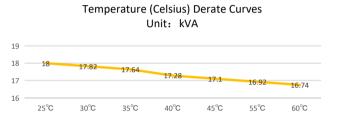
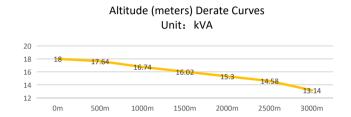




	MODEL	LSY18S	
Power Pf.1.0	Standby	kVA	18
		kW	18
	Prime	kVA	17
		kW	17
	Frequency	Hz	50
	Voltage	V	230
	Rated speed	rpm	1500





### **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	YND490D					
Cylinder No.& Configuration	4 cylinder Diesel L type					
Working Mode	Naturally Aspirated					
Bore x Stroke	90x100mm					
Displacement	2.54L					
Compression Ratio	18					
Rated Power	21kW					
Rated Speed	1500					
Lubrication System	Splash Lubrication					
Lube Oil	Conforms above CD class or SAE10W-30,15W-40					
Lube Oil Capacity	8L					
Battery Capacity	6-QW-45(380)*1					
Fuel Type	Diesel:0#(Summer),-10#(Winter),-35#(Cold)					
Fuel Consumption 25% load	1.87L/H					
Fuel Consumption 50% load	2.98L/H					
Fuel Consumption 75% load	4.05L/H					
Fuel Consumption 100% load	5.45L/H					



ALTERNATOR					
Туре	3-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	Single-Phase Sensing, $\pm$ 1%				
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  $\pm$  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

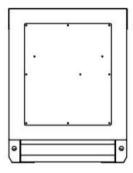


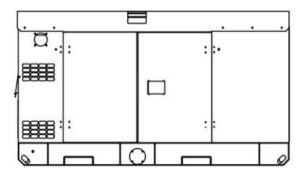
# **Generating Sets Standard and Optional Features**

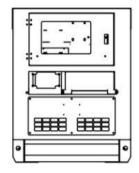
Engine	<ul> <li>4-stroke, water-cooled diesel engine</li> <li>Standard air filter</li> <li>Standard fuel filter</li> <li>Standard oil filter</li> <li>Oil temperature sensor</li> <li>Low coolant level sensor</li> <li>Radiator with blowing fan</li> <li>Industrial Grade Silencer</li> <li>Fuel water separator</li> <li>Water jacket heater (optional)</li> </ul>	
Alternator	<ul> <li>Class H insulation</li> <li>IP23 Protection</li> <li>Automatic Voltage Regulator (AVR)</li> <li>Optional for small gensets</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>	
Electrical system	<ul> <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> </ul>	
Packing	<ul> <li>Engine manual</li> <li>Alternator manual</li> <li>Gensets operation and maintenance manual</li> <li>Tool kit</li> </ul>	
Baseframe	<ul> <li>Forklift pockets</li> <li>Pulling slots</li> <li>Earth wire protection</li> <li>Built-in anti vibration mountings</li> <li>Fuel outlet value</li> <li>Standard fuel tank</li> <li>Enlarged fuel tank (optional)</li> <li>Separated fuel tank (optional)</li> </ul>	
Canopy	<ul> <li>Weatherproof &amp; sound-attenated canopy</li> <li>Sound-absorbing material</li> <li>Lifting lug</li> <li>Emergency stop button</li> <li>Inside silencer</li> </ul>	



## **Overview Dimension & Weight**







LSY18S (Silent type)							
Configuration	L= Length (mm)	W= Width (mm)	H= Height (mm)	Weight (kg)	Fuel Tank Capacity(L)		
Silent Type	1840	805	1050	750	78		



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