

**DIESEL GENERATING SETS
SOUNDPROOF TYPE
(2-POLE)**
(SINGLE PHASE TYPE · THREE PHASE TYPE)

Power Source Technology for the Future
Denyo[®]

TLGSeries

*Compact & Lightweight
Diesel Generating Sets*



TLG-12LSX



TLG-13LSY

Denyo Co., Ltd.

GENERATOR

TLG SERIES: Soundproof Diesel Engine Generators

TLG SERIES: DENYO'S newly developed technology has been utilized with environmental considerations.

This TLG series are three phase and single phase models. These models are equipped with the engine of two poles and it can meet in any applications.

Incorporating a revolutionary compact design, using advanced "Know-How", it improves in operation, performance characteristics, and maintainability.

The TLG Series illustrates that DENYO is keeping it's commitment to develop new technology for tomorrow's power needs.



Improvements in Operation and Maintainability

Newly Developed, High-Performance, Generator

The TLG Series suppress the wave distortion at the minimum for thyristors, inverter controls, computers, or X-rays. A start characteristic improves for motor loads. Also using a high-efficiency Automatic Voltage Regulator (AVR) enables few voltage regulations. The voltage regulation is within $\pm 1.0\%$ for single phase models and within $\pm 1.5\%$ for three phase models.

Automatic Fuel Air Extractor

Air trapped in the fuel system can be troublesome. However, with the TLG Series, fuel air extraction is automatically performed by simply operating the starter switch, without using tools or devices. There is no soiling the machine's interior or the operator's hands. And the outflow of fuel to the machine's exterior is prevented.

Prolonged Operating Periods

Using fuel efficient engines, in conjunction with the high-efficiency alternator, means fuel costs are reduced and enables the TLG Series to be operated continuously for periods between 9 and 13 hours.

One-Sided Maintenance

The TLG Series are designed that daily maintenance can be done by one side of the machine. In addition, the radiator can be easily cleaned by removing its cover.



Eco-Friendly / Eco-Conscious Series(Models)

Extremely Quiet Operation: 68dB(A) or less

This high-speed system operates at low noise levels that will not disturb the human environment. This has been achieved by using highly effective sound-insulating materials and a unique duct construction, which is a part of the advanced cooling system developed by Denyo.

Use of Clean Engines

The used in these generators meet the Californian Atmospheric Pollution Regulation, which is one of the world's most stringent anti-pollution standards. This is achieved by these engines using a PCV (Purge Control Valve) system. Therefore, these engines do not discharge blow-by gas to the outside, which keeps the interior of the machine

Additional Features

50Hz / 60Hz Operation

You can operate the TLG Series at both 50Hz and 60Hz by simply adjusting the engine speed using the throttle control knob on the control panel.

Compact Design

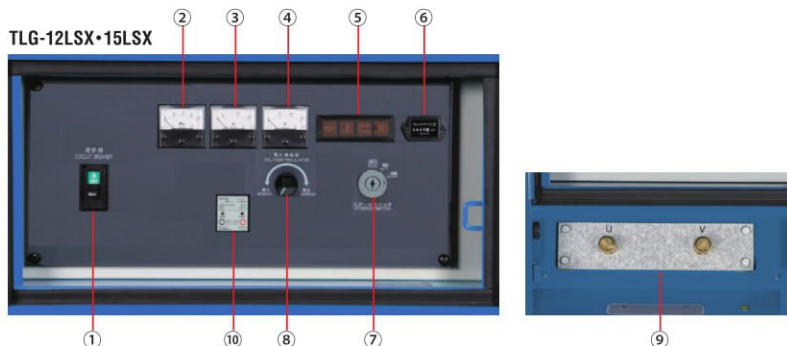
The compact and stackable design of the TLG Series facilitates the most effective use of storage space. All the machines are equipped with a balanced, centered lifting lug (hook) to further enhance generator's portability.

