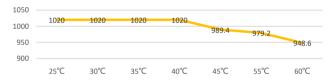


MODEL			LSM1020S3-6		
Power Pf.0.8	Standby	kVA	1020		
		kW	816		
	Prime	kVA	930		
		kW	744		
	Frequency	Hz	60		
	Voltage	V	208/120; 220/127; 416/240; 440/254; 480/277		
	Rated speed	rpm	1800		

# Temperature (Celsius) Derate Curves Unit: kVA



## Altitude (meters) Derate Curves Unit: kVA

1100 900 700 0m 500m 1000m 1500m 2000m 2500m 3000m

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.



#### Standard reatures

- >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 60Hz 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 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.

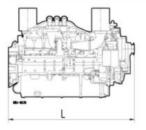
RATINGS: All three-phase units are rated at 0.8 power factor. Standby ratings: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are 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.

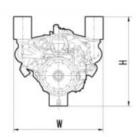


## MTU engine Model: 12V2000G85



Engine Brand		MTU
Engine Model		12V2000G85
Cylinder No.& Configuration		12 cylinder Diesel.VEE type
Working Mode		Turbocharged and
		air-cooled charge air
Bore x Stroke	mm	130*150
Displacement	L	23.8
Compression Ratio		16: 1
Rated Power	kW	810
Rated Speed		1800
Lubrication System		Splash Lubrication
Lube Oil		CH15W-40
Lube Oil Capacity	L	90
Battery Capacity		150AH*2
Fuel Type		0#
Fuel Consumption 25% load	L/H	59.63
Fuel Consumption 50% load	L/H	107.75
Fuel Consumption 75% load	L/H	159.38
Fuel Consumption 100% load	L/H	211.50







### **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

3-Phase Sensing,  $\pm 0.25\%$ 

125% 60 Hz, 150% 50 Hz

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 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 ±0.25% no-load to full-load regulation.
- Brushless alternator with brushless pilot exciter for excellent load response.

### Controller





Audiovisual annunciation with NFPA 110 Level 1 capability. Programmable microprocessor logic and digital display features. Safeguard circuit protection standard. 12- or 24-volt engine electrical system capability. Remote start, remote annunciation, and remote communication options. Refer to M6-46 for additional controller features and accessories

### **Key Features**

- 4-line back-lit LCD text display
- > Five key menu navigation
- > Front panel editing with PIN protection
- > LED and LCD alarm indication
- Customisable status screens
- Power save mode
- Support for up to three remote display units
- > 9 configurable inputs
- > 8 configurable outputs
- Flexible sender inputs
- Configurable timers and alarms
- > 3 configurable maintenance alarms
- Multiple date and time scheduler
- Configurable event log (250)
- Control logic facilities
- > Easy access diagnostic page
- CAN and Magnetic Pick-up / Alt. Sensing
- > Fuel usage monitor and low fuel alarms
- Charger alternator failure alarm

- Manual speed control
- Manual fuel pump control
- > Engine exerciser
- > "protections disabled" feature
- > kW overload protection
- Power monitoring
- Load switching (load shedding and dummy load outputs)
- Automatic load transfer
- > Unbalanced load protection
- > Independent Earth Fault trip
- > USB connectivity
- Backed up real time clock
- Configurable display languages
- ➤ User selectable RS232 and RS485 communications
- > SMS Messaging (additional external modem required)
- Additional display screens to help with modem diagnostics
- > Integral PLC editor



### **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 silence
- Fuel water separator (optional)
- Water jacket heater (optional)

### **Alternator**

- Class H insulation
- **IP23 Protection**
- Automatic Voltage Regulator (AVR)
- PMG excitation
- Single bearing alternator
- Class F or class B temperature rise (optional)
- Digital Voltage Regulator (optional)
- Double bearing (optional)
- Condensed 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

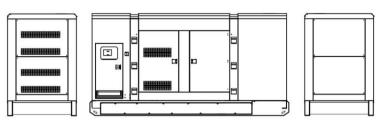
### **Baseframe**

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

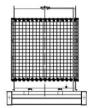
### Canopy

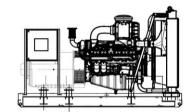
- Weatherproof & sound-attenated canopy
- Sound-absorbing material
- Lifting lug
- Emergency stop button
- Inside silencer

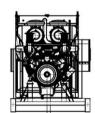
### **Overview Dimension & Weight**



LSM1020S3-6 (Silent type)						
Conf iguration	L= Length (mm)	W= Width (mm)	H= Height (mm)	Weight (kg)	Fuel Tank Capacity(L)	
Silent Type	5806	2260	2554	9100	1692	







LSM1020E3-6 (Open type)						
Conf iguration	L= Length (mm)	W= Width (mm)	H= Height (mm)	Weight (kg)	Fuel Tank Capacity(L)	
Open Type	4700	1780	2400	7000	-	

Contact your distributor / dealer for more information

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

NO.312 Highway, Luoshe Town, Wuxi, China, 214000 Tel: 86-510-85166446

Facebook: www.facebook.com/leesgenerator

Web:www.leespower.com Email: lees@leespower.com

