

# DSE402 MKII

## WATERPROOF MANUAL/AUTO START CONTROL MODULE

### FEATURES



The DSE402 MKII is a waterproof Manual/Automatic Start Control Module designed for genset and other applications. The module is designed to start and stop the engine via a manual waterproof key switch on the front panel or via a user configurable remote start input. It will provide a number of engine protections, automatically shutting down the engine on detection of a fault condition. Provision is also made for an overspeed shutdown from either the MPU or AC Hz (to be specified on ordering).

First-up shutdown alarm is indicated by a steady red LED.

### 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  
5Hz to 8Hz @ +/-7.5mm, 8Hz to 500Hz @ 2gn

#### 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

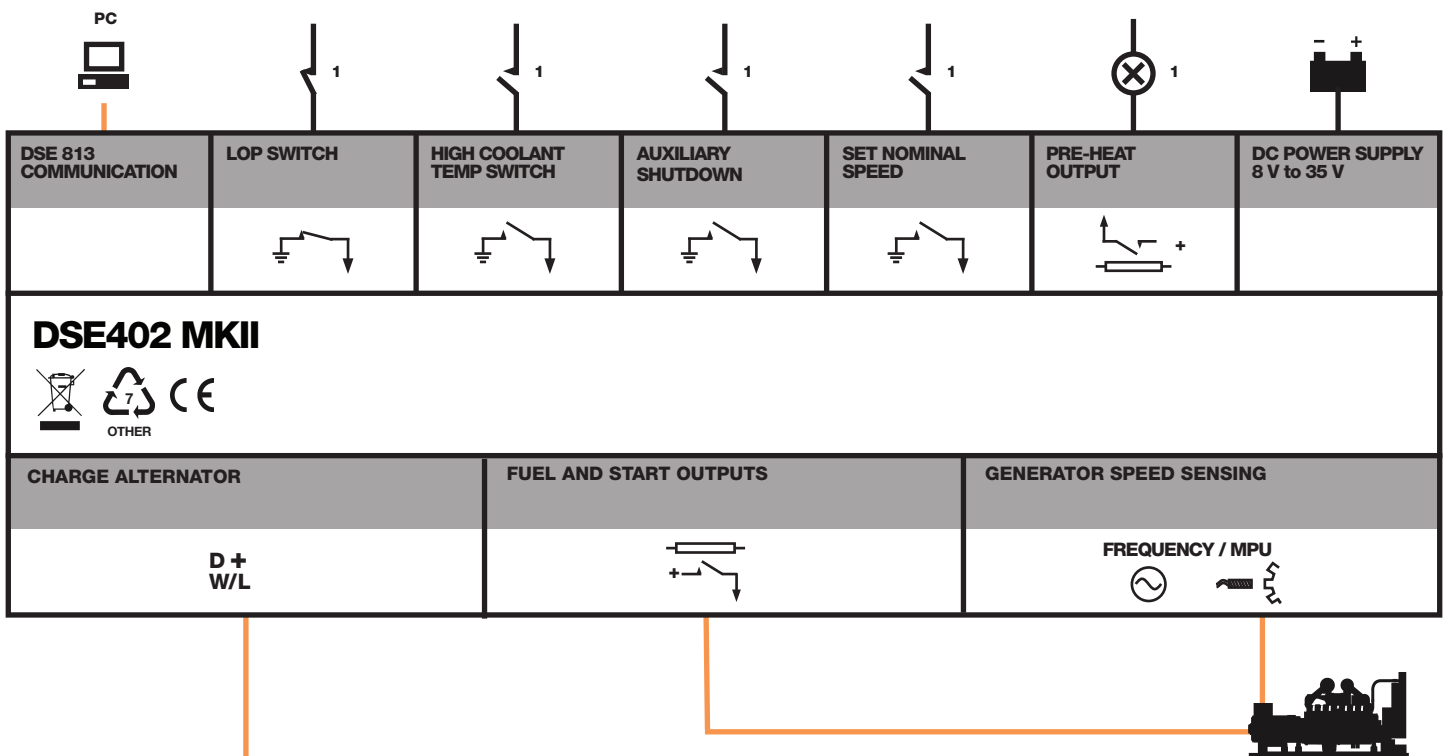
#### SHOCK

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

#### DEGREES OF PROTECTION PROVIDED BY ENCLOSURES

BS EN 60529  
IP66

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



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### FEATURES



### KEY FEATURES

- Key start
- Low oil pressure protection
- High engine temperature protection
- Auxiliary shutdown
- PC configurable via DSE813 interface and DSE Configuration Suite PC Software
- Automatic engine pre-heat
- Overspeed protection

### KEY BENEFITS

- IP66 rating makes this module ideal for outdoor use
- Potted electronics prevents vibration and water damage
- Licence-free PC Software
- User friendly set up and fascia layout
- Uses DSE Configuration Suite PC Software for simple configuration

### 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

120 mA at 12 V, 170 mA at 24 V

#### TYPICAL OPERATING CURRENT

60 mA at 12 V, 75 mA at 24 V  
In stop position consumption is zero.

#### CHARGE/FAIL EXCITATION RANGE

0 V to 35 V

#### OUTPUTS

##### FUEL

15 A DC at supply voltage

##### START

15 A DC at supply voltage

##### PRE-HEAT

2 A DC at supply voltage

#### DIMENSIONS

##### OVERALL

157 mm x 111 mm x 60 mm  
6.2" x 4.4" x 2.4"

##### PANEL CUT-OUT

132 mm x 84 mm

#### STORAGE TEMPERATURE RANGE

-40 °C to +85 °C  
-40 °F to +185 °F

#### OPERATING TEMPERATURE RANGE

-30 °C to +70 °C  
-22 °F to +158 °F

### RELATED MATERIALS

#### TITLE

DSE402 MKII Installation Instructions  
DSE402 MKII Operator Manual  
DSE402 MKII Configuration Suite Lite Software Manual  
DSE813 USB Communications Adaptor Data Sheet

#### PART NO'S

053-087  
057-137  
057-138  
055-100

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