

DSEPOWER[®] SHARING WITH SIMPLICITY



DSE8700 REAR MOUNTED LOAD SHARE UNIT

The DSE8700 is an easy-to-use, rear-mounted, multi-generator loadshare system, designed to synchronise up to 32 generators including electronic and non-electronic engines.

The module is available in 3 variants:

- DSE8710 Auto Start (this can also be programmed as a DSE8720 AMF or a DSE8760 Auto Mains Controller)
- DSE8720 Auto Mains Failure
- DSE8760 ATS/Auto Mains Controller

The modules are designed to work with independent front display screens which are connected via a data link up to a maximum distance of 1km. These must be ordered as a separate item. The DSE8700 monitors the

engine and indicates operational status and fault conditions, automatically starting or stopping the engine on load demand or fault condition. Failures are annunciated on the independent front screens (multiple language options available), illuminated LEDs 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 sophisticated 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 able to be active at the same time, the DSE8700 is ideal for a wide variety of demanding load share applications.

* To follow

LOAD SHARE FEATURES INCLUDE:

- Peak lopping
- Sequential set start
- Manual voltage/frequency adjustment
- ROCOF and vector shift
- Generator load demand
- Automatic hours run balancing
- Mains (Utility) de-coupling
- Dead bus sensing
- Mains (Utility) de-coupling test mode
- Bus failure detection
- Direct governor and AVR connections/controls
- Volts and frequency matching
- kW and kVAr 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 60068-2-1
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

