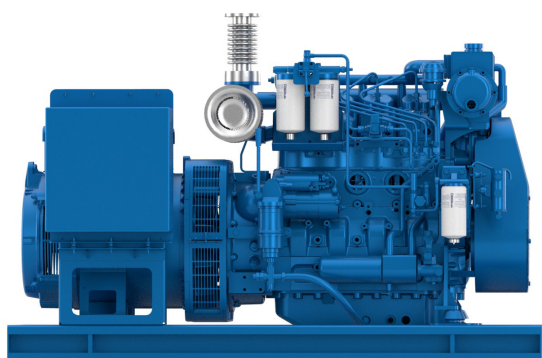




4W105

Genset Diesel Engine



Number of cylinders	4 in line
Bore and stroke (mm)	105 X 130
Total displacement (L)	4.5
Compression ratio	18/1
Engine rotation	counter clockwise
Idle speed	700
Flywheel	SAE 3
Flywheel housing	SAE 11.5"

Customer benefits

Continuous compact power with reference performances in its category

Easy service with accesible components and unit cylinder heads

Simple technology with common rail injection

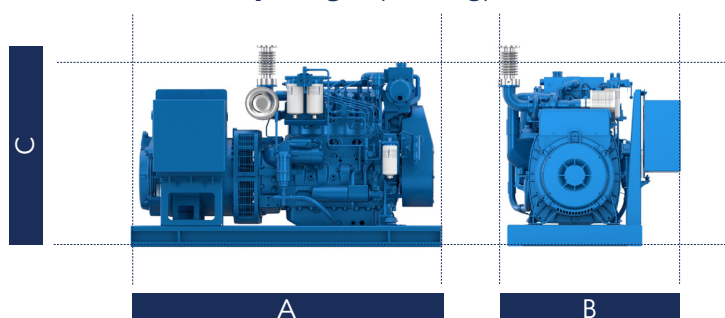
Life cycle cost efficiency with extended MTBO (Mean time between overhauls)

4W105					Fuel consumption									Emissions	
					@ 100%			@ 75%			@ 50%				
Rating	Hz	kVA	kWe	RPM	kWm	g/kWh	l/h	kWm	g/kWh	l/h	kWm	g/kWh	l/h	IMO	EPA
PRP	50	105	84	1500	91	198	18	68	199	14	46	205	10	II	NA*
PRP	60	125	100	1800	108	207	22	78	206	16	52	211	11	II	NA*
PRP	50	105	84	1500	91	198	18	68	199	14	46	205	10	NA*	NA*
ESP	50	125	100	1500	108	207	22	78	206	16	52	211	11	NA*	NA*
PRP	60	110	88	1800	95	199	18	71	198	14	48	205	10	NA*	NA*
ESP	60	135	108	1500	117	208	24	88	205	18	59	210	12	NA*	NA*

Generator Sets Engines

Power Class		Definition
PRP	Prime Power	Unrestricted running time Time at full load \leq 500hrs/year Load variation \leq 75% of rated power 10% overload 1hr/12hrs
ESP	Emergency Standby Power	Running time 200hrs/year max Load variation 110% of Prime Power Average load factor should not exceed 70% of the engine's ESP power rating

Dimensions and dry weight (mm/kg)



Genset	A	B	C	Dry weight
PRP 80 kVA @ 50 Hz	1705	995	1015	907
PRP up to 100 kVA - 50 Hz	1705	995	1015	944
PRP 125 kVA - 60 Hz	1705	995	1015	944
PRP 105 kVA	1705	9995	1015	980

Standard equipment

Cooling System

Two - stage cooling circuit with built - in HT thermostatic valve
Integrated fresh water expansion tank
High efficiency tubular heat exchanger
Gear driven centrifugal raw water pump
Self priming raw water pump with bronze impeller

Lubrication System

Full flow lube oil filters duplex type
Fresh water cooled lube oil heat exchanger

Fuel System

Common-rail electronic injection
High pressure pump with shielded high pressure injection rail and pipes
Fuel oil filter duplex type
External fuel pre-filter with water separator

Intake Air and Exhaust System

Double flow raw water cooled intake air heat exchanger module
High efficiency dry turbocharger with ball bearing technology
Two Stage Turbocharging system

Electrical System

Voltage: 24V DC insulated
Electrical starter
190A battery alternator

Optional Equipment

Wet exhaust
PTO elastic coupling
Additional pulley
Electric drain system
Standard PTO for hydraulic pump
Different alternators possible - including 12V
Electrical rotary actuator

Power definition

(Standard ISO 3046/1 - 1995 (F))

Reference conditions

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

Fuel oil

Relative density	0,840 ± 0,005
Lower calorific power	42 700 kJ/kg
Consumption tolerances	+ 5%
	(DIN ISO 3046-1)
Inlet limit temperature	35°C / 95°F

Our ratings also comply with classification societies maximum temperature definition without power derating.

Ambient temperature	45°C / 113°F
Raw water temperature	32°C / 90°F