

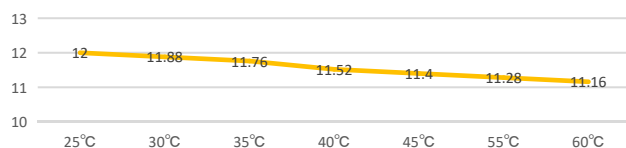
# MODEL: LSY12S

Powered by LEES

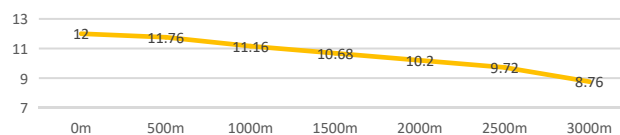


MODEL		LSY12S	
Power Pf.1.0	Standby	kVA	12
		kW	12
	Prime	kVA	11
		kW	11
	Frequency	Hz	50
	Voltage	V	230
Rated speed	rpm	1500	

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.

### 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	YD480D-EP986
Cylinder No.& Configuration	4 cylinder Diesel L type
Working Mode	Naturally Aspirated
Bore x Stroke	80x90mm
Displacement	1.809L
Compression Ratio	18
Rated Power	14kW
Rated Speed	1500
Lubrication System	Splash Lubrication
Lube Oil	Conforms above CD class or SAE10W-30,15W-40
Lube Oil Capacity	6.7L
Battery Capacity	6-QWLZ-45(380)*1
Fuel Type	Diesel:0#(Summer),-10#(Winter),-35#(Cold)
Fuel Consumption 25% load	1.67L/H
Fuel Consumption 50% load	2.74L/H
Fuel Consumption 75% load	3.43L/H
Fuel Consumption 100% load	4.22L/H

## ALTERNATOR

Type	3-Pole, Rotating-Field
Exciter type	Brushless, Permanent-Magnet, Pilot Exciter
Voltage regulator	Solid-State, Volts/Hz
Insulation	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	Single-Phase Sensing, $\pm 1\%$
One-step load acceptance	100% of Rating
Unbalanced load capability	100% of Rated Standby

- 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  $\pm 1\%$  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

### 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 Grade Silencer
- Fuel water separator
- Water jacket heater (optional)

### Alternator

- Class H insulation
- IP23 Protection
- Automatic Voltage Regulator (AVR)
- Optional for small gensets
- 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)

### 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

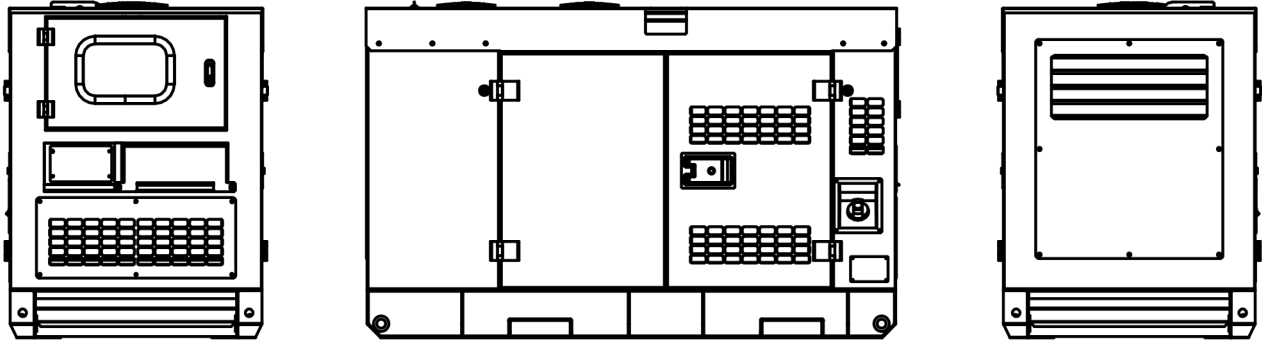
### Baseframe

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

### Canopy

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

## Overview Dimension & Weight



LSY12S (Silent type)					
Configuration	L = Length (mm)	W = Width (mm)	H = Height (mm)	Weight (kg)	Fuel Tank Capacity(L)
Silent type	1686	806	1050	650	/



### WUXI LEES POWER COMPANY LIMITED

No. 1, Ningzhou Road, Huishan District Wuxi, China, 214000  
 Tel: 86-510-85166446  
 Web: [www.leespower.com](http://www.leespower.com)  
 Email: [lees@leespower.com](mailto:lees@leespower.com)

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### LEES POWER (UK) LTD

23A Buckingham Avenue, Slough Trading Estate, Slough, Berkshire, SL1 4QA, UK  
 Tel: +44(0)2081080326  
 Web: [www.leespower.uk](http://www.leespower.uk)  
 Email: [lees@leespower.com](mailto:lees@leespower.com)

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