Emergency Shut-Down Devices

To protect the generator from malfunctions, a warning lamp and an in-built emergency system are standard specification to detect the low oil pressure, high water temperature, and failure of charging. If these abnormalities are detected, the warning lamp will light up and the engine will come to an emergency stop. There is also a circuit breaker to shutdown immediately in the case of AC overload.

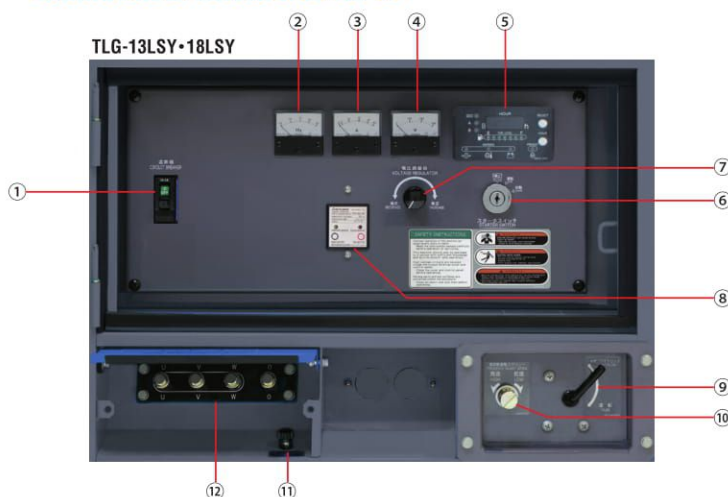
REVOLUTION

— SINGLE PHASE TYPE —



- ① Circuit Breaker (Output Terminals)
- ② Frequency Meter
- ③ AC Ammeter
- ④ AC Voltmeter
- ⑤ Warning Light
(Oil Pressure, Water Temperature, Charge)
- ⑥ Hour Meter
- ⑦ Starter Switch
- ⑧ Voltage Regulator
- ⑨ Single-phase Output Terminals
- ⑩ Earth Leakage Relay

— THREE PHASE TYPE —



- ① Circuit Breaker (Three Phase Output)
- ② Frequency Meter
- ③ AC Ammeter
- ④ AC Voltmeter
- ⑤ Engine Monitor
- ⑥ Starter Switch
- ⑦ Voltage Regulator
- ⑧ Earth Leakage Relay
- ⑨ Adjustable Speed Lever
- ⑩ Adjustable Frequency Screw
- ⑪ Ground Terminal (For Bonnet)
- ⑫ Three Phase Output Terminals

Options

Earth Leakage Relay

To prevent electric shock, it is recommended that these generators are equipped with leakage detectors and a relay circuit breaker.



Automatic Fuel Replenishment Device

When the level in the unit tank drops after an extended period of operation, a level sensor detects this and an electric pump is operated to automatically replenish fuel in the unit tank from a separate tank.

Salt Corrosion Resistant Specifications

Salt Corrosion Resistant These specifications are designed for when the unit will be used on the coast or on the ocean, and include treatment to prevent insulation resistance from dropping, and corrosion resistant treatment of the parts.

Trailer & Caster

- 4-Wheel Caster
- 2-Wheel Trailer



Other Options

- Keyed rear door
- Keyed fuel tank cap
- Mounting of muffler flange (Upward)



SPECIFICATIONS

MODEL	SINGLE PHASE TYPE					
	TLG-6LSX		TLG-12LSX		TLG-15LSX	

Alternator

Frequency (Hz)	50	60	50	60	50	60
Output (kVA)	5.0	6.0	10.5	12.0	13.0	15.0
Voltage (V)	2-Wire 50Hz:100~120 or 200~240 60Hz:100~120 or 200~240 or 3-Wire 50Hz:100/200 ~120/240 60Hz:100/200 ~120/240					
Rotating Speed (min ⁻¹)	3000	3600	3000	3600	3000	3600
Power Factor	1.0					
No. of Phase	Single Phase, 2-Wire or Single Phase, 3-Wire					
No. of Poles	2					
Excitation	Brushless(with AVR)					
Insulation	Class F					

