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DSE

DSE7310 MKII GEN-SET CONTROLLER

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TEKSAN's DSE7310 MKII is an advanced Auto Start Control Module suitable for variety of single, diesel of 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, illuminated LEDs, remote PC and via SMS text alerts (with external modem).

The module includes USB, RS232 and RS485 ports as well as dedicated DSENet® terminals for system expansion. It is compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines and offer an extensive number of flexible inputs, outputs and extensive engine protections so the system can be easily adapted to meet the most demanding industry requirements.

The extensive list of features includes enhanced event and performance monitoring, remote communications & PLC functionality. Dual mutual standby is now available on the DSE7310 MKII using RS232 or RS485 communications. This provides for a simpler and more convenient installation with more advanced features such as true engine hours balancing.

The module can be easily configured using the **non-proprietary DSE Configuration Suite PC software.** Selected front panel editing is also available.

SPECIFICATIONS			
DC SUPPLY **CONTINUOUS VOLTAGE RATING** 8 V to 35 V Continuous 5 V for upto 1 minute	**MAXIMUM OPERATING CURRENT** 510 mA at 12 V, 240 mA at 24 V **MAXIMUM STANDBY CURRENT** 330 mA at 12 V, 160 mA at 24 V **CHARGE FAIL/EXCITATION RANGE** 0 V to 35 V	**MAGNETIC PICKUP** **VOLTAGE RANGE** +/- 0.5 V to 70 V **FREQUENCY RANGE** 10,000 Hz (max)	**DIGITAL INPUTS A TO H** Negative switching **ANALOGUE INPUTS A & F** Configurable as: Negative switching digital input 0 V to 10 V sensor / 4 mA to 20 mA sensor Resistive sensor
CRANKING DROPOUTS Able to survive 0 V for 100 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.	**GENERATOR & MAINS (UTILITY)** **VOLTAGE RANGE** 15 V to 415 V AC (Ph to N) 26 V to 719 V AC (Ph to Ph) **FREQUENCY RANGE** 3.5 Hz to 75 Hz	**OUTPUTS** **OUTPUT A & B (FUEL & START)** 15 A DC at supply voltage **OUTPUTS C & D** 8 A AC at 250 V AC (Volt-free)	**AUXILIARY OUTPUTS E, F, G, H, I & J** 2 A DC at supply voltage **ANALOGUE INPUTS B, C, D & E** Configurable as: Negative switching digital input Resistive sensor
DIMENSIONS **OVERALL** 245 mm x 184 mm x 51 mm 9.6" x 7.2" x 2.0" **PANEL CUT-OUT** 220 mm x 160 mm (8.7" x 6.3")	**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	**TEMPERATURE** BS EN 60068-2-1 Ab/Ae Cold Test -30 ºC BS EN 60068-2-2 Bb/Be Dry Heat +70 ºC	**HUMIDITY** BS EN 60068-2-30 Db Damp Heat Cyclic 20/55 ºC at 95% RH 48 Hours BS EN 60068-2-78 Cab Damp Heat Static 40 ºC at 93% RH 48 Hours
STORAGE TEMPERATURE RANGE -40°C to +85°C -40 °F to +185 °F **OPERATING TEMPERATURE RANGE** -30°C to +70°C -22 °F to +158 °F	**ELECTRICAL SAFETY** BS EN 60950 Safety of Information Technology Equipment, including Electrical Business Equipment	**VIBRATION** BS EN 60068-2-6 Ten sweeps in each of three major axes 5 Hz to 8 Hz at +/-7.5 mm, 8 Hz to 500 Hz at 2 gn	**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.

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DSE7310 MKII AUTO START CONTROL MODULE

