

DSE8700 SERIES

REAR MOUNTED LOAD SHARE MODULES

Used in conjunction with DSE remote displays

FEATURES



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

The module is available in 2 variants:

- DSE8710 Auto Start (this can also be programmed as a DSE8760 Auto Mains Controller)
- DSE8760 ATS/Auto Mains Controller (this can also be programmed as a DSE8710 Auto Start 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 Series monitors the system 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 independent front screens, 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 capable of being active at the same time, the DSE8700 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
- Dead bus sensing
- Mains (Utility) de-coupling test mode
- Bus failure detection
- Direct governor and AVR connections/controls
- 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 60068-2-1
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

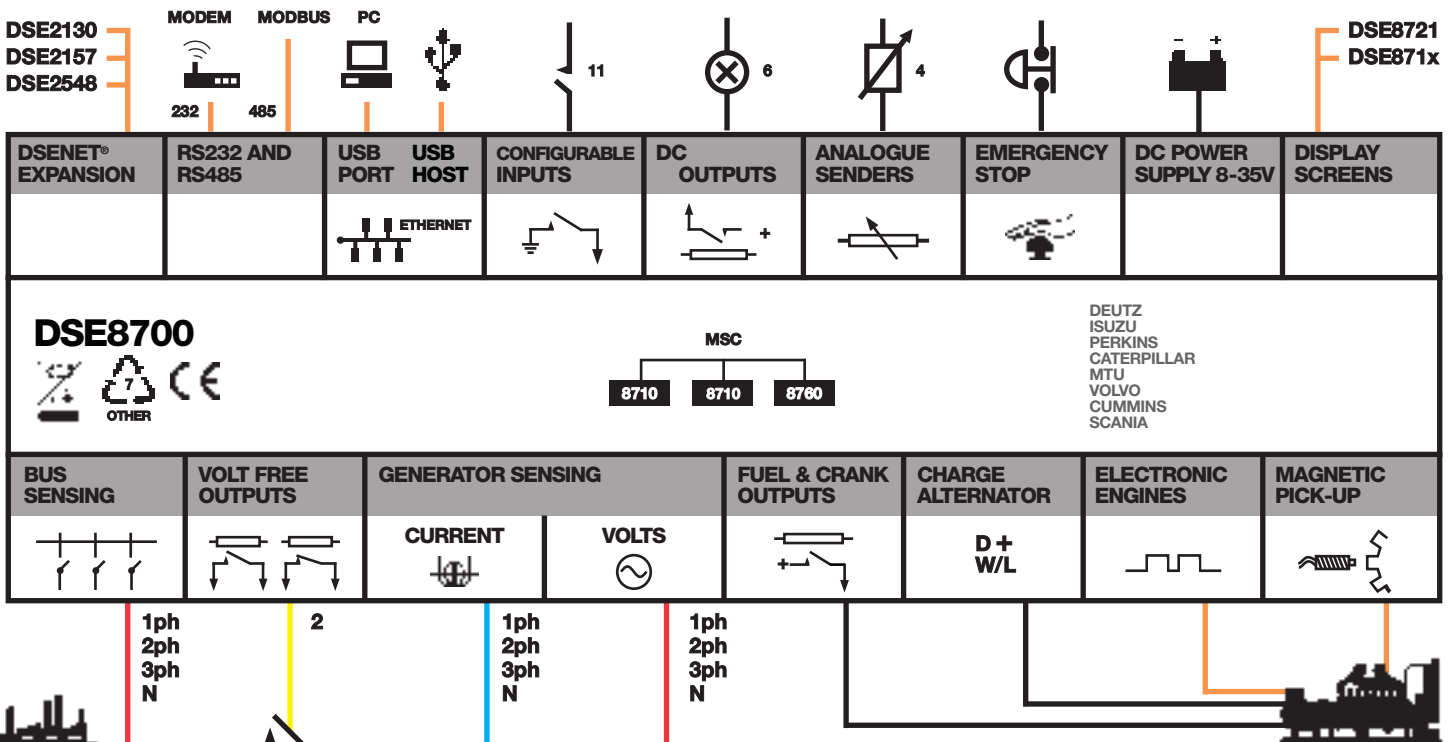
HUMIDITY

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



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DSE8721
Colour Remote Display Module



DSE871X
Standard Remote Display Module

KEY FEATURES

- Comprehensive loadshare capabilities
- 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/Alt. sensing
- Electronic engine capability
- RS232 & RS485 remote communications
- Modbus RTU & TCP
- PLC Functionality
- 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
- Compatible with DSE8600 Series

KEY BENEFITS

- RS232, RS485 & Ethernet 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

EXPANSION DEVICES

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

RELATED MATERIALS

TITLE

DSE8700 Installation Instructions
 DSE8710 Operator Manual
 DSE8760 Operator Manual
 DSE8700 PC Configuration Suite Manual
 DSE8721 Colour Remote Display Module Data Sheet
 DSE871x Mono Remote Display Module Data Sheet

PART NO'S

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

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 460 mA at 12 V, 245 mA at 24 V
MAXIMUM STANDBY CURRENT 375 mA at 12 V, 200 mA at 24 V
CHARGE FAIL/EXCITATION RANGE 0 V to 35 V
OUTPUTS
OUTPUT A (FUEL ON DSE8710) 15 A DC at supply voltage
OUTPUT B (CRANK ON DSE8710) 15 A DC at supply voltage
OUTPUTS C & D 8 A AC at 250 V AC (Volt free)
AUXILIARY OUTPUTS E,F,G 2 A DC at supply voltage
MAINS (UTILITY) & BUS (DSE8760 ONLY) VOLTAGE RANGE 15 V to 333 V AC (L-N)
FREQUENCY RANGE 3.5 Hz to 75 Hz
GENERATOR & BUS (DSE8710 ONLY) 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 240 mm x 172 mm x 57 mm 9.4" x 6.8" x 2.2"
STORAGE TEMPERATURE RANGE -40 °C to +85 °C

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