



# LBE GENERATORS

*LBE POWERING YOUR WORLD  
anytime. anywhere*

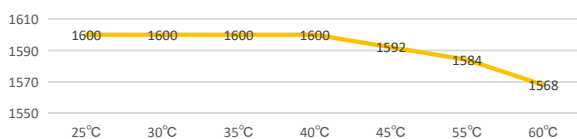
## CT-1410

**Powered By Cummins**

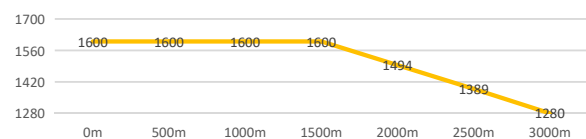


| MODEL           |             |     | CT-1410 |
|-----------------|-------------|-----|---------|
| Power<br>Pf.0.8 | Standby     | kVA | 1600    |
|                 |             | kW  | 1280    |
|                 | Prime       | kVA | 1410    |
|                 |             | kW  | 1128    |
|                 | Frequency   | Hz  | 60      |
|                 | Voltage     | V   | 220/380 |
|                 | Rated speed | rpm | 1800    |

Temperature (Celsius) Derate Curves  
Unit: kVA



Altitude (meters) Derate Curves  
Unit: kVA



### Standard reference Conditions:

Standard reference condition 25°C (77°F) air inlet temp, 100m (328ft) A.S.L 30% relative humidity. Fuel consumption data with diesel fuel with specific gravity of 0.85 and conforming to BS 2869: 1998, Class A2.

### Note:

The standby power rating of the generating set is where a variable load limited to an annual usage up to 500 hours is applied, with 300 hours of which may be continuous running. Noting that no overload is permitted

### Standard Features

- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The generator set complies with ISO 8528-5, Class G3 requirements for transient performance.
- The generator set accepts rated load in one step.
- The 60Hz generator set engine is certified by the Environmental Protection Agency (EU or MEP) to conform to EU2、EU3 nonroad emissions regulations.(≤560KW)
- A one-year limited warranty covers all systems and components. Two-, five-, and ten-year extended warranties are also available.

### Generator Features

- The brushless, rotating-field generator has broadrange reconnectability.
- The pilot-excited, permanent-magnet generator (PMG) provides superior short-circuit capability
- Controllers are available for all applications. See controller features inside.
- The low coolant level shutdown prevents overheating (standard on radiator models only).
- Integral vibration isolation eliminates the need for under-unit vibration spring isolators.
- An electronic, isochronous governor delivers precise frequency regulation.
- Electronic engine controls and a generator microprocessor controller combine to deliver one of the most advanced control systems in today's generator market.



# LBE GENERATORS

*LBE POWERING YOUR WORLD*  
*anytime. anywhere*

## CT-1410

Powered By Cummins

### Engine Specifications

|                             |                                                       |
|-----------------------------|-------------------------------------------------------|
| Manufacturer / Model        | Cummins KTA50-G3                                      |
| Cylinder No.& Configuration | 16 cylinder Diesel.VEE type                           |
| Working Mode                | Turbocharged and Aftercooled (Jacket water to cooler) |
| Bore x Stroke               | 159*159mm                                             |
| Displacement                | 50L                                                   |
| Compression Ratio           | 13.9:1                                                |
| Rated Power                 | 1220kW                                                |
| Rated Speed                 | 1800                                                  |
| Lubrication System          | Splash Lubrication                                    |
| Lube Oil                    | Conforms above CF class or SAE10W-30,15w-40           |
| Lube Oil Capacity           | 176.8L                                                |
| Battery Capacity            | 6-QW-200EP*4                                          |
| Fuel Type                   | Diesel:0#(Summer),-10#(Winter),-35#(Cold)             |
| Fuel Consumption 25% load   | 89L/H                                                 |
| Fuel Consumption 50% load   | 157L/H                                                |
| Fuel Consumption 75% load   | 222L/H                                                |
| Fuel Consumption 100% load  | 291L/H                                                |



# LBE GENERATORS

*LBE POWERING YOUR WORLD*  
*anytime. anywhere*

## CT-1410

Powered By Cummins

### ALTERNATOR SPECIFICATION

|                                                                                    |                                            |
|------------------------------------------------------------------------------------|--------------------------------------------|
| 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                                                                   | Prime 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 dripproof 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.



