

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

Developing Technology Tomorrow's Power Needs.

Denyo

TLGSeries

*Ecological Power Source
for the EARTH*



TLG-12LSX



TLG-13LSY

Denyo Co., Ltd.

SPECIFICATIONS

Models		SINGLE PHASE TYPE				THREE PHASE TYPE					
		TLG-12LSX		TLG-15LSX		TLG-7.5LSK		TLG-13LSY		TLG-18LSY	
Alternator	Frequency(Hz)	50	60	50	60	50	60	50	60	50	60
	Output(kVA)	10.5	12.0	13.0	15.0	6.5	7.5	10.5	13.0	15.0	18.0
	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		50Hz:190 ~ 240 (380 ~ 480) 60Hz:190 ~ 240 (380 ~ 480)			
	Rotating Speed(min ⁻¹)	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600
	Power Factor	1.0				0.8(Lagging)					
	No. of Phase	Single Phase,2-Wire or Single Phase,3-Wire				Three Phase,4-Wire					
	No. of Poles	2									
	Excitation	Brushless(with AVR)									
	Insulation	Class F									
Diesel Engine	Model	Yanmar 3TNV70-F		Yanmar 3-3TNV76G		Kubota Z482-K3A		Yanmar 3TNV70-F		Yanmar 3-3TNV76G	
	Type	4-cycle,Water-cooled									
	No. of Cylinders-Bore×Stroke(mm)	3-70×74		3-76×82		2-67×68		3-70×74		3-76×82	
	Piston Displacement(L)	0.854		1.115		0.479		0.854		1.115	
	Rated Output(kW/min ⁻¹)	12.6/3000	15.4/3600	15.8/3000	18.9/3600	6.8/3000	8.0/3600	12.6/3000	15.4/3600	15.8/3000	18.9/3600
	Battery(V-Ah×piece)	12-55×1		12-55×1		12-36×1		12-55×1			
	Fuel	ASTM No.2 Diesel Fuel, or Equivalent									
	Fuel Tank Capacity(L)	51				26		51			
	Fuel Consumption(L/h)	3.3	4.0	3.9	4.9	1.7	2.1	2.8	3.5	3.8	4.7
	Sound Levels 7m dB(A)	63	65	67	68	61	63	63	66	67	67
Dimensions, Weight	Length(mm)	1400		1400		1220		1400			
	Width(mm)	690		690		610		690			
	Height(mm)	930		930		720		930			
	Dry Weight(kg)	407		440		260		406		440	

- 3-wire type is available as option.
- 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.
- Colors of products would be different from printed ones of catalogues.
- Specifications given herein are subject to change without notice.



Direct inquiries to the nearest Denyo distributor or to Denyo Co., Ltd.



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GENERATOR

TLG SERIES: Soundproof Diesel Engine

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.



TLG-12LSX

— SINGLE PHASE TYPE —



TLG-15LSX

TLG-12LSX · 15LSX



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

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.



REVOLUTION

Generators

— THREE PHASE TYPE —



TLG-7.5LSK



TLG-13LSY

TLG-13LSY · 18LSY



- ① Circuit Breaker(Three Phase Output) ② Circuit Breaker(Output Socket) ③ Frequency Meter ④ AC Ammeter ⑤ AC Voltmeter ⑥ Engine Monitor ⑦ Starter Switch ⑧ Voltage Regulator ⑨ Earth Leakage Relay ⑩ Adjustable Speed Lever ⑪ Adjustable Frequency Screw ⑫ Single-phase Output Socket(2x15A) ⑬ Ground Terminal(For Bonnet) ⑭ Three Phase Output Terminals



TLG-18LSY

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 cleaner and exhaust emissions are minimized.

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.

Optional Earth Leakage Relay

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