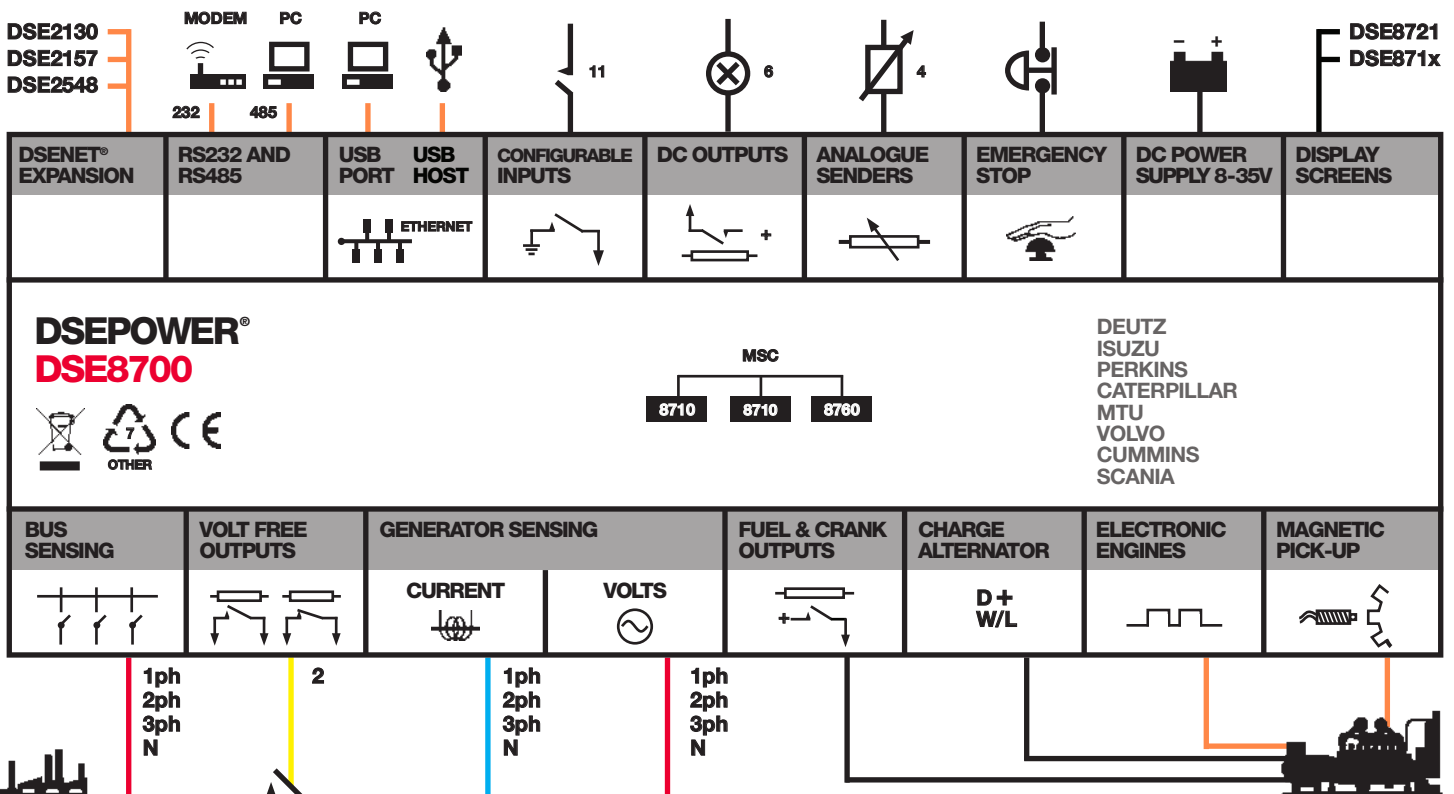
HUMIDITY

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

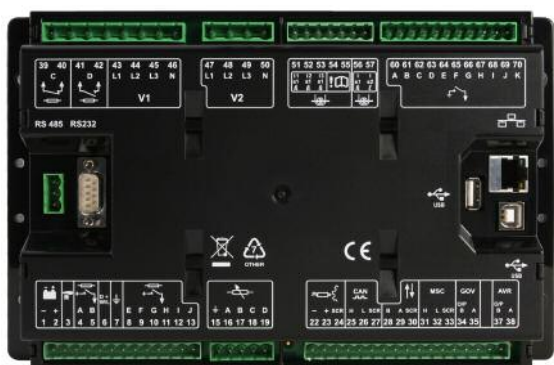
COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF LOAD SHARE APPLICATIONS



DSEPOWER[®] SHARING WITH SIMPLICITY



DSE8700 REAR MOUNTED LOAD SHARE UNIT



DSE8721
COLOUR REMOTE DISPLAY MODULE



DSE871X
MONO REMOTE DISPLAY MODULE

FEATURES

- Independent display screen options
- Configurable inputs (11)
- Configurable outputs (8)
- Voltage measurement
- Built-in governor and AVR control
- kW overload alarms
- Comprehensive electrical protection
- Magnetic pick-up
- Electronic engine capability
- RS232 & RS485 remote communications
- Modbus RTU
- Multi event exercise timer
- Automatic start/Manual start
- Event log (250)
- Engine protection

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

BENEFITS

- RS232 & RS485 can be used at the same time
- DSENet connection for system expansion
- PLC Functionality
- Auto Voltage Sensing
- Five Step dummy load support
- Five Step Load Shedding support
- High number of inputs and outputs
- Worldwide Language Support
- Configuration Suite PC Software

- Direct USB connection to PC
 - Ethernet monitoring*
 - USB Host*
 - Data Logging & Trending*
- * To follow

EXPANSION DEVICES

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

RELATED LITERATURE

- DSE 8700 Installation Instructions
- DSE8700 PC Configuration Suite Manual
- DSE8710 Manual
- DSE8760 Manual
- DSE8721 Colour Remote Display Module Data Sheet
- DSE871x Mono Remote Display Module Data Sheet
- DSE124 CANbus Extender Data Sheet

PART NO

- 053-073
- 057-127
- 057-124
- 057-125
- 055-084
- 055-084
- 055-082

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SPECIFICATION

DC SUPPLY

8V to 35V continuous

CRANKING DROPOUTS

Able to survive 0V for 50ms, providing supply was at least 10V before dropout and supply recovers to 5V. This is achieved without the need for internal batteries

MAXIMUM OPERATING CURRENT

460mA at 12V. 245mA at 24V

MAXIMUM STANDBY CURRENT

375mA at 12V. 200mA at 24V

ALTERNATOR INPUT RANGE

15V AC (L-N) to 333V AC (L-N) absolute maximum

ALTERNATOR INPUT FREQUENCY

50Hz - 60Hz at rated engine speed (Minimum: 15V AC L-N)

MAGNETIC PICK-UP VOLTAGE RANGE

0.5V to 70V RMS

MAGNETIC INPUT FREQUENCY

1Hz - 10,000 Hz

START RELAY OUTPUT

15A DC at supply voltage

FUEL RELAY OUTPUT

15A DC at supply voltage

AUXILIARY RELAY OUTPUTS

Six outputs 2A DC at supply voltage
Two outputs volt free 8A at 250V AC

CHARGE FAIL/EXCITATION RANGE

0V to 35V

BUILT IN GOVERNOR CONTROL

Fully Isolated
Minimum Load Impedance: 1000Ω
Offset Volts 0V - 5V DC
Range Volts +/- 0 - 5V

BUILT IN AVR CONTROL

Fully Isolated
Minimum Load Impedance: 1000Ω
Gain Volts 0V - 5V DC
Offset Volts +/- 5V DC

DIMENSIONS

240mm x 172mm x 57mm
9.4" x 6.8" x 2.2"