DSEGenset

DSE®

DSE710/20

AUTO START AND AUTO MAINS FAILURE CONTROL MODULES

FEATURES

The DSE710 is an Automatic Start Control Module suitable for a wide variety of single diesel or gas gen-set applications.

Monitoring an advanced list of engine parameters, the DSE710 will automatically shut down the engine, or indicate a warning, on detection of a fault condition, indicating the fault on the module's front panel LCD display or LED.

The module can be easly configured using the DSE810 interface and PC. Front panel editing is also available.

The module can be controlled from a PC that is located up to a maximum distance of 100 meters away.

The DSE720 is an Automatic Mains Failure Control Module incorporating all the features of the DSE710 plus the ability to monitor the mains (utility) supply, automatically controlling the switch-over to generator when the mains (utility) power fails.

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

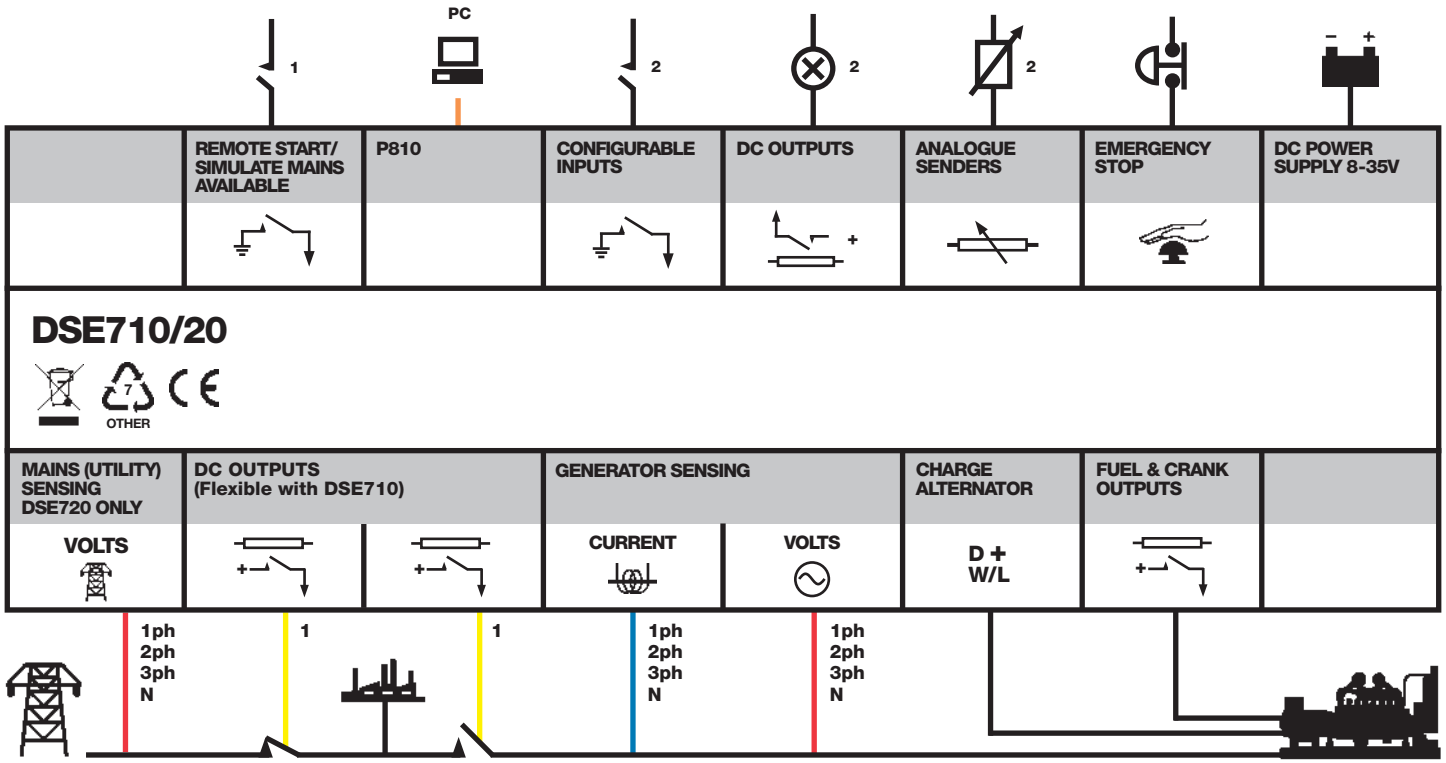
VIBRATION
BS EN 60068-2-6
Ten sweeps in each of three major axes
5 Hz to 8 Hz @ +/-7.5 mm,
8 Hz to 500 Hz @ 2 gn

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 4

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AUTO START AND AUTO MAINS FAILURE CONTROL MODULES

FEATURES

DSE710

DSE720

KEY FEATURES

- PC/Front panel configuration
- Digital and analogue inputs
- Digital outputs
- Automatic mains (utility) supply monitoring (DSE720 only)
- Automatic shutdown or warning when fault conditions are detected
- Automatic/Manual/Remote start
- Engine pre-heat
- Engine monitoring and protection features
- Protected Solid State (PSS) outputs
- Tamper-proof engine hours counter
- LED indicators
- Configurable timers
- Configurable outputs
- Configurable inputs
- Back-lit character/icon LCD display

KEY BENEFITS

- Automatic transfer between mains (utility) and generator power (DSE720 only)
- On-site module configuration and remote configuration (max 100 meters) using DSE PC software
- User-friendly set-up and button layout
- Multiple engine parameters are monitored simultaneously
- License-free PC 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.

MAXIMUM OPERATING CURRENT
180 mA at 12 V. 190 mA at 24 V

MAXIMUM STANDBY CURRENT
145 mA at 12 V. 150 mA at 24 V

OUTPUTS

AUXILIARY
Solid state
2.4 A DC at supply voltage

FUEL/START
Solid state
3.4 A DC at supply voltage

GENERATOR C.T.
5 A secondary 0.5 VA

GENERATOR INPUT RANGE
35 V(L-N) to 333 V AC(L-N) absolute maximum
50 Hz - 60 Hz (min 15 V AC)

MAINS (UTILITY) SENSING INPUT RANGE (DSE720 only)
35 V(L-N) to 333 V AC (L-N)
50 Hz - 60 Hz (min 15 V AC)

DIMENSIONS

OVERALL
209 mm x 146 mm x 30.3 mm
8.2” x 5.7” x 1.2”

PANEL CUT-OUT
182 mm x 137 mm
7.2” x 5.4”

MAXIMUM PANEL THICKNESS
8 mm
0.3”

RELATED MATERIALS

TITLE	PART NO’S
DSE710 Installation Instructions	053-013
DSE720 Installation Instructions	053-005
DSE710 Operator Manual	057-066
DSE720 Operator Manual	057-001
DSE700 PC Software Manual	057-002

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