



**LBE POWERING YOUR WORLD**  
anytime. anywhere

**K-50**

**POWERED BY KUBOTA**



**POWERED BY KUBOTA**



Diesel generator set



60Hz



Water-cooled



Three Phase

| Model         | K-50 |    |
|---------------|------|----|
| Standby Power | kVA  | 55 |
|               | kW   | 44 |
| Prime Power   | kVA  | 50 |
|               | kW   | 40 |
| Frequency     | Hz   | 60 |

**RATINGS:** All three-phase units are rated at 0.8 power factor. **Standby ratings:** Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. **Prime power ratings:** Prime power ratings apply to installations where utility power is unavailable or unreliable. At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528/1, overload power in accordance with ISO-3046/1, BS 5514, AS 2789, and DIN 6271. For limited running time and base load ratings

Kubota (Japan) enjoys a strong reputation in the global market for its excellent compact, lightweight, high-output engines. Kubota is the first company in the world to obtain certification for general-purpose engines under the California Air Resources Board (CARB) emissions regulations, Kubota's engines are renowned for their world-class environmental performance. Kubota is also acknowledged for its engineering capabilities in adapting engines to different applications.



3473 As Sayyidah Khadijah Street – 6461 Al Faisaliyah District  
23441 Jeddah, Kingdom Of Saudi Arabia

C.R. 7023514651  
VAT No. 310940679600003  
Phone 0530371038  
E-mail INFO@LBE-KSA.COM  
Website WWW.LBE-KSA.COM

٣٤٧٣ شارع السيدة خديجة – ٦٤٦١ حي الفيصلية  
٢٣٤٤١ جدة، المملكة العربية السعودية  
السجل التجاري ٧٠٢٣٥١٤٦٥١  
الرقم الضريبي ٣١٠٩٤٠٦٧٩٦٠٠٠٣  
الهاتف ٠٥٣٠٣٧١٠٣٨  
بريد الكتروني INFO@LBE-KSA.COM  
موقع الكتروني WWW.LBE-KSA.COM



**LBE POWERING YOUR WORLD**  
anytime. anywhere

**K-50**

**POWERED BY KUBOTA**



| <b>Make &amp; Model</b>                       | <b>KUBOTA 3800-T-DI-E2BG</b> |            |     |
|-----------------------------------------------|------------------------------|------------|-----|
| Cylinders & Arrangement                       | 4; Vertical in-line          |            |     |
| Bore & Stroke (mm)                            | 100 x 120                    |            |     |
| Induction system                              | Turbo Charged                |            |     |
| Combustion                                    | Direct injection             |            |     |
| Cycle                                         | 4 stroke                     |            |     |
| Compression ratio                             | 21:8                         |            |     |
| Cooling System                                | Water cooled                 |            |     |
| Displacement                                  | 3.769 liters                 |            |     |
| Lube oil capacity                             | 13.2 liters Max              |            |     |
| Coolant capacity                              | 9 liters                     |            |     |
| Standard governor                             | Electronic                   |            |     |
| Engine Speed                                  | 1800 rpm                     |            |     |
| Fuel Consumption (L/H) @ 100% Load            | 11.8                         | @ 50% Load | 6.7 |
| Fuel Consumption L/H) @ 75% Load              | 9.0                          | @ 25% Load | 4.9 |
| Radiator Cooling Air Flow (m <sup>3</sup> /s) | 1.49                         |            |     |
| Emissions regulations                         | EPA / CARB Tier 2            |            |     |
| Exhaust temperature °C (max)                  | 500                          |            |     |
| Max exhaust gas flow (m <sup>3</sup> /min)    | 10.7                         |            |     |
| Max. allowed back pressure (kPa)              | 7.1                          |            |     |

The above performance data are valid as per the following specs:

- Diesel Fuel is according to BS2869 Class A2 or equivalent.
- Lubricating oil is according to Grade SAE 15W-40 API CI4.
- The coolant should be 50% antifreeze and 50% fresh water.



### Alternator

|                                                                                     |                                            |
|-------------------------------------------------------------------------------------|--------------------------------------------|
| Type                                                                                | 4-Pole, Rotating-Field                     |
| Exciter type                                                                        | Brushless, Permanent-Magnet, Pilot Exciter |
| Voltage regulator                                                                   | Solid-State, Volts/Hz                      |
| Insulation                                                                          | NEMA MG1, Class H                          |
| Material                                                                            | Synthetic, Nonhygroscopic                  |
| Temperature rise                                                                    | 130°C, 150°C Standby                       |
| Bearing: quantity, type                                                             | 1, Sealed                                  |
| Coupling                                                                            | Flexible Disc                              |
| Amortisseur windings                                                                | Full                                       |
| Rotor balancing                                                                     | 125% 60 Hz, 150% 50 Hz                     |
| Voltage regulation, no-load to full-load (with < 0.5% drift due to temp. variation) | 3-Phase Sensing, $\pm 0.25\%$              |
| One-step load acceptance                                                            | 100% of Rating                             |
| Unbalanced load capability                                                          | 100% of Rated Standby                      |

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the generator field.
- Self-ventilated and drip-proof construction.
- Superior voltage waveform from two-thirds pitch windings and skewed stator.
- Digital solid-state volts-per-hertz voltage regulator with  $\pm 0.25\%$  no-load to full-load regulation.
- Brushless alternator with brushless pilot exciter for excellent load response.

