STANDARD SPECIFICATIONS

Fully Packaged Kubota Generator Includes:

- Powered by Kubota diesel engine
- Stamford Newage alternator (Leroy Somer available)
- Deepsea 5220 Microprocessor control panel, Digital
- 3 pole MCB, Main Line Circuit Breaker, output rated
- Incorporated fuel tank (50 to 10,000Gal available)
- 12V Varta battery rack and cables
- 12V Engine Charge alternator
- 12 Lead Single bearing alternator IP23, insulation class H
- Radiator for wiring T° of 50°C [122°F] with mechanical fan
- Mechanically welded chassis with anti-vibration isolators
- Dry type air filter, Fuel filter and Oil filter elements installed
- Soundproof and Weatherproof enclosures available
- Each unit prototype and individually load bank tested

Diesel Genset Main Technical Data

<table>
<thead>
<tr>
<th>Model</th>
<th>Tank (L)</th>
<th>Sound Level (dB(A))</th>
<th>kVA</th>
<th>kW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>ESP</td>
<td>PRP</td>
</tr>
<tr>
<td>PK11S6</td>
<td>24</td>
<td>57.8</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td>10</td>
</tr>
</tbody>
</table>

KUBOTA Engine, 1800RPM

<table>
<thead>
<tr>
<th>Model</th>
<th>Bore/ stroke (mm)</th>
<th>Cyl.</th>
<th>Asp.</th>
<th>Gov.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1105-BG</td>
<td>78/78.4</td>
<td>3L</td>
<td>NA</td>
<td>M</td>
</tr>
</tbody>
</table>

1) Sound level measurement at 7-meter distance from generator
2) Ambient reference conditions: 1,000 m bar, 27°C, 30% relative humidity. Rating according to ISO 3046 and 8528.
3) Available in the following voltages: 240/120V.
4) ESP: Standby Power Standby duty, operation under variable load, without over load.
   PRP: Prime Power-Continuous duty operation, under variable load 24/24h-10% over load permissible 1 hour/12 hours.

Reliable Performance

Voltage Regulation
Voltage regulation maintained within ±0.5% as follows:
- Between 0.8 and 1.0 lagging and unity, From no load to full load
- At speed droop variation up to 4.5%

Frequency Adjustable Ratio
- Load from 0-100%, within 1.0% (electric regulator), within 4.5% (mechanical regulator) Frequency Undulation
- Load from 0-100%, Frequency undulation within 0.25%
- No load wire volts max undulation ratio within 1.8%

Effect factor of telecom
- TIF better than 50, THF to BS4999 Part 40 better than 2%

Electromagnetism
- In compliance with BS800 and VDE levels G and N

Conforms To
ISO3046, ISO8528, BS4999, BS5514, BS5000PT99, AS1359, IEC34
UTE5100, VDE0530
ISO9001:2000
Kubota, a leading supplier of reliable diesel engines, introduces the convenient One Side Maintenance type E-TVCS engines.

E-TVCS (Three Vortex Combustion System)
Kubota’s highly efficient combustion system, located in a specially designed piston with a valve recess and a fanshaped concave, produces an ideal air/fuel mixture by creating 3 vortexes in the combustion chamber. This results in a better cross flow of air and exhaust gas, lower intake temperature and improved combustion efficiency.

High in output, low in fuel consumption
E-TVCS superb combustion system not only improved the power output, but it has also reduced the engine’s fuel consumption.

Lower noise level
Noise levels are held to an unprecedented low level thanks to the E-TVCS, an offset piston with the standard built-in steel strut, and the increase rigidity of the crank and gear cases.

Warranty
Excellent service access further improves maintenance and support is provided by a worldwide network of 1000 distributors and dealers.

STAMFORD NEWAGE GENERATOR
STAMFORD NEWAGE, owned by Cummins Generator Technologies, has a long history of producing high-quality reliable products for the power generation market. Their portfolio of high quality generator ends is recognized as an industry standard.

Alternator Technical Data

- Brushless, self exciting
- Class ‘H’ insulation
- Standard degree of protection is IP23
- Self regulating
- With fan cooling
- Resist humid grease
- AC excitation, rotating rectification tube
- Stator grease insulation covered
- Rotator and excitation high polymer
- Resist the corruption of oil and acid
- Rotator balance is in accordance with BS5625 standard 12.5
- High-quality lubrication sealed long-time bearing
- Rotator silicon steel close tight
Kubota Engine
Stamford Alternator

PK11S6S KUBOTA DIESEL GENERATOR

CONTROL SYSTEMS

DEEPSEA 5220 CONTROL (DIGITAL)

The DSE5220 is an Automatic Mains Failure Control Module designed to monitor a mains (utility) supply and automatically start and stop diesel and gas generating sets that include non electronic engines. Upon detection of a mains (utility) failure the module automatically starts the generating set. Once the mains power has been restored the module instructs the generating set to stop. The module also provides excellent engine monitoring and protection features:

1. Automatic engine start/stop
2. Engine monitoring and protection
3. Breaker control
4. Generator protection
5. Automatic Mains Failure (ATS / AMF)

Optional applications:
6. RS232 or RS485 communications capabilities for linking to a PC, sending SMS messages and interfacing with new and existing building management systems.

