

DSE7110/20

AUTO START & AUTO MAINS FAILURE CONTROL MODULES

FEATURES



The DSE7110 is an Auto Start Control Module and the DSE7120 is an Auto Mains (Utility) Failure Control Module suitable for a wide variety of single, diesel or gas, gen-set applications.

Monitoring speed, frequency, voltage, current, oil pressure, coolant temperature and fuel level, the modules will display warnings, shutdown and engine status information on the back-lit LCD screen and illuminated LEDs.

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

Enhanced features include a real-time clock for improved event monitoring and a 4-line icon display.

The modules can be easily configured using the DSE Configuration Suite PC software. 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 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
5 Hz to 8 Hz @ +/-7.5 mm,
8 Hz to 500 Hz @ 2 gn

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

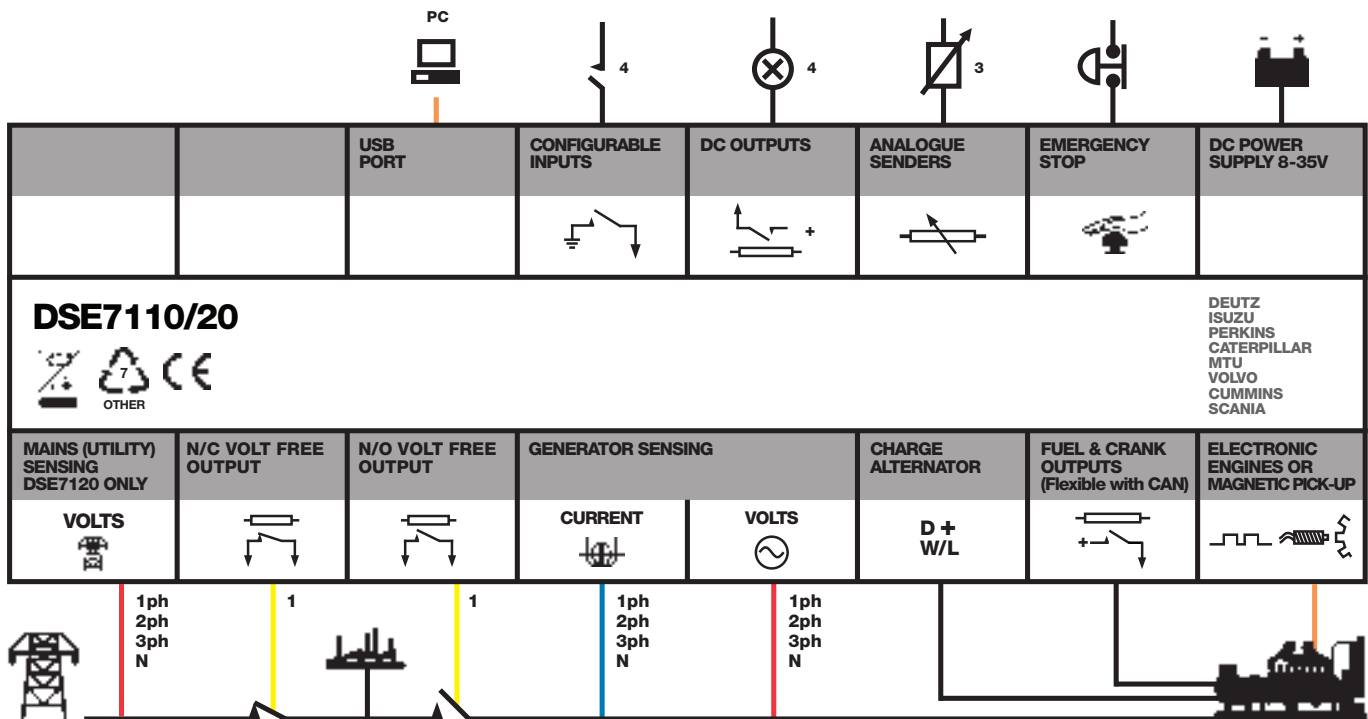
SHOCK

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



ISSUE 2



DSE7110/20

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FEATURES



DSE7110



DSE7120



KEY FEATURES

- Back-lit icon LCD display
- Five key menu navigation
- Front panel editing
- LED and LCD alarm indication
- Power Save mode
- 4 Digital inputs
- 3 Analogue inputs (2 fixed, 1 flexible)
- 6 configurable outputs
- Configurable timers and alarms
- Alternative configuration
- Event Log (5)
- CAN and Magnetic Pick up / Alt. sensing
- 3 Phase generator monitoring
- Current monitoring and protection
- 3 Phase Mains (Utility) monitoring (DSE7120 only)
- Test button (DSE7120 only)
- Automatic load transfer (DSE7120 only)

- Battery voltage monitoring
- Engine pre-heat
- Hours counter
- Comprehensive shutdown or warning on fault condition
- Backed-up real-time clock
- Fully configurable via DSE Configuration Suite PC software
- USB connectivity
- Remote SCADA monitoring via DSE Configuration Suite PC software

KEY BENEFITS

- Automatically transfers between mains (utility) and generator power (DSE7120 only)
- Real-time clock provides accurate event logging
- Hours counter provides accurate information for monitoring and maintenance periods

- User-friendly set-up and button layout
- Multiple engine parameters are monitored simultaneously
- Module can be configured to suit individual applications
- Compatible with a wide range of CAN engines
- Uses DSE Configuration Suite PC software for simplified configuration
- IP65 rating (with supplied gasket) offers increased resistance to water ingress
- Licence-free software

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. LEDs and backlight will not be maintained during cranking.

MAXIMUM OPERATING CURRENT

290 mA at 12 V, 140 mA at 24 V

MAXIMUM STANDBY CURRENT

75 mA at 12 V, 40 mA at 24 V

CHARGE FAIL/EXCITATION RANGE

0 V to 35 V

MAINS (UTILITY) DSE7120 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

8 mm
0.3"

RELATED MATERIALS

TITLE

DSE7110 Installation Instructions
DSE7120 Installation Instructions
DSE7100 Operator Manual
DSE7100 Configuration Suite PC Manual

PART NO'S

053-080
053-081
057-113
057-117