



# DSE**7210/20**

# **AUTO START & AUTO MAINS FAILURE CONTROL MODULES**

### **FEATURES**



The DSE7210 is an Auto Start Control Module and the DSE7220 is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, gen-set applications.

Monitoring an extensive number of engine parameters, the modules will display warnings, shutdown and engine status information on the back-lit LCD screen and illuminated LEDs. The DSE7220 will also monitor the mains (utility) supply.

Both modules are compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines and offer an extensive number of flexible inputs, outputs and engine protections so the system can be easily adapted to suit a wide range of application demands

Enhanced features include a realtime clock for improved event monitoring, the ability to display information in any language and a clear 4-line text display.

The modules can be easily configured using the DSE Configuration Suite PC software. Selected front panel editing is also available.

# ENVIRONMENTAL TESTING STANDARDS

### **ELECTRO-MAGNETIC COMPATIBILITY**

BS EN 61000-6-2 EMC Generic Immunity Standard for the Industrial Environment BS FN 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 maior axes 5 Hz to 8 Hz @ +/-7.5 mm, 8 Hz to 500 Hz @ 2 an

# 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

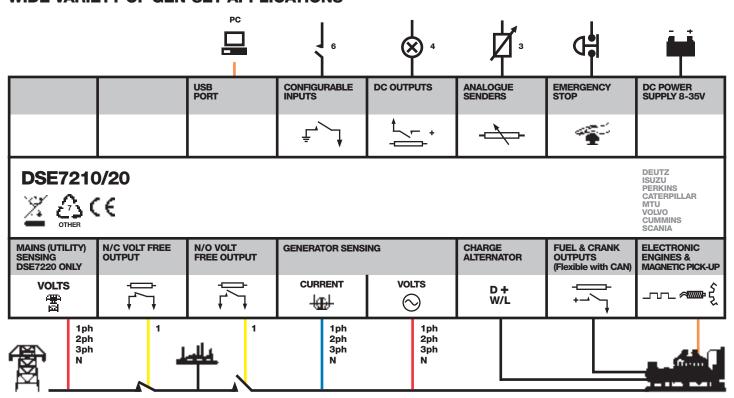
**SHOCK** BS EN 60068-2-27 Three shocks in each of three major axes 15 gn in 11 mS

# 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





















# DSE**7210/20**

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### **FEATURES**



### DSE**7220**

### DSF7210





# **KEY FEATURES**

- 4-Line back- lit LCD text display
- Five key menu navigation
- Front panel editing with PIN protection
- LED and LCD alarm indication
- Customisable status screens
- Power save mode
- 7 configurable inputs
- 8 configurable outputs
- Configurable timers and alarms
- 3 configurable maintenance alarms
- Multiple date and time scheduler
- Configurable event log (100)
- Control logic facilities
- Easy access diagnostic page
- CAN and Magnetic Pick-up/Alt. sensing
- Fuel usage monitor and low fuel alarms
- Charge alternator failure alarm

- · Manual speed control (on compatible CAN engines)
- Manual fuel pump control
- Engine exerciser
- "Protections disabled" feature
- KW Overload protection
- Power monitoring (kW h, kV Ar, kV A h, kV Ar h)
- Load switching (load shedding) and dummy load outputs)
- · Automatic load transfer (DSE7220 only)
- True dual mutual standby with load balancing timer (DSE7210
- USB connectivity
- · Backed-up real-time clock
- Fully configurable via DSE Configuration Suite PC software
- Configurable display languages
- Remote SCADA monitoring via DSE Configuration Suite PC software

# **KEY BENEFITS**

- 132 x 64 pixel ratio display for clarity
- Real-time clock provides accurate event logging
- Multiple date and time scheduler
- Set maintenance periods can be configured to maintain optimum engine performance
- Licence-free PC software
- IP65 rating (with supplied gasket) offers increased resistance to water ingress

### SPECIFICATION

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

# **CHARGE FAIL/EXCITATION RANGE**

**MAINS (UTILITY) DSE7220 ONLY** 

VOLTAGE RANGE 15 V - 333 V AC (L-N)

### FREQUENCY RANGE

3.5 Hz to 75 Hz

### **OUTPUTS**

### **OUTPUT A (FUEL)**

15 A DC at supply voltage

# **OUTPUT B (START)**

15 A DC at supply voltage

# **OUTPUTS C & D**

8 A 250 V (Volt free)

# **AUXILIARY OUTPUTS E,F,G,H**

2 A DC at supply voltage

# **GENERATOR**

# VOLTAGE RANGE

15 V - 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)

# 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

### **RELATED MATERIALS**

**DSE7210 Installation Instructions** DSE7220 Installation Instructions DSE7200/7300 Quick Start Guide DSE7200/7300 Operator Manual DSE7200/7300 Configuration Suite PC Manual

### **PART NO'S** 053-026

053-027 057-101 057-074 057-077

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