



# 4 W105S Marine Generator Set

Model	Injection	Speed control	Cylinder configuration	Bore/stroke (mm)	Displacement (l)
4 W105S	Mechanical	Electronic	4 in line	105x130	4.50



## Customer benefits

**Continuous compact power** with reference performances in its category

**Easy service** with accessible components and unit cylinder heads

**Simple technology with mechanical injection**

**Life cycle cost efficiency** with extended mean time between overhauls (MBTO)

## Rating table

Rating	Frequency	RPM	kWm	kWe	kVA
PRP	50 Hz	1500	70	64	80
PRP	50 Hz	1500	74	68	85
PRP	50 Hz	1500	87	80	100
PRP	50 Hz	1500	91	84	105
PRP	60 Hz	1800	91	84	105
PRP	60 Hz	1800	108	100	125

## Prime running power (PRP)

- Variable load with mean power calculated on 250 running hours
- No restriction on use if mean power 75% of nominal power
- Total operating time at 100% nominal power shall not exceed 500 hours per year
- 10% overload available 1 hour each 12 hours

## Power definition

Standard ISO 3046/1 - 1995 (F)

### Reference conditions

Ambient temperature	25 °C / 77 °F
Barometric pressure	100 kPa
Relative humidity	30%
Raw water temperature	25 °C / 77 °F

### Fuel oil

Relative density	0,840 ± 0,005
Lower calorific power	42 700 kJ/kg
Consumption tolerances	0 ± 5%
Air inlet limit temperature	35 °C / 95 °F



## Standard equipment

### Engine and block

Cast iron cylinder block, with replaceable cylinder liners  
 Separate cast iron cylinder heads  
 Replaceable valves guides and seats  
 Steel forged crankshaft  
 Light alloy piston with 3 high performance piston rings

### Cooling system

Fresh / raw water heat exchanger with integrated thermostatic valves and expansion tank  
 Cast iron centrifugal fresh water pump, mechanically driven  
 Bronze self-priming raw water pump, mechanically driven

### Lubrication system

Full flow screwable oil filters  
 Fresh water cooled lube oil cooler

### Fuel System

In line injection pump with flanged electronic speed governor  
 Double wall injection bundle  
 Duplex fuel filters  
 Water separator

### Intake air and exhaust system

Fresh water cooled exhaust gas manifold  
 Turbo blower with insulated turbine housing

### Electrical system

Voltage 24Vdc  
 Electrical starter on flywheel crown

### Generator

- 50/60Hz Frequency, 4 Pole
- Insulation / Heating Class H/H
- Electronic voltage regulation
- Brushless excitation
- IP23 Protection, Marine impregnation
- Single bearing

## Specific fuel consumption

Frequency	PRP				75% PRP			50% PRP		
	kWe	kWm	g/kWh	l/h	kWm	g/kWh	l/h	kWm	g/kWh	l/h
50 Hz	64	70	197	16	53	201	12	35	212	8
50 Hz	68	74	196	17	56	200	13	37	211	9
50 Hz	80	87	197	20	66	199	15	43	205	10
50 Hz	84	91	198	21	69	198	16	45	205	10
60 Hz	84	91	196	21	69	197	16	46	218	11
60 Hz	100	108	199	25	81	200	19	54	215	13

## Dimensions and dry weight (mm / kg)

	A	B	C	Weight
80 KVA- 50 Hz	1705	1015	995	907
85 to 100 KVA- 50 Hz 105 KVA- 60 Hz	1705	1015	995	944
105 KVA- 50 Hz 125 KVA- 60 Hz	1774	1015	995	980