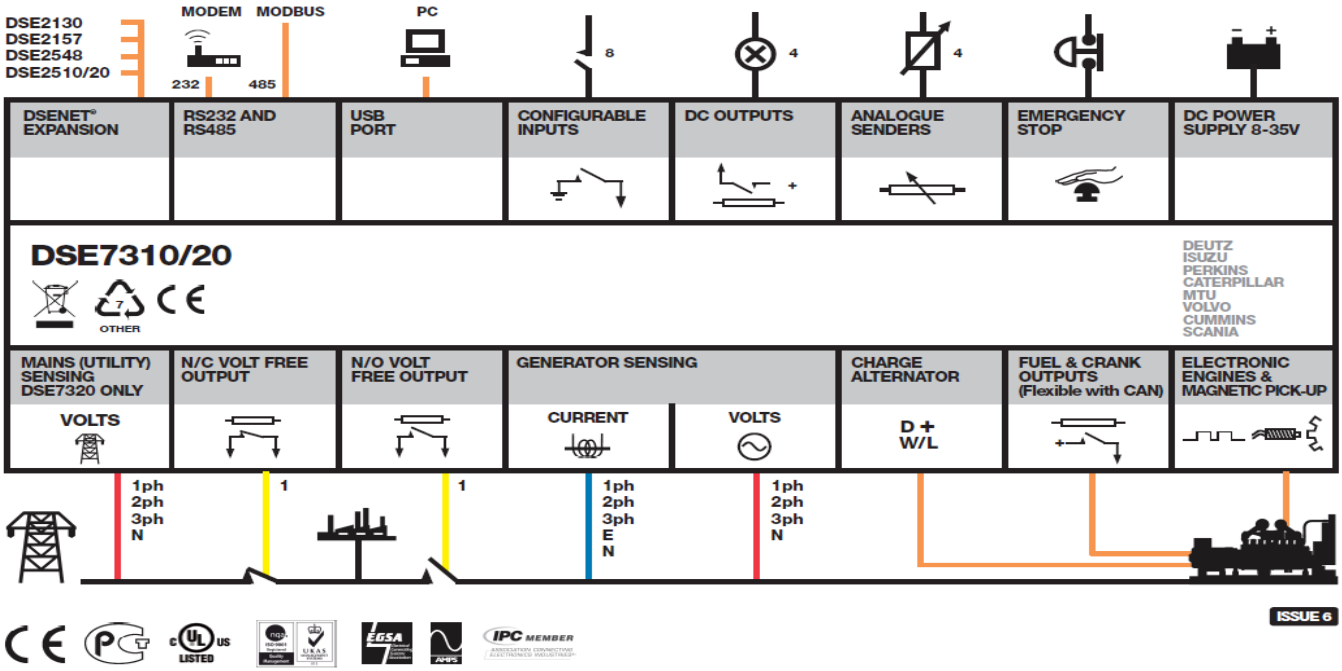
KEY FEATURES

- Configurable power-up mode
- MPU fail delay
- Enhanced graphical user interface
- Drag & drop advanced PLC editor
- MSC ID within PLC GenComm override
- 4-Line back-lit LCD text display
- Multiple Display Languages
- Five key menu navigation
- LCD alarm indication
- Heated display option available
- Customisable power-up text and images
- DSENet expansion compatibility
- Data logging facility
- Internal PLC editor
- Protections disable feature
- Fully configurable via PC using USB, RS232 & RS485 communication
- Front panel configuration with PIN protection
- Power save mode
- 3 phase generator sensing and protection
- Generator current and power monitoring (kW, kvar, kVA, pf)
- kW and kvar overload and reverse power alarms
- Over current protection
- Unbalanced load protection
- Independent earth fault protection
- Breaker control via fascia buttons
- Fuel and start outputs configurable when using CAN
- 6 configurable DC outputs
- 2 configurable volt-free relay outputs
- 6 configurable analogue/digital inputs
- Support for 0 V to 10 V & 4 mA to 20 mA sensors
- 8 configurable digital inputs
- Configurable 5 stage dummy load and load shedding outputs
- CAN, MPU and alternator frequency speed sensing in one variant
- Real time clock
- Manual and automatic fuel pump control
- Engine pre-heat and post-heat functions
- Engine run-time scheduler
- Engine idle control for starting & stopping
- Fuel usage monitor and low fuel level alarms
- Simultaneous use of RS232 and RS485 communication ports
- True dual mutual standby using RS232 or RS485 for accurate engine hours balancing.
- MODBUS RTU support with configurable MODBUS pages.
- Advanced SMS messaging (additional external modem required)
- Start & stop capability via SMS messaging
- 3 configurable maintenance alarms
- Compatible with a wide range of CAN engines, including tier 4 engine support
- Uses DSE Configuration Suite PC Software for simplified configuration
- License-free PC software
- IP65 rating (with supplied gasket) offers increased resistance to water ingress
- Modules can be integrated into building management systems (BMS) using MODBUS RTU

KEY BENEFITS

- Automatically transfers between mains (utility) and generator (DSE7320 MKII only) for convenience.
- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout for ease of use
- Multiple parameters are monitored & displayed simultaneously for full visibility
- The module can be configured to suit a wide range of applications for user flexibility
- PLC editor allows user configurable functions to meet user specific application requirements.

COMPREHENSIVE FEATURE LIST TO SUIT A WIDE VARIETY OF GEN-SET APPLICATIONS



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