DSEGenset

DSE

DSE8810
COLOUR AUTO START LOAD SHARE MODULE

FEATURES

The DSE8810 is an easy-to-use, loadshare module, designed to synchronise and work within a loadshare system of up to 32 generators including electronic and non-electronic engines.

The DSE8810 monitors the generator and indicates operational status and fault conditions, automatically starting or stopping the engine on load demand or fault condition.

System alarms are annunciated on the LCD screen (multiple language options available), illuminated LED and audible sounder.

The event log will record 250 events to facilitate easy maintenance. An extensive number of fixed and flexible monitoring, metering and protection features are included as well as comprehensive communication and system expansion options.

Using the DSE PC Configuration Suite Software allows easy alteration of the operational sequences, timers and alarms. With all communication ports capable of being active at the same time, the DSE8810 is ideal for a wide variety of demanding load share applications.

KEY LOAD SHARE FEATURES:

- Sequential set start
- R.O.C.O.F. and vector shift
- Generator load demand
- Automatic hours run balancing
- Dead bus sensing
- Bus failure detection
- Direct governor and AVR control
- Volts and frequency matching
- kW and kV Ar load sharing

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

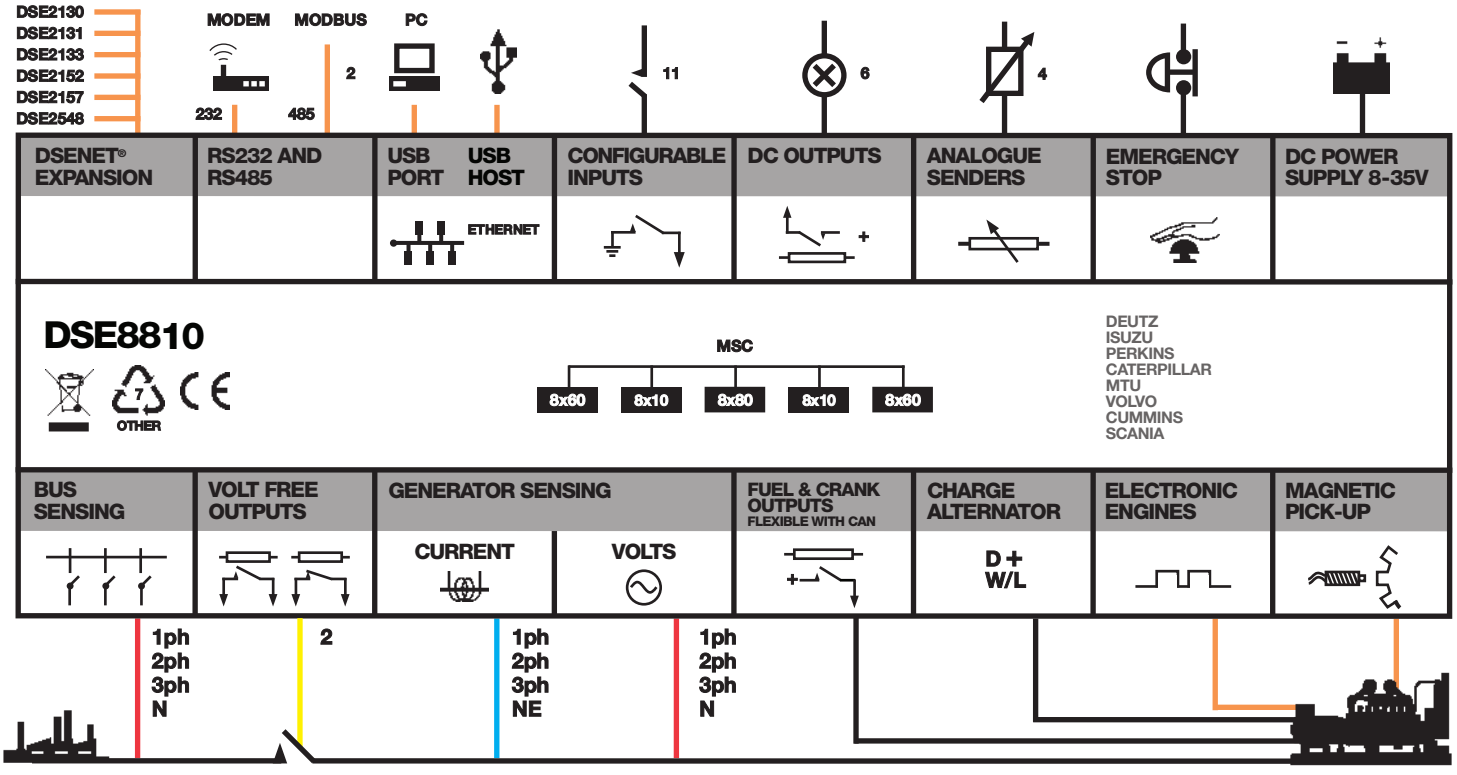
VIBRATION
BS EN 60068-2-6
Ten sweeps in each of three major axes
5Hz to 8Hz @ +/-7.5mm, 8Hz to 500Hz @ 2gn