# LBE GENERATORS

*LBE POWERING YOUR WORLD*  
*anytime. anywhere*

## CT-1410

Powered By Cummins

### 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 GENERATORS

*LBE POWERING YOUR WORLD*  
*anytime. anywhere*

## CT-1410

Powered By Cummins

### Generating Sets Standard and Optional Features

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Engine</b>            | <ul style="list-style-type: none"><li>• 4-stroke, water-cooled diesel engine</li><li>• Standard air filter</li><li>• Standard fuel filter</li><li>• Standard oil filter</li><li>• Oil temperature sensor</li><li>• Low coolant level sensor</li><li>• Radiator with blowing fan</li><li>• Industrial Grade Silencer</li><li>• Fuel water separator</li><li>• Water jacket heater (optional)</li></ul>                                             |
| <b>Alternator</b>        | <ul style="list-style-type: none"><li>• Class H insulation</li><li>• IP23 Protection</li><li>• Automatic Voltage Regulator (AVR)</li><li>• PMG excitation (optional)</li><li>• Single bearing alternator</li><li>• Class F or class B temperature rise (optional)</li><li>• Digital Voltage Regulator (optional)</li><li>• Double bearing (optional)</li><li>• Anti-Condensation Heater (optional)</li><li>• IP41 Protection (optional)</li></ul> |
| <b>Electrical system</b> | <ul style="list-style-type: none"><li>• Maintenance-free and anti-explosion battery</li><li>• Standard breaker</li><li>• ABB breaker (optional)</li><li>• ATS (optional)</li><li>• Battery charger (optional)</li><li>• GMS monitoring (optional)</li><li>• 127/230 voltage (optional)</li></ul>                                                                                                                                                  |
| <b>Packing</b>           | <ul style="list-style-type: none"><li>• Engine manual</li><li>• Alternator manual</li><li>• Gensets operation and maintenance manual</li><li>• Tool kit</li></ul>                                                                                                                                                                                                                                                                                 |
| <b>Baseframe</b>         | <ul style="list-style-type: none"><li>• Forklift pockets</li><li>• Pulling slots</li><li>• Earth wire protection</li><li>• Built-in anti vibration mountings</li><li>• Fuel outlet valve</li><li>• Standard fuel tank</li><li>• Enlarged fuel tank (optional)</li><li>• Separated fuel tank (optional)</li></ul>                                                                                                                                  |
| <b>Canopy</b>            | <ul style="list-style-type: none"><li>• Weatherproof &amp; sound-attenuated canopy</li><li>• Sound-absorbing material</li><li>• Lifting lug</li><li>• Emergency stop button</li><li>• Inside silencer</li></ul>                                                                                                                                                                                                                                   |



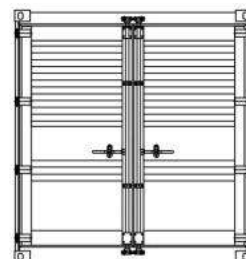
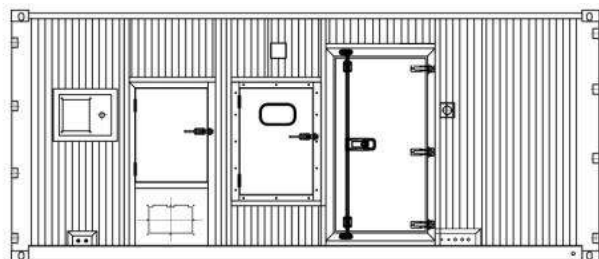
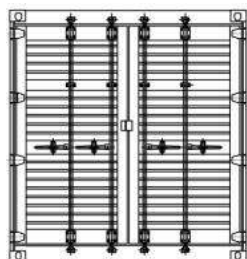
# LBE GENERATORS

*LBE POWERING YOUR WORLD  
anytime. anywhere*

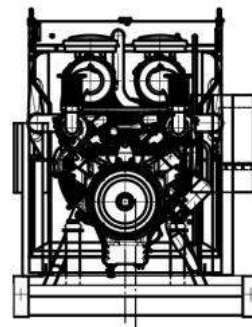
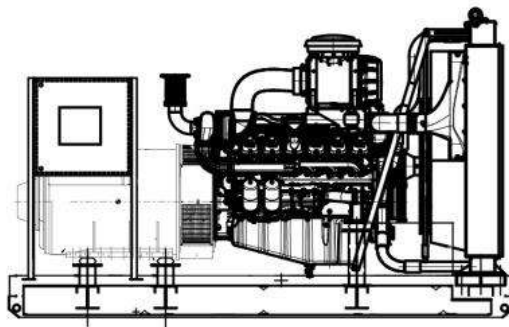
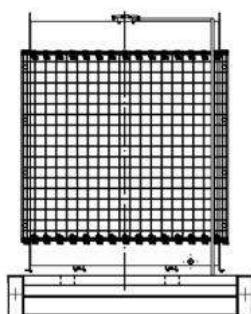
## CT-1410

Powered By Cummins

### Overview Dimension & Weight



| Containerized type) |                |               |                |             |                       |
|---------------------|----------------|---------------|----------------|-------------|-----------------------|
| Configuration       | L= Length (mm) | W= Width (mm) | H= Height (mm) | Weight (kg) | Fuel Tank Capacity(L) |
| Containerized Type  | ISO 20'ft GP   |               |                | 16850       | /                     |



| (Open type)   |                |               |                |             |                        |
|---------------|----------------|---------------|----------------|-------------|------------------------|
| Configuration | L= Length (mm) | W= Width (mm) | H= Height (mm) | Weight (kg) | Fuel Tank Capacity (L) |
| Open Type     | 5283           | 2260          | 2510           | 9450        | 1000(optional)         |



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