

# DSE8660

## AUTO TRANSFER SWITCH & MAINS CONTROL MODULE

### FEATURES



The DSE8660 is an easy-to-use single or multi-mains controller with automatic transfer switch capability. Designed to synchronise single or multiple DSE8610s with single or multiple mains (utility) supplies, the DSE8660 will automatically control the change over from mains (utility) to generator supply or run generators in synchronisation with the mains (utility) to provide no-break, peak lopping and peak shaving power solutions.

The module can indicate operational status and fault conditions on the LCD screen (multiple languages available), by illuminated LED, audible sounder and SMS messaging.

Comprehensive communications are also available via RS485 and RS232 for remote PC control and monitoring, and integration into building management systems. The comprehensive event log will record up to 250 events to facilitate maintenance.

An extensive number of fixed and flexible monitoring and protection features are included. Easy alteration of the sequences, timers and alarms can be made using the DSE PC Configuration Suite Software. Selected configuration is also available via the module's front panel.

With all communication ports capable of being active at the same time, the DSE8600 Series is ideal for a wide variety of demanding load share applications.

### KEY LOAD SHARE FEATURES:

- Peak lopping
- Sequential set start
- Manual voltage/frequency adjustment
- R.O.C.O.F. and vector shift
- Generator load demand
- Automatic hours run balancing
- Mains (Utility) de-coupling
- Mains (Utility) de-coupling test mode
- Bus failure detection
- Volts and frequency matching.

### 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

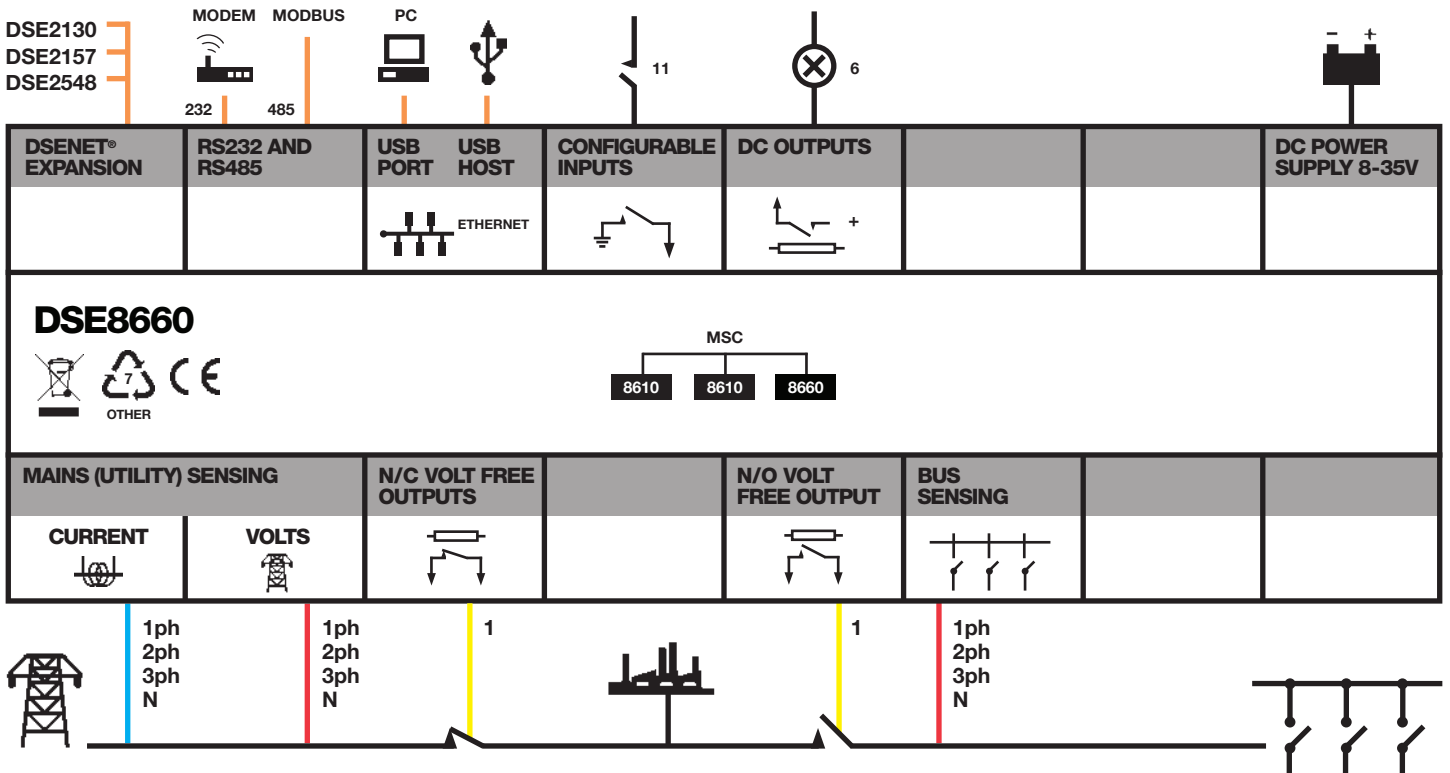
#### SHOCK

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

## COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF LOAD SHARE APPLICATIONS



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### FEATURES



### KEY FEATURES

- Configurable inputs (11)
- Configurable outputs (8)
- Voltage measurement
- Mains (utility) fail sensing
- Multiple mains (utility) monitoring
- Peak lopping
- Peak shaving
- RS232 & RS485 remote communications
- Modbus RTU
- Built-in PLC Functionality
- Multi event exercise timer
- Back-lit LCD 4-line text display
- Multiple display languages
- Automatic start/Manual start
- Audible alarm
- Fixed and flexible LED indicators
- Event log (250)
- Fault condition notification to a designated PC
- Front panel mounting

- PIN protected front panel configuration
- PC configuration
- Configurable alarms and timers
- Configurable start and stop timers
- SMS alert messaging

### KEY BENEFITS

- A single flexible solution for multiple applications
  - Ethernet monitoring
  - Built-in RS232 & RS485 can be used at the same time
  - DSENet connection for system expansion
  - High number of inputs and outputs
  - Worldwide Language Support
  - Configuration Suite PC Software via USB
  - USB Host\*
  - Data Logging & Trending\*
- \* To follow

### EXPANSION DEVICES

- DSE2548 LED Expansion Module
- DSE2130 Input Expansion Module
- DSE2157 Output Expansion Module
- DSE124 CAN/MSC Extender

### 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**  
 340 mA at 12 V, 160 mA at 24 V

**MAXIMUM STANDBY CURRENT**  
 160 mA at 12 V, 80 mA at 24 V

**MAINS (UTILITY) AND BUS VOLTAGE RANGE**  
 15 V to 333 V AC (L-N)

**FREQUENCY RANGE**  
 3.5 Hz to 75 Hz

**OUTPUTS**  
**OUTPUTS C & D**  
 8 A at 250 V AC (Volt free)

**AUXILIARY OUTPUTS E,F,G,H, I & J**  
 2 A DC at supply voltage

**DIMENSIONS**  
**OVERALL**  
 240 mm x 181 mm x 42 mm  
 9.4" x 7.1" x 1.6"

**PANEL CUT-OUT**  
 220 mm x 160 mm  
 8.7" x 6.3"

**MAXIMUM PANEL THICKNESS**  
 8 mm  
 0.3"

### RELATED MATERIALS

#### TITLE

DSE8660 Installation Instructions  
 DSE8660 Operator Manual  
 DSE8600 PC Configuration Suite Manual  
 DSE8610 Data Sheet

#### PART NO'S

053-070  
 057-120  
 057-119  
 055-083

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