

# DSE332

## AUTO TRANSFER SWITCH MODULE

### FEATURES



The DSE332 is an Automatic Transfer Switch controller for genset and other applications. The module will monitor the voltage and frequency of the incoming AC mains (utility) supply and in the event of a failure, will issue a start command to the generator control system.

Once the generator is available and producing an output within limits, the DSE332 will control the transfer device and switch the load from the mains (utility) to the generating set.

Once the mains (utility) supply returns to within limits, the module will command a return to the mains (utility) supply and shut down the generator after a suitable cooling run. Various timing sequences are available to prevent nuisance starting on minor supply breaks.

The DSE332 supports many topologies and features include a clear, back-lit, LCD, 4-line, text display, showing system status and warnings and Red and Green LEDs indicating operational status.

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 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

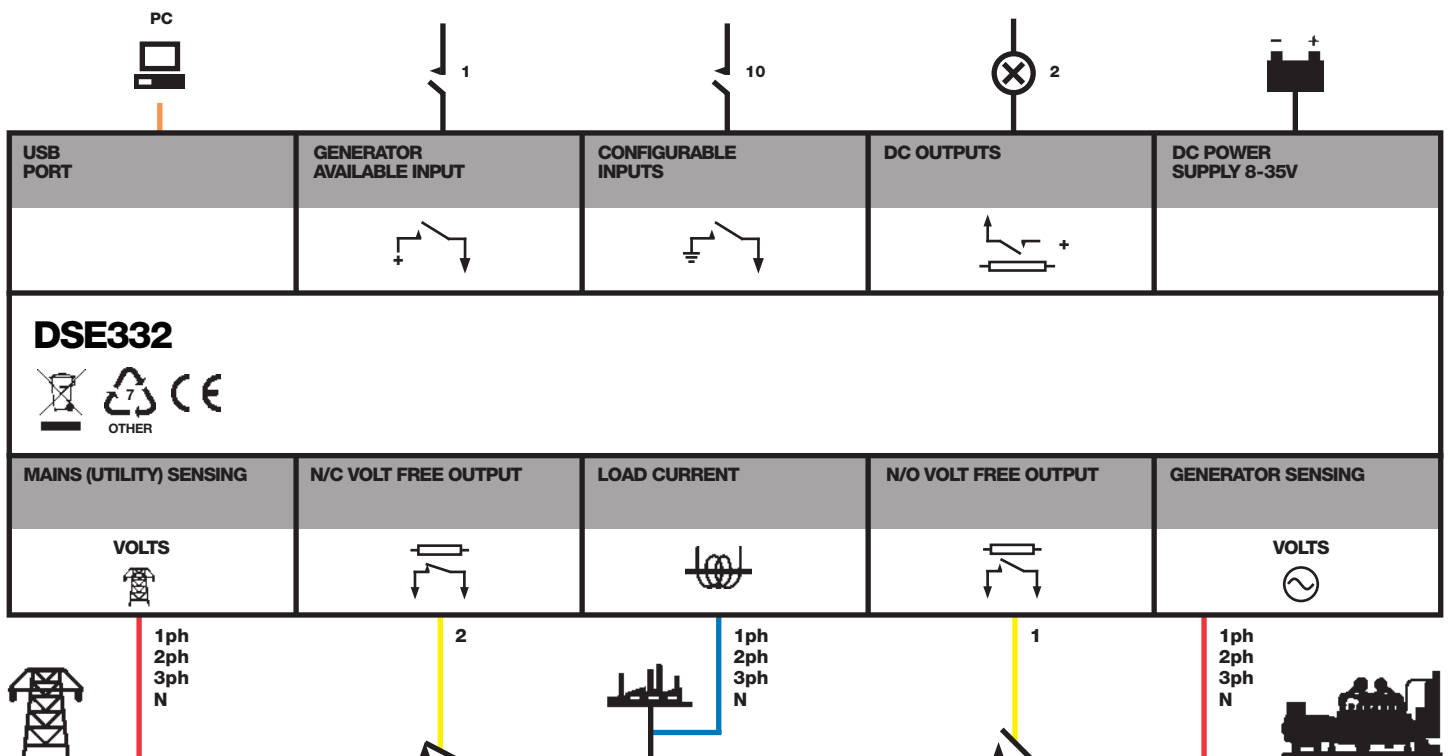
#### SHOCK

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



# DSE332

## AUTO TRANSFER SWITCH MODULE

### FEATURES



### KEY FEATURES

- Supports many topologies
- Automatic switch-over between supplies
- Check sync feature
- Real-time clock
- 10 configurable inputs
- 5 configurable outputs
- Event log (10)
- Configurable timers
- Automatic shutdown or warning when fault conditions are detected
- PC configuration
- Front panel configuration
- LED indicators
- Text LCD display
- External mains (utility) or genset failure inputs
- Auto start inhibit
- Load inhibit
- Manual restore to mains (utility)
- Optional current monitoring

### KEY BENEFITS

- Fully automatic monitoring and switch-over control minimises the effects of power disruptions
- Real-time clock provides accurate event information for easy maintenance diagnostics
- User-friendly set-up and button layout
- Will work with external synchroniser for seamless return to mains (utility)

### RELATED MATERIALS

#### TITLE

DSE332 Installation Instructions  
DSE332 Quick Start Guide  
DSE332 Operator Manual  
DSE332 Configuration Suite PC Manual  
DSE160 Self-Seeking Power Supply Data Sheet

#### PART NO'S

053-061  
057-110  
057-097  
057-106  
055-076

### 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

290 mA at 12 V, 170 mA at 24 V

#### MAXIMUM STANDBY CURRENT

100 mA at 12 V, 70 mA at 24 V

#### MAINS (UTILITY)

**VOLTAGE RANGE**  
15 V to 333 V AC (L-N)

**FREQUENCY RANGE**  
3.5 Hz to 75 Hz

#### OUTPUTS

##### OUTPUT A (MAINS/UTILITY)

Normally closed relay output  
8 A at 250 V AC

##### OUTPUT B (GENERATOR)

Normally open relay output  
8 A at 250 V AC

##### AUXILIARY OUTPUTS C & D

2 A DC at supply voltage

##### OUTPUT E (START)

Normally closed relay output  
8 A at 35 V DC

#### GENERATOR

**VOLTAGE RANGE**  
15 V to 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"

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