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 LOAD SHARE APPLICATIONS



ISSUE 1

PENDING

DSEGenset

DSE

DSE8810
COLOUR AUTO START LOAD SHARE MODULE

FEATURES

KEY FEATURES

- Configurable inputs (11)
- Configurable outputs (8)
- Built-in governor and AVR control
- Comprehensive electrical protection
- Comprehensive loadshare capabilities
- RS232, RS485 & Ethernet remote communications
- Modbus RTU/TCP support
- Back-lit LCD graphical display
- Configurable display languages
- Audible alarm
- Reduced file transfer time
- Engine protection
- Fault condition notification to a designated PC
- Compatible with DSE8700 & DSE8600 Series
- Front panel editing with PIN protection
- Flexible sender inputs
- Configurable timers and alarms
- 3 configurable maintenance alarms
- Multiple date and time scheduler
- Configurable event log (250)
- Easy access diagnostic page
- CAN and Magnetic Pick-up/Alt. sensing
- Fuel usage monitor and low fuel alarms
- Manual fuel pump control
- “Protections disabled” feature
- kW overload protection
- Reverse power protection
- Power monitoring (kW h, kV Ar, kV A h, kV Ar h)
- Load switching (load shedding and dummy load outputs)
- Unbalanced load protection
- Independent Earth Fault trip
- USB connectivity
- Backed up real time clock
- Fully configurable via DSE Configuration Suite PC software
- Advanced SMS messaging (additional external modem required)
- Start & stop capability via SMS messaging
- Additional display screens to help with modem diagnostics
- DSENet® expansion compatible
- Integral PLC editor

KEY BENEFITS

- Dual processor for improved response
- RS232, RS485 & Ethernet can be used at the same time
- High number of inputs and outputs
- Worldwide language support
- Data logging & trending
- Harmonics display for clear monitoring*
- Modules can be integrated into building management systems (BMS)
- Licence-free PC software
- IP65 rating (with supplied gasket) offers increased resistance to water ingress
- PLC editor allows user configurable functions to meet specific application requirements

*Available soon

RELATED MATERIALS

TITLE	PART NO’S
DSE8810 Installation Instructions	053-137
DSE88xx Operator Manual	057-163
DSE88xx PC Configuration Suite Manual	057-164

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
600 mA at 12 V, 300 mA at 24 V

MAXIMUM STANDBY CURRENT
330 mA at 12 V, 160 mA at 24 V

CHARGE FAIL/EXCITATION RANGE
0 V to 35 V

OUTPUTS

OUTPUT A (FUEL)
15 A DC at supply voltage

OUTPUT B (CRANK)
15 A DC at supply voltage

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

AUXILIARY OUTPUTS E TO J
2 A DC at supply voltage

GENERATOR & BUS

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)

BUILT-IN GOVERNOR CONTROL

MINIMUM LOAD IMPEDANCE
1000Ω
Fully isolated

GAIN VOLTAGE
0 V to 10 V DC
Fully isolated

OFFSET VOLTAGE
+/- 10 V DC
Fully isolated

BUILT-IN AVR CONTROL

MINIMUM LOAD IMPEDANCE
1000Ω
Fully isolated

GAIN VOLTAGE
0 V to 10 V DC
Fully isolated

OFFSET VOLTAGE
+/- 10 V DC
Fully isolated

DIMENSIONS

OVERALL
245 mm x 184 mm x 50 mm
9.6” x 7.2” x 2”

PANEL CUTOUT
220 mm x 160 mm
8.7” x 6.3”

MAXIMUM PANEL THICKNESS
8 mm
0.3”

STORAGE TEMPERATURE RANGE
-40 °C to +85 °C

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Registered in England & Wales No.01319649
VAT No.316923457

055-116/03/12 (1)