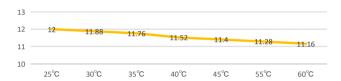




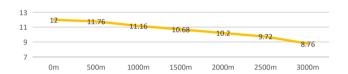


	LSY12S3		
Power Pf.1.0	Standby	kVA	12
	Standby	kW	10
	Prime	kVA	11
		kW	9
	Frequency	Hz	50
	Voltage	V	230/400
	Rated speed	rpm	1500

Temperature (Celsius) Derate Curves
Unit: kVA



# Altitude (meters) Derate Curves Unit: kVA



#### **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.

#### LEES generator sets meet the standards of

ISO9001, CE, BS5000, ISO 8528, ISO 3046, IEC 60034, NEMA MG-1.22.







#### **Standard Features**

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



Engine Specifications						
Engine Brand	LEES					
Engine Model	YD385D					
Cylinder No.& Configuration	3 cylinder Diesel L type					
Working Mode	Naturally Aspirated					
Bore x Stroke	85x90mm					
Displacement	1.532L					
Compression Ratio	18					
Rated Power	11kW					
Rated Speed	1500					
Lubrication System	Splash Lubrication					
Lube Oil	Conforms above CD class or SAE10W-30,15W-40					
Lube Oil Capacity	4.5L					
Battery Capacity	6-QW-36(312)*1					
Fuel Type	Diesel:0#(Summer),-10#(Winter),-35#(Cold)					
Fuel Consumption 25% load	1.61L/H					
Fuel Consumption 50% load	2.54L/H					
Fuel Consumption 75% load	3.12L/H					
Fuel Consumption 100% load	3.55L/H					



ALTERNATOR				
Туре	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(ALTERNATOR)			
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.



### 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



#### **Protection**

- · High engine temperature
- Low oil pressure
- Over speed
- Under speed
- · Loss of speed signal
- · Generator over frequency
- · Generator under frequency
- · Generator over voltage
- · Generator under voltage
- Generator over current
- · Fail to start
- · Auxiliary inputs

#### 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



# **Generating Sets Standard and Optional Features**

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

<ul> <li>Class H insulation</li> </ul>	า
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- **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)
- · Anti-Condensation Heater (optional)
- IP41 Protection (optional)

#### Maintenance-free and anti-explosion battery

Standard breaker

#### **Electrical system**

**Alternator** 

- ABB breaker (optional)
- ATS (optional)
- Battery charger (optional)
- GMS monitoring (optional)

#### **Packing**

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

- Forklift pockets
- Pulling slots
- Earth wire protection
- Built-in anti vibration mountings

#### Baseframe

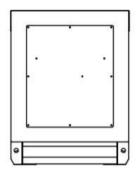
- Fuel outlet value
- Standard fuel tank
- Enlarged fuel tank (optional)
- Separated fuel tank (optional)

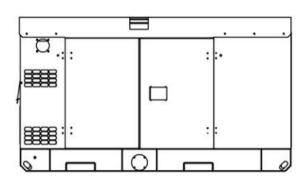
# Canopy

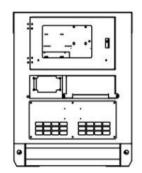
- Weatherproof & sound-attenated canopy
- Sound-absorbing material
- Lifting lug
- Emergency stop button
- Inside silencer



# **Overview Dimension & Weight**







LSY12S3 (Silent type)							
Configuration	L= Length (mm)	W= Width (mm)	H= Height (mm)	Weight (kg)	Fuel Tank Capacity(L)		
Silent Type	1686	805	1050	610	65		



#### **WUXI LEES POWER COMPANY LIMITED**

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