

# INDUSTRIAL ENGINES LTD. MODEL: MDG30

## Engine Specification

### Manufacturer. MITSUBISHI

**Model:** S 4S Water-cooled industrial diesel engine, "EPA Tier 3 compliant

**Design:** Four-cycle, four-cylinder, diesel with indirect injection combustion, cast iron crankcase and cylinder head.

**Displacement** 3.3 Liter

**Bore x Stroke:** 3/0 in. (94 mm) x 4.72 in. (120 mm)

**Compression Ratio:** 22 : 1

**Lube Oil System:** Full flow pressure lobe oil system with spin-on cartridge filter with bypass.

### Recommended Oil Filter change:

250 hours up to 95° F (35° C) ambient

125 hours above 95° F (35° C) ambient

**Air Cleaner.** Heavy-duty

**Fuel System:** Individual fuel injection pumps operated by the camshaft. Lift of the fuel lift pump is 10 feet (3.04 m) maximum.

### Alternator Data

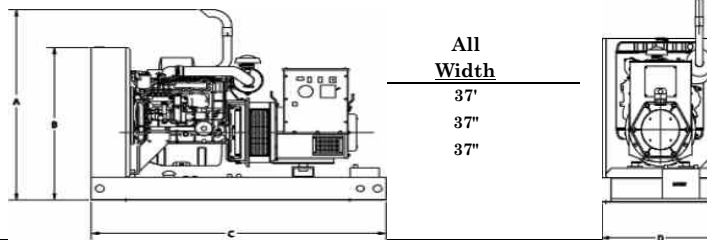
**Design:** 4-Pole, brushless, single bearing, rotating field, solid state AVR, 12-lead reconnectable for single or 3 phase.

**Generator Construction:** Complies with NEMA, IEEE and ANSI standards. Self-ventilated. drip-proof construction. Triple-dip varnish and epoxy-coated windings to Class H insulation with 2/3 pitch wound stator for a smooth voltage wave

**Voltage:** 60 Hertz, 1 Phase 120/240 VAC, 3 Phase 277/480 VAC.

### OPEN GENERATOR APPROX DIMENSIONS

- A = 53.81'
- B = 43.1'
- C = 58.5'
- D = 32.0'
- E = 44.8"
- F = 53.81'



Engine Specifications at 60 Hz (50Hz) Rated Load		
Engine Model S4S	U.S.	Metric
Cylinder Displacement	203.3 cu. in.	3.3 liter
Exhaust Gas Flow	257.8 dm (218.9)	121.7 li.Eec. (103.3)
Exhaust Temperature	932° F	500° C
Maximum Back Pressure	20" water	52 mbar
Governor Droop	5%	
Steady-State Frequency Regulation	+/- 0.5%	
Combustion Air	93 cfm (79)	43.9 [sec. (37.3)
Cooling Air Flow	4278 cfrn (3474)	2.0 tra/sec (1.6)

Fuel Consumption 6011z (50Hz)		
Load	US Gal / Hr	Liter / Hr
100%	2.7 (2.3)	10.3 (8.6)
75%	2.0(1.7)	7.4 (6.3)
50%	1.4 (1.1)	5.2 (4.3)

Alternator Statistics at Rated Load	
Alternator Manufacturer	MECC ALTE
Voltage Change with 100% Load Step Applied	Within 3% ( <sup>1</sup> / <sub>4</sub> sec.)
Telephone Influence Factor (TIF)	Less than 50
Voltage Regulation	2% all loads to 100%
Total Harmonic Factor (THF)	Less than 2%
Temperature Rise	125° C

Shipping Details	All	Open/End	Sound Att.
Crate Type	Height	Length	Length
Pallet Only	55"		99'
Open Crate	59"	77	101'
Enclosed Crate	59"	77	101'
Approximate Weight:			
Open Generator Set: 1685 lbs.	Open Weight	End. Weight	Sound At Weight
Enclosed Generator Set: 1890 lbs.	1750 lbs.	1955 lbs.	2035 lbs.
Sound Attenuated Generator Set: 1965 lbs.	1825 lbs.	2030 lbs.	2110 lbs.
	1860 lbs.	2065 lbs.	2145 lbs.

The information in this data sheet is of a general nature and does not form part of any contract or warranty. We have made efforts to ensure that the specification and information is accurate without any obligation or liability. The set illustrated is not necessarily the standard build.

For further information, contact:

INDUSTRIAL ENGINES LTD.

780-484-6213

888-887-0008 7/22/14