITS

- Transfers between mains and generator power
- On-site module configuration to match user requirements

### OPERATION

The modules are operated using the three push buttons on the front:



#### MANUAL OFF LOAD -

This is used to manually start and run the engine off load. Should the mains (utility) supply fail, then the load is transferred to the generator automatically.



#### MANUAL ON LOAD -

This mode is used to manually start and run the engine on load.



**AUTO MODE** - This puts the module into automatic mode, where it will await a mains (utility) failure. Upon detection it will send a start request to the generator control unit.

### SPECIFICATION

#### DC SUPPLY

8V to 35V continuous

#### CRANKING DROPOUTS

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.

#### MAXIMUM OPERATING CURRENT

50mA(12V and 24V) (DSE4130 only)  
50mA (DSE705 only)

#### TYPICAL CURRENT

15mA(12V and 24V) (DSE4130 only)  
12mA (DSE705 only)

#### ALTERNATOR INPUT RANGE

75V(L-N) to 333V AC (L-N) absolute maximum

#### ALTERNATOR INPUT FREQUENCY

50Hz – 60Hz at rated engine speed  
(minimum:75V AC L-N)

#### START & RUN OUTPUTS

1.2 Amp DC at supply voltage. Switches to battery negative when active

#### CLOSE GEN/MAINS CONTROL OUTPUTS

1.2 Amp DC at supply voltage. Switches to battery negative when active

#### AUXILIARY OUTPUTS

1.2 Amp DC at supply voltage. Switches to battery negative when active

#### DSE705 DIMENSIONS

165mm x 125mm x 29mm  
6.5" x 4.9" x 1.2"

#### DSE705 CUT OUT

149mm X 109mm  
5.9" x 4.3"

#### DSE4130 DIMENSIONS

171mm x 115mm x 49mm  
6.75" x 4.5" x 2"

#### DSE4130 CUT OUT

154mm x 98mm  
6.1" x 3.9"

### ENVIRONMENTAL TESTING STANDARDS

#### ELECTRO MAGNETIC CAPABILITY

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

#### TEMPERATURE

BS EN 60068-2-2  
Test Ab to +70°C 60067-2-2 Hot  
Test Ab to -30°C 60068-2-1 Cold

#### VIBRATION

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

#### HUMIDITY

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

#### SHOCK

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

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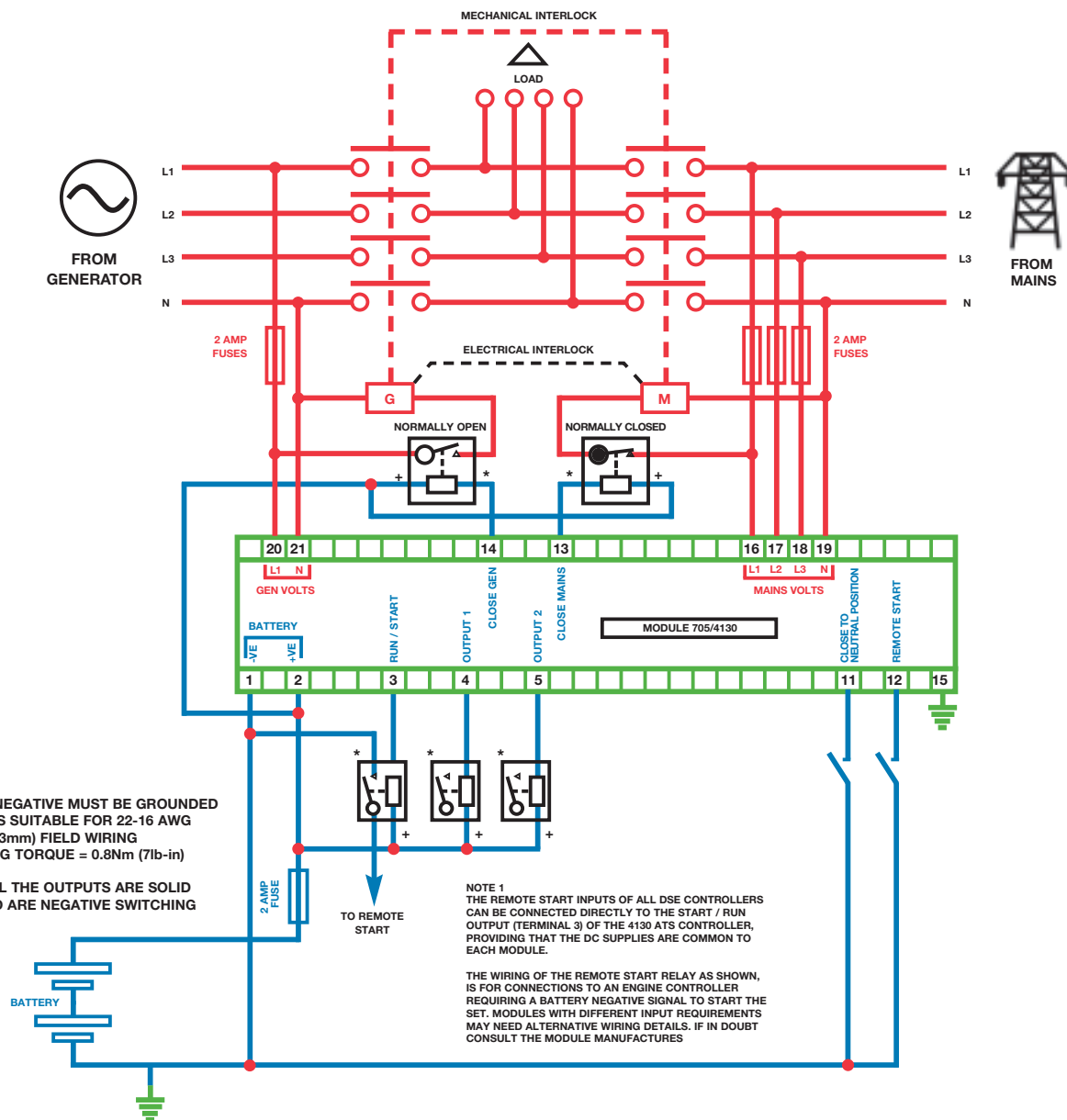
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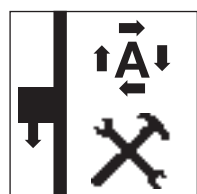
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## DSE705 & DSE4130

**CONFIGURATION**

The modules can be configured to match user's individual parameter settings. Configuration mode is accessed via the switch at the rear of the module. Once in configuration mode the **AUTO-LED** flashes rapidly.



NORMAL

CONFIGURATION

**RELATED MATERIALS****TITLE**

DSE705 Installation Instructions  
DSE705 Operators Manual  
DSE4130 Installation Instructions  
DSE4130 Operators Manual

**PART NO'S**

053-037  
057-044  
053-024  
057-024

Please refer to the installation instructions for the parameter settings and full configuration information.

**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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