### Controller



Audiovisual annunciation with NFPA 110 Level 1 capability. Programmable microprocessor logic and digital display features. Safeguard circuit protection standard. 12- or 24-volt engine electrical system capability. Remote start, remote annunciation, and remote communication options. Refer to M6-46 for additional controller features and accessories

### 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
- Support for up to three remote display units
- 9 configurable inputs
- 8 configurable outputs
- Flexible sender inputs
- Configurable timers and alarms
- 3 configurable maintenance alarms
- Multiple date and time scheduler
- Configurable event log (250)
- Control logic facilities
- Easy access diagnostic page
- CAN and Magnetic Pick-up / Alt. Sensing
- Fuel usage monitor and low fuel alarms
- Charger alternator failure alarm
- Manual speed control
- Manual fuel pump control
- Engine exerciser
- "protections disabled" feature
- kW overload protection
- Power monitoring
- Load switching (load shedding and dummy load outputs)
- Automatic load transfer
- Unbalanced load protection
- Independent Earth Fault trip
- USB connectivity
- Backed up real time clock
- Configurable display languages
- User selectable RS232 and RS485 communications
- SMS Messaging (additional external modem required)
- Additional display screens to help with modem diagnostics
- Integral PLC editor

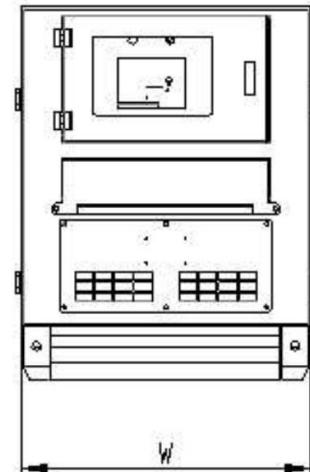
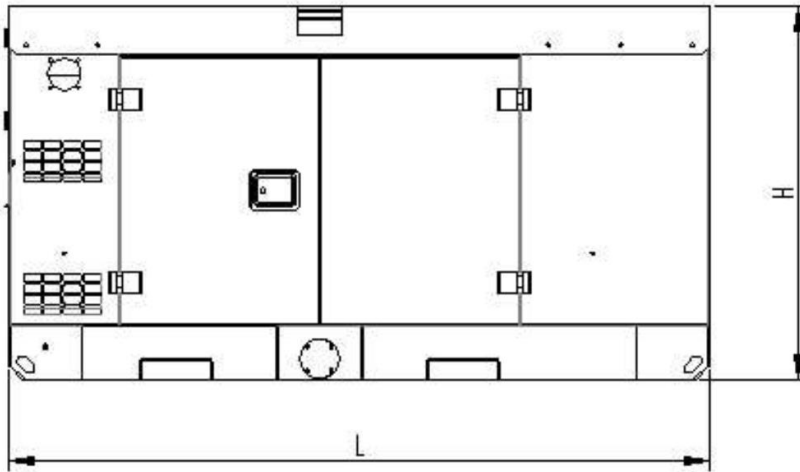


**LBE POWERING YOUR WORLD**  
anytime. anywhere

**K-50**

**POWERED BY KUBOTA**

### Overview dimension & Sound levels



| Configuration | L= Length (mm) | W= Width (mm) | H= High (mm) | Weight(kg) |
|---------------|----------------|---------------|--------------|------------|
| Enclosed set  | 2260           | 1110          | 1500         | 1350       |

Dimensions and weights shown are approximate

### Genset Standard Features

#### Fabrication:

- Engine/alternator assembly rests on skid with anti-vibration mounting pads
- Skid made of durable sheet metals and beams exceeding vibration & torsion norms
- Skid-mounted fuel tank with fuel gauge, filler cap, fuel inlet and outlet hoses
- Control panel enclosure made of reliable metal sheet

#### Paint:

- White color
- Heat-treated, powder-coated electrostatic corona spraying
- Durability tests conforming to international standards: Salt Spray Resistance, Humidity Resistance

#### Works-Testing:

- All gensets tested prior to dispatch
- Automatic test generated and checked according to ISO 8528

#### Equipment:

- Water-cooled radiator with belt-driven blower fan and full guarding
- Electric starter with solenoid relay
- Battery charging alternator
- Energized-to-run solenoid
- Replaceable fuel, oil and air filters
- Heavy-duty lead-acid battery with matching capacity (Amps & CCA)
- Industrial exhaust silencer – 16 dB noise reduction