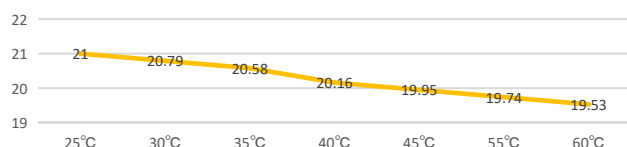


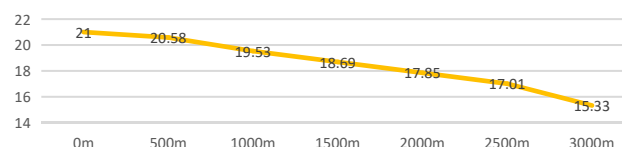


MODEL			LSY21S3-6
Power Pf.1.0	Standby	kVA	20.5
		kW	16.5
	Prime	kVA	18.6
		kW	15
	Frequency	Hz	60
	Voltage	V	208/120; 220/127; 416/240; 440/254; 480/277
	Rated speed	rpm	1800

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.

### 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 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.

## Engine Specifications

Engine Brand	LEES
Engine Model	YND485D
Cylinder No.& Configuration	4 cylinder Diesel L type
Working Mode	Naturally Aspirated
Bore x Stroke	85x95mm
Displacement	2.156L
Compression Ratio	18
Rated Power	20kW
Rated Speed	1800
Lubrication System	Splash Lubrication
Lube Oil	Conforms above CD class or SAE10W-30,15W-40
Lube Oil Capacity	5.5L
Battery Capacity	6-QW-45(380)*1
Fuel Type	Diesel:0#(Summer),-10#(Winter),-35#(Cold)
Fuel Consumption 25% load	2.27L/H
Fuel Consumption 50% load	3.25L/H
Fuel Consumption 75% load	4.35L/H
Fuel Consumption 100% load	5.61L/H

## ALTERNATOR

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(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 drip-proof 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

- |               |   |
|---------------|---|
| <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 silence</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> </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 value</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> |
|---------------|---|

## Overview Dimension & Weight



LSY21S3-6 (Silent type)					
Configuration	L= Length (mm)	W= Width (mm)	H= Height (mm)	Weight (kg)	Fuel Tank Capacity(L)
Silent Type	1840	805	1050	670	78



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