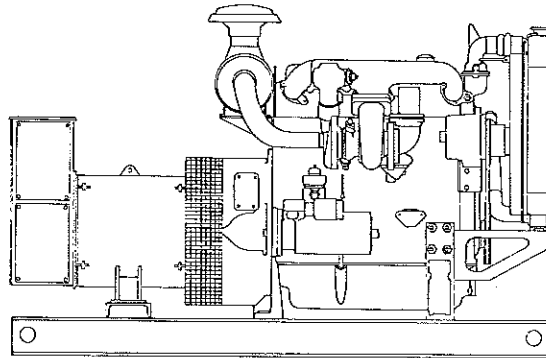


# KATOLIGHT<sup>®</sup> Diesel ENGINE GENERATOR SETS

**60 KW**  
60 Hz

**50 KW**  
50 Hz



## Model Selection / Rating Chart

MODEL NO. @ 60 Hz	STANDBY RATINGS & CHARACTERISTICS					
	KW*	RPM	VOLTS	KVA	PHASE	WIRE
D60FRP4	60	1800	277/480	75	3	12
D60FPP4	60	1800	120/208	75	3	12
D60FJR4	60	1800	120/240	75	3	12
D60FGP4	60	1800	120/240	60	1	12

MODEL NO. @ 50 Hz	STANDBY RATINGS & CHARACTERISTICS					
	KW*	RPM	VOLTS	KVA	PHASE	WIRE
D50FRP5	50	1500	220/380	62.5	3	12
D50FPP5	50	1500	110/190	62.5	3	12
D50FJP5	50	1500	110/220	62.5	3	12
D50FGP5	50	1500	110/220	50	1	12

## General Specifications

### ENGINE

TYPE: In-line Multi-Cylinder, Turbocharged  
 CYCLE: 4  
 H.P.: 96.9 @ 1800 RPM  
 80.3 @ 1500 RPM  
 BORE: 3.6 in. (9.14Y cm.)  
 PISTON DISPLACEMENT: 235.9 in.<sup>3</sup> (3.86 lit.)  
 BMEP: 181 psi (1,246.2 kPa)  
 ASPIRATING: 170 CFM @ 60 Hz (4.8 m<sup>3</sup>/m @ 60 Hz)  
 142 CFM @ 50 Hz (4.0 m<sup>3</sup>/m @ 50 Hz)  
 FUEL CONSUMPTION: 4.5 gal/hr (17 lit/hr)

CYLINDER: 4  
 KW: 72.3 @ 1800 RPM  
 59.9 @ 1500 RPM  
 STROKE: 5 in. (12.7 cm.)

### GENERATOR

TYPE: Revolving Field-Brushless-Direct Connected Exciter  
 CONSTRUCTION: Single Bearing-Shielded-Close Coupled  
 REGULATION: Static Regulator Maintains 1% of rated voltage  
 INSULATION: Class F (Epoxy Vacuum Impregnated)  
 CONNECTION: WYE or DELTA  
 AMBIENT TEMPERATURE: 40° C.