<table>
<thead>
<tr>
<th>Standard functions</th>
<th>Shutdown</th>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Control</td>
<td>Loss of Speed Signal</td>
<td>Alternator Under / Over Voltage</td>
</tr>
<tr>
<td>Generator Monitoring</td>
<td>Alternator Under / Over Voltage</td>
<td>Alternator Under/ Over Frequency</td>
</tr>
<tr>
<td>Generator Protection</td>
<td>Mains Under / Over Voltage</td>
<td>Mains Under / Over Frequency</td>
</tr>
<tr>
<td>Engine Monitoring</td>
<td>Mains Under/ Over Frequency</td>
<td>Under / Over Speed</td>
</tr>
<tr>
<td>Clear Text Display</td>
<td>Under / Over Frequency</td>
<td>Low Oil Pressure</td>
</tr>
<tr>
<td></td>
<td>Low Oil Pressure</td>
<td>High Engine Temperature</td>
</tr>
<tr>
<td></td>
<td>High Engine Temperature</td>
<td>Phase Sequence Electrical (Option)</td>
</tr>
<tr>
<td></td>
<td>Phase Sequence Electrical (Option)</td>
<td>Earth Fault (Option)</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>

PLC-702 CONTROL SYSTEM (ANALOG)

The PLC702 is an Automatic Mains Failure Control Module specialized for Residential, Portable and Telecoms applications. Its simplicity and low cost make it an ideal solution for a wide range of applications.

**Standard Functions**

- Manual Engine Control Module
- Low Oil Pressure
- High Engine Temperature
- Auxiliary Shutdown
- Overspeed Protection
- Protection hold-off timer
- Charge Failure warning
**Kubota Engine Stamford Alternator**

**PK11S6S KUBOTA DIESEL GENERATOR**

**GENERATOR OPTIONS AND ACCESSORIES**

**ENCLOSURES**

- Protect your stationary and mobile generator against bad weather, theft and unauthorized use
- Sound attenuating and fire retardant foam or fiberglass panels provide excellent noise reduction
- Critical class silencer and flexible exhaust connector installed inside the canopy
- High gauge electro zinc coated steel with a polyester powder coat for maximum corrosion resistance
- Large lockable doors allow convenient access for all maintenance and service items
- Single point lifting hook fixed to the generator steel frame
- Recessed emergency stop button accessible outside the enclosure
- Cooling air discharge with a vertical air outlet grille. Redirects cooling air up and above enclosures to reduce noise ambient

**WEATHER PROOF / SOUND ATTENUATED**

**AUTOMATIC TRANSFER SWITCHES (ATS/AMF)**

30 - 3000 AMP, ASCO SERIES 165 & SERIES 300

- With a Series 300 transfer switch, you get a product backed by ASCO Power Technologies, the industry leader responsible for virtually every major technological advance in the industry
- True double-throw operation: The single solenoid design is inherently interlocked & prevents contacts from stopping between sources or from being in contact with both sources at the same time
- Easy-to-read flush-mounted control and display panel provides LED indicators for switch position and source availability. It also includes test and time-delay bypass switches as standard features
- Standard engine exerciser for weekly automatic testing of diesel generator with or without load
- UL 1008 listed for Transfer Equipment and CSA C22.2 listed for automatic transfer switches
- NFPA 110 for Emergency & Standby Power & the National Electrical (NEC) Articles 700, 701 and 702
- Adjustable time-delay feature prevents switch from being activated due to momentary power outages

**EXTENDED RUNTIME/CAPACITY FUEL TANKS**

25 - 5500 GAL, UL142 LISTED MODELS AVAILABLE

- Available in single-wall and double-wall design
- UL listed. Secondary containment tank meeting UL 142 tank requirements (optional)
- NFPA compliant. Designed to comply with the installation standards of NFPA 30 and NFPA 37 (optional)
- Emergency pressure relief vents. Meets UL requirements; ensures adequate venting of inner and outer tank under extreme pressure and/or emergency conditions
- Electrical stub-up area with removable end channel
- Normal vent • Inner tank emergency vent sized to UL 142 specifications
- Direct reading mechanical fuel gauge • Fuel in basin switch
- Satin black paint finish

**DIMENSIONS AND WEIGHT**

<table>
<thead>
<tr>
<th>OPEN VERSION</th>
<th>DIMENSIONS mm (in)</th>
<th>NET WEIGHT kg (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TYPE B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENCLOSED VERSION</th>
<th>DIMENSIONS mm (in)</th>
<th>WEIGHT kg (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE A</td>
<td>1680 x 975 x 1335</td>
<td>680 (1496)</td>
</tr>
</tbody>
</table>

*Type A frame features Control panel and Breaker installed on top of the alternator

*Type B frame features Control panel and Breaker installed in front of the alternator