



12M55

Marine propulsion engine



Number of cylinders	V12
Bore and stroke (mm)	180 x 215
Displacement (L)	65.6
Engine rotation	Counterclockwise
Idle speed (rpm)	600
Flywheel	21"
Flywheel housing	SAE 00

Rated power - Fuel consumption

Rating	kW	rpm	HP	Fuel consumption			IMO
				Optimum value	Rated power		
				g/kWh	g/kWh	l/h	
P1	1800	1600	2450	188	189	409	II
P1	1912	1800	2600	192	193	462	II
P2	1985	1600	2700	187	188	434	II
P2	2205	1800	3000	189	194	515	II
P3	2536	1800	3450	187	200	612	II

P1 - CONTINUOUS DUTY - Severe continuous application with little or no engine speed / load variations.

Displacement hull:

- Engine mean load factor: 100%.
- Annual duration of use: Unrestricted.
- Use under full load: unlimited (100%).

Application examples: Deep Sea vessels and shrimp trawlers, high sea or river tugboats, towboats, cargos, cargo boats, dredgers, ferries.

P2 - HEAVY DUTY - Continuous application with frequent variations in engine speed and load.

Displacement or semi-displacement hull:

- Engine mean load factor: 80%.
- Annual duration of use: 5,000 hours.
- Use under full load: 8 hours in a 12-hours period (66%).

Application examples: Annual passenger vessels, harbour tugs, self-propellers, coasters, fast fishing boats such as tuna boats, seiners, pot vessels or liners, buoying vessels, oceanographic research vessels.

P3 - INTERMITTENT DUTY - Intermittent application with significant variations in engine speed and load. Planning or semi-planning hull:

- Engine mean load factor: 70%.
- Annual duration of use: 3,000 hours.
- Use under full load: 2 hours in a 12-hours period (16%).
- Cruising speed is less than 90% of nominal engine speed.

Application examples: Seasonal passenger vessels, fishing launches, pilot boats, pump boats, displacement sailboats, trawlers, bow thrusters.

P4 - LIGHT DUTY - Light application with significant variations in engine speed and load.

Planning hull:

- Engine mean load factor: 90%.
- Annual duration of use: less than 1,500 hours.
- Use under full load: 1 hour in a 12-hours period (8%).
- Cruising speed is less than 80% of nominal engine speed.

Application examples: Survey or rescue fast vessels, military fast vessels, patrol boats, commercial pleasure craft.

P5 - HIGH PERFORMANCE DUTY - High performance application with significant variations in engine speed and load:

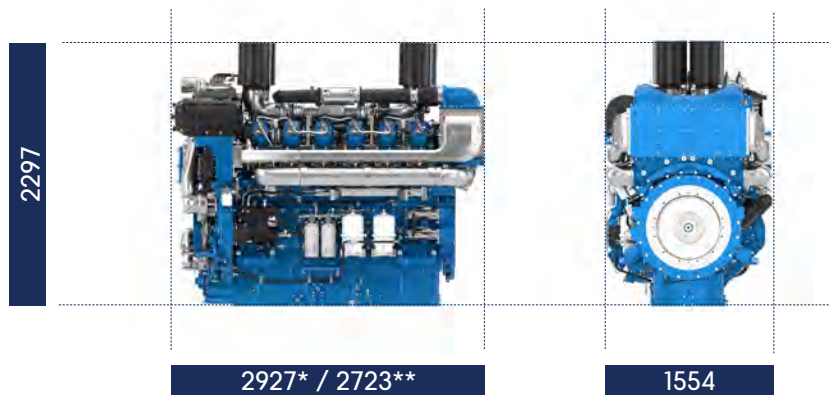
- Engine mean load factor: 60%.
- Annual duration for use: 500 hours.
- Use under full load: 1 hour in a 12-hours period (8%).

Application examples: Private pleasure boats, multi-hull pleasure boats.

WARRANTY DISCLAIMER

Warranty does not apply whenever the engine operation conditions differ from the initial duty class - P1, P2, P3, P4 and P5 - operational conditions. The operator must therefore modify the duty class accordingly, to benefit from SIMB warranty coverage.

Dimensions and dry weight (mm/kg)



Weight with 5% tolerance

*total

**from flywheel

Standard equipment

Cooling System

Three-stage cooling circuit with integrated HT thermostatic valve
High efficiency heat exchanger (Plate Type)
Gear-driven self-priming raw water pump with bronze impeller
Gear-driven centrifugal freshwater pump

Lubrication System

Duplex full-flow spin-on lube oil filters
Freshwater-cooled lube oil cooler
Electric pre-lubrication and oil drain pump

Fuel System

Electronically controlled common-rail fuel injection system
Double-wall fuel injection pipe with leakage detection system
Duplex fuel filters, replaceable while engine is running
Duplex fuel prefilter with water separator
Electric fuel priming pump

Intake Air and Exhaust System

Fresh water cooled exhaust gas manifold
High efficiency dry-type turbocharger with heat insulation
Fresh water cooled charge air cooler

