

# DSE8680

## BUS-TIE CONTROLLER

### FEATURES



The DSE8680 module is designed to control a bus-tie breaker. The module manages the synchronising and check-sync across the breaker automatically, via the DSE MSC (Multi-set Communications) Link, when opening or closing the bus-tie breaker.

With all communication ports capable of being active at the same time, the DSE8680 is ideal for a wide variety of demanding load share applications.

The DSE8680 module has been designed to work with the DSE8610 and DSE8710 Load Share control modules which support up to 32 generators and 8 mains (utilities) to provide a stand alone, fully integrated solution without the need for PLC.

### 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  
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

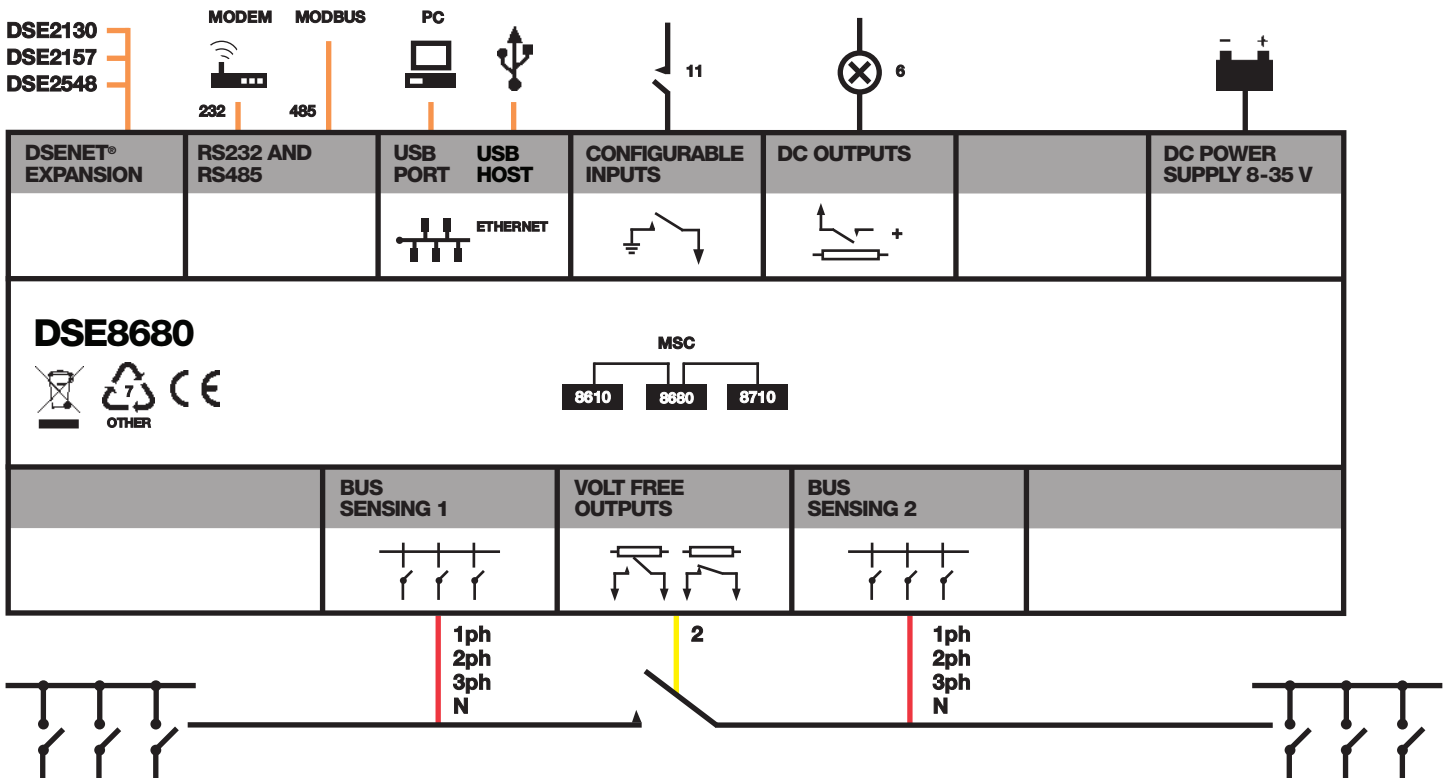
#### SHOCK

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 GEN-SET APPLICATIONS



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### KEY FEATURES

- Controls one bus-tie in a system containing DSE8610 and/or DSE8710 controllers.
- Connects to two DSE MSC links, one for 'bus 1' and another for 'bus 2'
- RS232 & RS485 remote communications
- Modbus RTU
- Back-lit LCD 4-line text display
- Automatic start/Manual start
- Audible alarm
- Event log (250)

- Fault condition notification to a designated PC
- PC configuration
- Configurable alarms and timers
- SMS alert messaging

### KEY BENEFITS

- Ethernet monitoring
- Automatic synchronising across the tie breaker
- Automatic control of the DSE MSC link when the breaker is opened/closed
- Instrumentation shows the status and measurements of both buses

- 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

### SPECIFICATION

#### DC SUPPLY

**CONTINUOUS VOLTAGE RATING**  
8 V to 35 V Continuous

**MAXIMUM OPERATING CURRENT**  
150 mA at 12 V, 80 mA at 24 V

**MAXIMUM STANDBY CURRENT**  
50 mA at 12 V, 30 mA at 24 V

#### BUS 1 AND BUS 2

**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 172 mm x 57 mm  
9.4" x 6.8" x 2.2"

#### PANEL CUTOUT

220 mm x 160 mm  
8.7" x 6.3"

#### MAXIMUM PANEL THICKNESS

8 mm  
0.3"

### RELATED MATERIALS

TITLE	PART NO'S
DSE8680 Installation Instructions	053-082
DSE8680 Operator Manual	057-130
DSE8680 Configuration Suite PC Software Manual	057-131
DSE8610 Data Sheet	055-083
DSE8700 Series Data Sheet	055-090

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