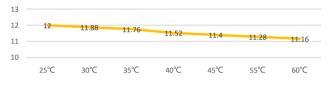




Temperature (Celsius) Derate Curves Unit: kVA



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° 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.

	MODEL	LSY12S		
	Standby	kVA	12.3	
		kW	12.3	
	Prime	kVA	11.2	
Power Pf.1.0		kW	11.2	
P1.1.0	Frequency	Hz	50	
	Voltage	V	230/400	
	Rated speed	rpm	1500	

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: YD480D

Main features:

- · Four-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		YD480D
Cylinder No.& Configuration		4 cylinder Diesel L type
Working Mode		Naturally Aspirated
Bore x Stroke	mm	80x90
Displacement	L	1.809
Compression Ratio		18
Rated Power	kW	14
Rated Speed		1500
Lubrication System		Splash Lubrication
Lube Oil		Conforms above CD class or
		SAE10W-30,15W-40
Lube Oil Capacity	L	5.0
Battery Capacity		12V45Ah x1
Fuel Type		Diesel:0#(Summer),-
		10#(Winter),-35#(Cold)
Fuel Consumption 25% load	L/H	1.67
Fuel Consumption 50% load	L/H	2.74
Fuel Consumption 75% load	L/H	3.43
Fuel Consumption 100% load	L/H	4.22



Alternator

Type 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 Single-Phase Sensing, $\pm 1\%$

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 \triangleright 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. \geq
- Superior voltage waveform from two-thirds pitch \triangleright 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 \triangleright 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
- \triangleright All parameters use digital modulation, with higher reliability and stability
- \triangleright 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
- ۶ Mains frequency
- ≻ Mains current
- ≻ Generator voltage
- ≻ Generator current
- ≻ Generator frequency
- ۶ Generator active power (kW)
- ≻ Generator inactive power (kW)
- \triangleright Generator apparent power (kVA)

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

Generator over frequency

> Over speed

Under speed

Protection

Generator under frequency \triangleright ≻

High engine temperature

Low oil pressure

- Generator over voltage ≻ Generator under voltage
- ۶
- Generator over current

Loss of speed signal

- ≻ Fail to start
- ≻ Auxiliary inputs



Generating Sets Standard and Optional Features

Engine

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

Alternator

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

Electrical system

- ≻ Maintenance-free and anti-explosion battery
- \triangleright Standard breaker
- ≻ ABB breaker (optional)
- ≻ ATS (optional)
- Battery charger (optional) \geq
- ≻ GMS monitoring (optional)

Packing

- Engine manual ≻
- ≻ Alternator manual
- Gensets operation and maintenance manual \triangleright
- ≻ Tool kit

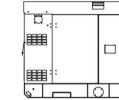
Baseframe

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

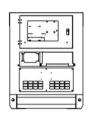
Canopy

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

Δ.



Overview Dimension & Weight



	LSY12S (Silent type)								
Configuration	L= Length (mm)	W= Width (mm)	H= Height (mm)	Weight (kg)	Fuel Tank Capacity (L)				
Silent Type	1680	800	1050	670	50				

Contact your distributor / dealer for more information

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