## Installation Facts

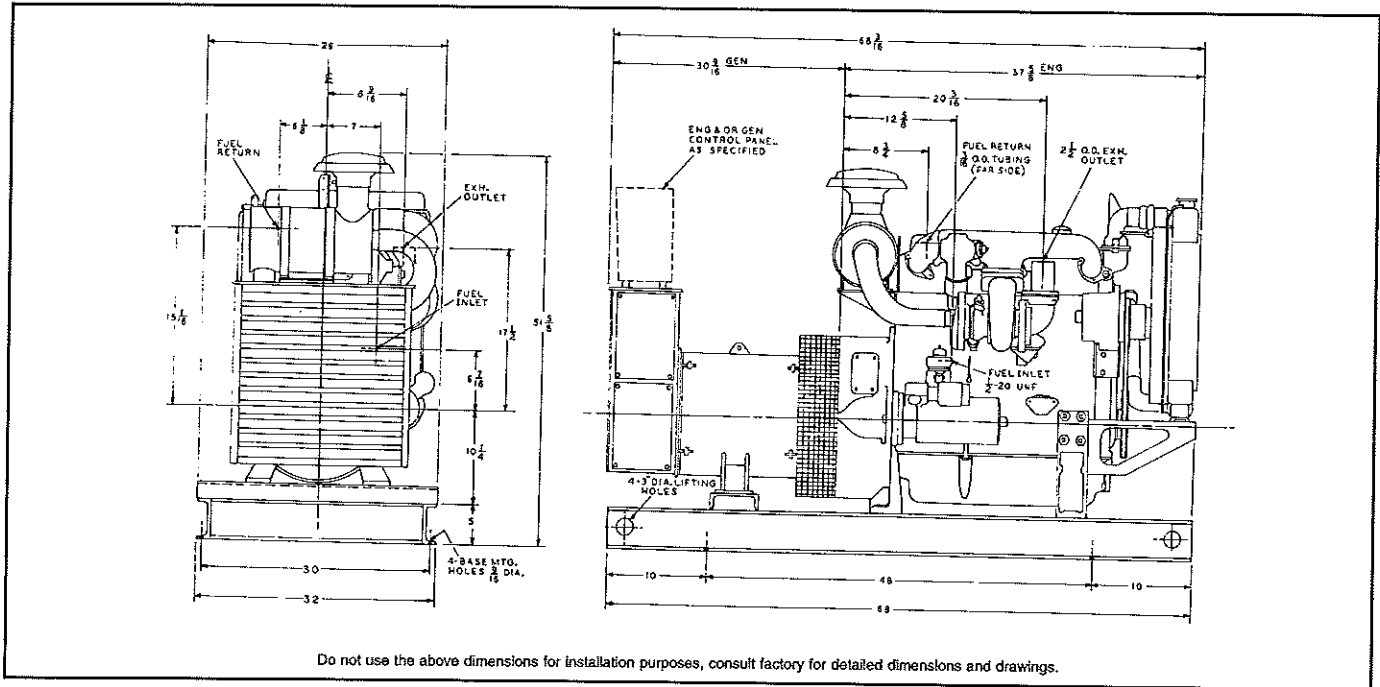
DIMENSION & WEIGHT	60 Hz Standby		50 Hz Standby	
Length	69 in.	(176 cm.)	69 in.	(176 cm.)
Width	32 in.	(66 cm.)	32 in.	(66 cm.)
Height	52 in.	(132 cm.)	52 in.	(132 cm.)
Weight	1,934 lb.	(877 kg.)	1,934 lb.	(877 kg.)
LIQUID CAPACITY (Refill)				
Oil Sump	2.5 gal.	(9.5 lit.)	2.5 gal.	(9.5 lit.)
Jacket Water, engine only	2.0 gal.	(7.6 lit.)	2.0 gal.	(7.6 lit.)
Radiator, including eng., jacket water system & lines-standard cap.	4.5 gal.	(17.0 lit.)	4.5 gal.	(17.0 lit.)
Water pump capacity	24.4 GPM	(92.4 l/m)	20.3 GPM	(76.8 l/m)
EXHAUST SYSTEM				
Gas Temperature (stack)	1,040° F	(560° C)	1,085° F	(585° C.)
Gas Volume at Stack Temperature	459 CFM	(13 m <sup>3</sup> /m)	396 CFM	(11.2 m <sup>3</sup> /m)
Maximum allowable back pressure	41 in. H <sub>2</sub> O	(76.2 mm. Hg)	41 in. H <sub>2</sub> O	(76.2 mm. Hg)
COOLING SYSTEM				
Ambient Capability of Radiator	120° F.	(49° C.)	120° F.	(49° C.)
Maximum allowable static pressure on exhaust side of radiator	0.5 in. H <sub>2</sub> O	(12.7 mm. H <sub>2</sub> O)	0.5 in. H <sub>2</sub> O	(12.7 mm. H <sub>2</sub> O)
Heat rejection to engine jacket water (dry exhaust)	2,644 BTUM	(46.5 KW)	2,246 BTUM	(39.4 KW)
STARTING SYSTEM				
Electric volt DC	12 volt		12 volt	
Battery recommendation - Minimum temperature 0° F. (-17.7° C.)	90 Amp-Hr.		90 Amp-hr.	
AIR REQUIREMENTS				
Air flow required for Radiator Cooled unit	6,955 CFM	(197 m <sup>3</sup> /m)	5,935 CFM	(168 m <sup>3</sup> /m)
Air flow required for Heat Exchanger or Remote Radiator	2,741 CFM	(77.6 m <sup>3</sup> /m)	2,291 CFM	(64.9 m <sup>3</sup> /m)
Generator set radiated heat	987 BTUM	(17.3 KW)	898 BTUM	(15.8 KW)

\*Derate 1.5% per 1,000 feet (305 m) above 2,500 feet (762 m) and 1% per 10° F. (5.5° C.) above 85° F. (29° C.)

Other voltages available up to 600 volts AC.

Printed in the USA

# Drawings for 60P4



## Design & Performance

- Katolight Generator manufactured to meet NEMA-MG-1-22.40 and CSA standards.
- Engine and generator controls are designed and manufactured by Katolight.
- Telephone influence factor is well within NEMA standards.
- Wave form deviation factor is no more than 5%, well within NEMA standards.
- Voltage Regulation - Standard static regulators will keep voltage within 1% of rated voltage.
- Harmonic Content is 3% maximum.
- Permanently lubricated, double shielded, radial ball type bearings are used.

## Standard Equipment

- Basic Engine - T4.236
- A.C. Generator
- Fuel Pump
- Primary & Secondary Fuel Filter
- Lube Oil Circulating Pump
- Lube Oil Cooler
- Full Flow Lube Oil Filter
- Jacket Water Circulating Pump
- Thermostat
- Air Filter
- Exhaust Manifold
- 12 Volt Electric Starting Motor, Solenoid, and Switch
- 12 Volt Battery Charging Alternator & D.C. Ammeter
- Oil Pressure -- Water Temperature Gauges -- Running Time Meter
- Generator Terminal Box
- Governor -- Mechanical to 3-5%
- Fabricated Steel Sub-base

## Optional Accessories

- Special Voltages up to 600 volts.
- Frequency: 50-400 Hz.
- Special array of temperature rise (50°, 60°, 70°, 80°, 105° and 130° C) generators available, meeting NEMA-MG-1-22.84 standards.
- Custom designed control systems -- Special metering -- Bussing -- Switch gear.
- Cooling -- Remote radiator/hotwell tank -- Heat exchangers
- Fuel systems -- Pumps -- Valves -- Tanks -- Switches
- Batteries -- Lead acid -- Lead calcium -- Nickel cadmium
- Enclosures -- Weather resistant -- Thermal insulated -- Sound attenuated
- Custom designed trailer mounting
- Precision governing with electronic systems.

Material and Specifications May Change Without Notice.

### KATOLIGHT CORPORATION

3201 Third Avenue

P. O. Box 3229

Mankato, Minnesota 56002-3229

Phone: (507) 625-7973 FAX: (507) 625-2968

Printed in U.S.A.

For more information contact your nearest Representative, Distributor, or Dealer below: