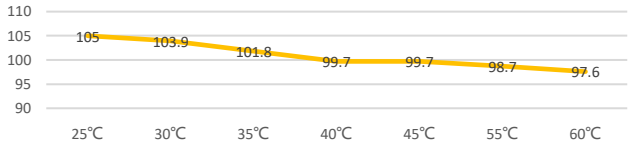
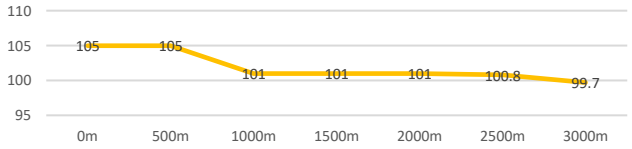
Comprehensive Power Solutions
8-4000kVA

MODEL			LSP105S3-6
Power Pf.0.8	Standby	kVA	105
		kW	82
	Prime	kVA	93
		kW	74
	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



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℃ (77℉) 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 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 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.

Perkins engine Model: 1104A-44TG2

Perkins

Main features:

- Compact and efficient power
  - 1100 series is the result of an intensive period of customer research that has guided the development of the range
  - The new 4.4 L cylinder block ensures bore roundness is maintained under the pressures of operation. It also ensures combustion and mechanical noise is lowered
  - A new cylinder head has re-established Perkins mastery of air control
- Quality by design
  - Product design and Class A manufacturing improvements enhance product reliability while maintaining Perkins legendary reputation for durability
- Cost effective power
  - Compact size and low noise
  - Lower fuel consumption and oil use
  - 500 hours service intervals
  - 2 year warranty

Engine Specifications

Engine Brand		PERKINS
Engine Model		1104A-44TG2
Cylinder No.& Configuration		4 cylinder Diesel L type
Working Mode		Turbocharged
Bore x Stroke	mm	105*127
Displacement	L	4.4
Compression Ratio		17.25:1
Rated Power	kW	84.5
Rated Speed		1800
Lubrication System		Splash Lubrication
Lube Oil		Conforms above CF class or SAE10W-30,15w-40
Lube Oil Capacity	L	8
Battery Capacity		80AH*1
Fuel Type		Diesel:0#(Summer),-10#(Winter),-35#(Cold)
Fuel Consumption 25% load	L/H	6.5
Fuel Consumption 50% load	L/H	11.9
Fuel Consumption 75% load	L/H	16.9
Fuel Consumption 100% load	L/H	22.3

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	130℃, 150℃ 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, ±0.25%
One-step load acceptance	100% of Rating
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±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(optional)
- 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

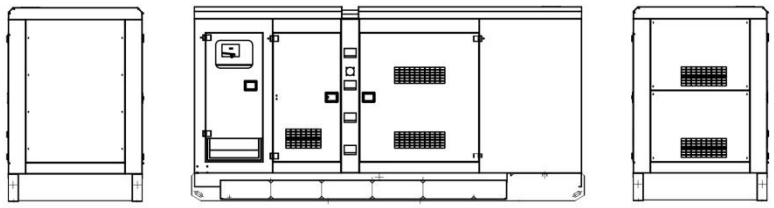
Baseframe

- 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)

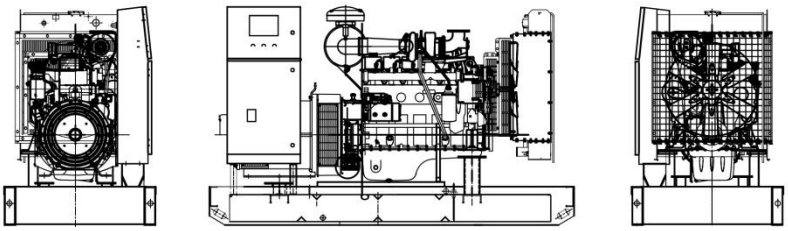
Canopy

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

Overview Dimension & Weight



LSP105S3-6 (Silent type)					
Configuration	L= Length (mm)	W= Width (mm)	H= Height (mm)	Weight (kg)	Fuel Tank Capacity (L)
Silent Type	2510	1060	1600	1335	178.4



LSP105E3-6 (Open type)					
Configuration	L= Length (mm)	W= Width (mm)	H= Height (mm)	Weight (kg)	Fuel Tank Capacity (L)
Open Type	1800	850	1350	1015	178.4

Contact your distributor / dealer for more information

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