Diesel Engine

Model	Kubota Z482-K3A		Yanmar 3TNV70-F		Yanmar 3-3TNV76G	
Type	4-cycle, Water-cooled					
No. of Cylinders-Bore x Stroke (mm)	2-67x68		3-70x74		3-76x82	
Displacement (L)	0.479		0.854		1.115	
Rated Output (kW)	6.8	8.0	12.6	15.4	15.8	18.9
Battery x Quantity	12-38x1		12-55x1		12-55x1	
Fuel	ASTM No.2 Diesel Fuel, or Equivalent					
Fuel Tank Capacity (L)	26		51			
Fuel Consumption (L/h)	1.7	2.1	3.3	4.0	3.9	4.9
Sound Levels 7mdB (A)	63	64	63	65	67	68

Dimensions, Weight

Length (mm)	1220		1400		1400	
Width (mm)	610		690		690	
Height (mm)	720		930		930	
Dry Weight (kg)	260		407		440	

- Rated Output applies to operating under standard conditions as per JIS B8014.
- 3-wire type is available as option.
- Fuel consumption is based on operation at 75% load.
- Sound level reflects high-speed no-load operation and is calculated by averaging the measurements at four points, each 7 meters from the source.

— SINGLE PHASE TYPE —



TLG-6LSX



TLG-12LSX



TLG-15LSX

SPECIFICATIONS

MODEL	THREE PHASE TYPE							
	TLG-7.5LSK	TLG-10LSK	TLG-13LSY	TLG-18LSY				

Alternator

Frequency (Hz)	50	60	50	60	50	60	50	60
Output (kVA)	6.5	7.5	8.0	10.0	10.5	13.0	15.0	18.0
Voltage (V)	50Hz:190 ~ 240 (380 ~ 480) 60Hz:190 ~ 240 (380 ~ 480)							
Rotating Speed (min ⁻¹)	3000	3600	3000	3600	3000	3600	3000	3600
Power Factor	0.8(Lagging)							
No. of Phase	Three Phase,4-Wire							
No. of Poles	2							
Excitation	Brushless(with AVR)							
Insulation	Class F							

Diesel Engine

Model	Kubota Z482-K3A		Kubota Z602-K3A		Yanmar 3TNV70-F		Yanmar 3-3TNV76G	
Type	4-cycle,Water-cooled							
No. of Cylinders-Bore x Stroke (mm)	2-67×68		2-72×73.6		3-70×74		3-76×82	
Displacement (L)	0.479		0.599		0.854		1.115	
Rated Output (kW)	6.8	8.0	8.9	9.9	12.6	18.9	15.8	18.9
Battery × Quantity	12-38×1		12-46×1		12-55×1		12-55×1	
Fuel	ASTM No.2 Diesel Fuel, or Equivalent							
Fuel Tank Capacity (L)	26				51			
Fuel Consumption (L/h)	1.7	2.1	2.0	2.6	2.8	3.5	3.8	4.7
Sound Levels 7mdB (A)	61	63	63	64	64	67	67	67

Dimensions,Weight

Length (mm)	1220		1220		1400		1400	
Width (mm)	610		680		690		690	
Height (mm)	720		720		930		930	
Dry Weight (kg)	260		289		406		440	

- Rated Output applies to operating under standard conditions as per JIS B8014.
- Fuel consumption is based on operation at 75% load.
- Sound level reflects high-speed no-load operation and is calculated by averaging the measurements at four points, each 7 meters from the source.

— THREE PHASE TYPE —



TLG-7.5LSK



TLG-10LSK



TLG-13LSY



TLG-18LSY



ISO 9001:2008
ISO 14001:2004 Certified



*Colors of products would be different from printed ones of catalogues.
The Specifications given herein are subject to change without notice.*

Denyo® The Denyo trademark is widely recognized as a brand, and is a registered trademark in 90 countries around the world.

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