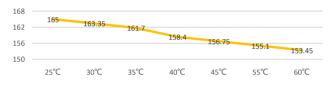


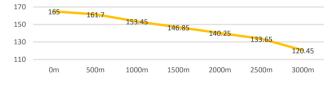


|   | MODEL           |             |     | LSY165S3 |  |
|---|-----------------|-------------|-----|----------|--|
|   | Power<br>Pf.0.8 | Standby     | kVA | 165      |  |
|   |                 |             | kW  | 132      |  |
|   |                 | Prime       | kVA | 150      |  |
|   |                 |             | kW  | 120      |  |
| ' |                 | Frequency   | Hz  | 50       |  |
|   |                 | Voltage     | V   | 230/400  |  |
|   |                 | Rated speed | rpm | 1500     |  |

#### Temperature (Celsius) Derate Curves Unit: kVA



### Altitude (meters) Derate Curves Unit: kVA



# LEES generator sets meet the standards of ISO9001, CE, BS5000, ISO 8528, ISO 3046, IEC 60034, NEMA MG-1.22.

#### **Standard reference Conditions:**

Standard reference condition  $25^{\circ}$ C ( $77^{\circ}$ 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.

#### **Standard Features**

>LEES Power provides one-source responsibility for the generating system and accessories.

>The generator set and its components are prototype-tested, factorybuilt, and production-tested.

➤The 50Hz generator set offers a AUS 2012 listing and CE 2015 listing.

≻The generator set complies with ISO 8528-5, Class G3 requirements for transient performance.

>The generator set accepts rated load in one step.

>The 50Hz 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.

**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, consult LEES. Obtain the technical information bulletin (TIS-101) on ratings guidelines for the complete ratings definitions. LEES reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.



Alees

# LEES engine Model: LR6M3L-D

Main features:

- · Six-cylinder, water-cooled, in-line diesel engine
- · Efficient fuel system for max power output and durability
- Large-capacity air cleaner
- · Cost effective, fuel efficient and reliable performance
- · Functional engine with compact structure
- · Excellent after-sales service and sufficient spare parts supplying
- · Easy installation and ready access for routine maintenance

# **Engine Specifications**

| Engine Brand                   | LEES                       |
|--------------------------------|----------------------------|
| Engine Model                   | LR6M3L-D                   |
| Cylinder No.& Configuration    | 6 cylinder Diesel L type   |
| Working Mode                   | Inter cooler Turbo         |
| Bore x Stroke mm               | 110x125                    |
| Displacement L                 | 7.130                      |
| Compression Ratio              | 17                         |
| Rated Power www.kW             | 145.0                      |
| Rated Speed                    | 1500                       |
| Lubrication System             | Splash Lubrication         |
| Lube Oil                       | Conforms above CD class or |
|                                | SAE10W-30,15W-40           |
| Lube Oil Capacity L            | 16.0                       |
| Battery Capacity               | 12V80Ah x2                 |
| Fuel Type                      | Diesel:0#(Summer),-        |
|                                | 10#(Winter),-35#(Cold)     |
| Fuel Consumption 25% load L/H  | 8.20                       |
| Fuel Consumption 50% load L/H  | 17.20                      |
| Fuel Consumption 75% load L/H  | 24.80                      |
| Fuel Consumption 100% load L/H | 33.10                      |
|                                |                            |



# Alternator

| Туре    |      |
|---------|------|
| Exciter | type |

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

100% of Rating 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±0.25% no-load to full-load regulation.
- Brushless alternator with brushless pilot exciter for excellent load response.

## Controller



#### **Key Features**

- Using microprocessor as a core, graphics LCD with big screen and backlight, key touch for operation
- Have a RS485 port, can be used for communicate to PC
- > All parameters can be set from the front panel, or be set by PC used SG72
- Security password-protected programming levels
- > All parameters use digital modulation, with higher reliability and stability
- Built-in speed/frequency detecting units can accurately judge the states such as crank success and over speed
- Power supply range is wide, accommodating to different starting battery voltage environment
- Built-in watch dog can never be dead halt, ensuring smooth program execution
- Modular configuration design, inserted type connection terminals, flush type installation, compact structure, easy installation

#### Precision measure and display of

- Mains voltage
- Mains frequency
- Mains current
- Generator voltage
- Generator current
- Generator frequency
- Generator active power (kW)
- Generator inactive power (kW)
- Generator apparent power (kVA)

- Generator power factor
- Generator starts count
- Generator hour count
- Cumulate electric energy (kWh)
- Generator temperature
- Generator pressure
- Generator fuel level
- Start battery voltage

Over speedUnder speed

Protection

Loss of speed signal

Low oil pressure

> Generator over frequency

High engine temperature

- Generator under frequency
- > Generator over voltage
- Generator under voltage
- Generator over current
- Fail to start
- > Auxiliary inputs



# **Generating Sets Standard and Optional Features**

#### Engine

- 4-stroke, water-cooled diesel engine
- Standard air filter
- > Standard fuel filter
- Standard oil filter
- Oil temperature sensor
- Low coolant level sensor
- Radiator with blowing fan
- Industrial silence
- > Fuel water separator
- > Water jacket heater (optional)

#### Alternator

- Class H insulation
- IP23 Protection
- Automatic Voltage Regulator (AVR)
- PMG excitation (optional)
- Single bearing alternator
- Class F or class B temperature rise (optional)
- Digital Voltage Regulator (optional)
- Double bearing (optional)
- Condensed heater (optional)
- IP41 Protection (optional)

#### **Electrical** system

- > Maintenance-free and anti-explosion battery
- Standard breaker
- ABB breaker (optional)
- ATS (optional)
- Battery charger (optional)
  GMS monitoring (optional)

# Packing

- Engine manual
- Alternator manual
- Gensets operation and maintenance manual
- Tool kit

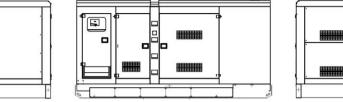
#### **Baseframe**

- Forklift pockets
- Pulling slots
- > Earth wire protection
- Built-in anti vibration mountings
- Fuel outlet value
- Standard fuel tank
- Enlarged fuel tank (optional)
- Separated fuel tank (optional)

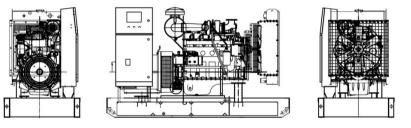


- Weatherproof & sound-attenated canopy
- Sound-absorbing material
- Lifting lug
- Emergency stop button
- Inside silencer

# Overview Dimension & Weight



|               | LSY165S3 (Silent type) |               |                |             |                           |  |
|---------------|------------------------|---------------|----------------|-------------|---------------------------|--|
| Configuration | L= Length (mm)         | W= Width (mm) | H= Height (mm) | Weight (kg) | Fuel Tank<br>Capacity (L) |  |
| Silent Type   | 3360                   | 1100          | 1700           | 2070        | 412                       |  |



|               |                | LSY165E3 (    | Open type)     |             |                           |
|---------------|----------------|---------------|----------------|-------------|---------------------------|
| Configuration | L= Length (mm) | W= Width (mm) | H= Height (mm) | Weight (kg) | Fuel Tank<br>Capacity (L) |
| Open Type     | 2400           | 1000          | 1450           | 1680        | 350                       |

Contact your distributor / dealer for more information

#### WUXI LEES POWER COMPANY LIMITED

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