Electrical System

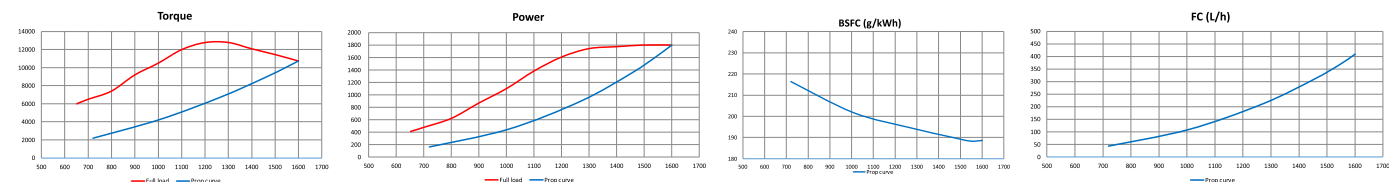
24V DC system, Insulated
Electrical Starter
Battery Charger 55A

Optional Equipment

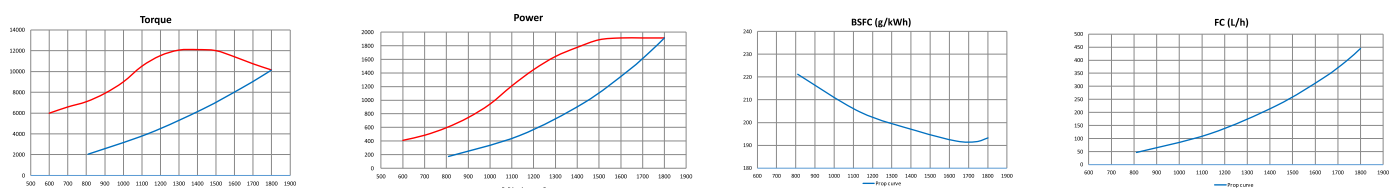
Front PTO

Performance

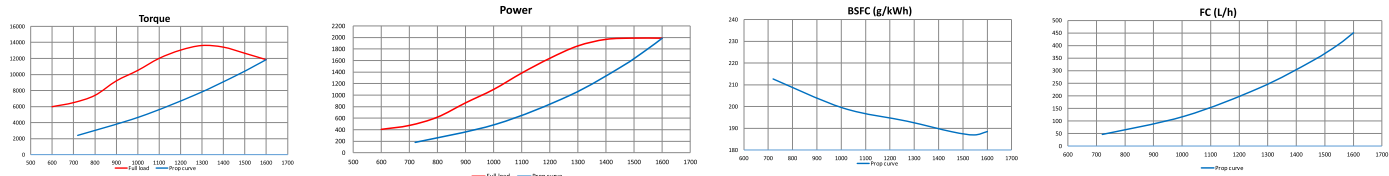
P1 - 1800 kW - 1600 rpm



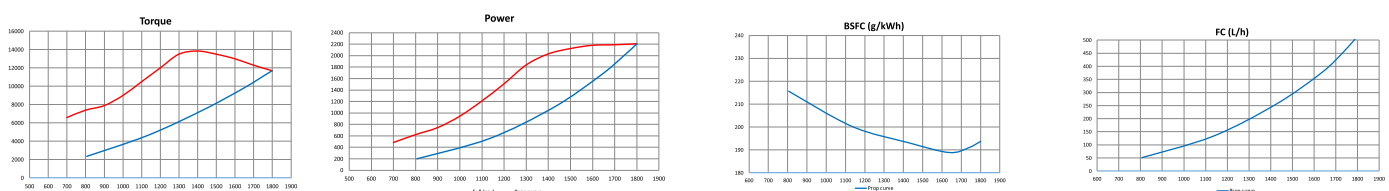
P1 - 1912 kW - 1800 rpm



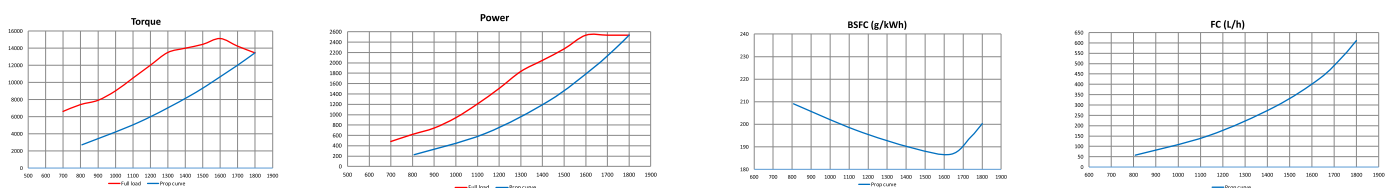
P2 - 1985 kW - 1600 rpm



P2 - 2205 kW - 1800 rpm



P3 - 2536 kW - 1800 rpm



Power definition

(Standard ISO 3046/1 - 2002)

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%
Inlet limit temperature	(DIN ISO 3046-1) 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