







Number of cylinders Bore and stroke (mm) Total displacement (L) Cylinders Engine rotation Idle speed Flywheel Flywheel housing 12 180 x 215 65.6 12V counter clockwise 600 21" SAE 00

Rated power - Fuel consumption

				Fuel consumption			
Duty	kW	HP	RPM	Optimum value	Rated	power	IMO
				g/kWh	g/kWh	l/h	
P1	1800	2450	1600	188	189	409	II
ΡI	1912	2600	1800	192	193	462	II
P2	1985	2700	1600	187	188	434	II
PZ	2205	3000	1800	189	194	515	II
Р3	2536	3450	1800	187	200	612	II

	P1	P2	Р3
Application	Unrestricted	Heavy	Intermittent
Engine load variations	Very little to none	Continuous	Important
Average Engine load factor	80-100%	30-80%	50%
Annual working time	More than 5000h	3000-5000h	1000-3000h
Time at full load	Unlimited	8h each 12h	2h each 12h

P1 Continuous Duty Typical applications:

- Deep sea trawlers
- Shrimps trawlers
- Sea going tug boatsRiver tug boats
- River tug bo
 Push boats
- Freighters
- Dredges
- LCT
- Ferries

P2 Heavy Duty Typical applications:

- Deep sea trawlers
- Shrimps trawlers
- Sea going tug boatsRiver tug boats
- Push boats
- Freighters
- Dredges
- LCT
- Ferries

P3 Intermittent Duty Typical applications:

- Seasonal passenger vessels
- Fishing boats
- Pilot boats
- Commercial pleasure boatsPump boats
- Displacement sailboats
- Trawlers
- Bow thrusters

- P4 Light Duty Typical applications:
- Private pleasure boats Multi-hull pleasure boats
- Multi-null pleasure boats
 Survey or rescue fast vessels
- Military fast vessels.

P5 High performance Duty Typical applications:

- Private pleasure boats
- Multi-hull pleasure boats





Dimensions and dry weight (mm/kg)



Standard equipment

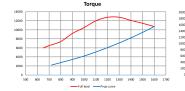
Cooling System	Three stage cooling circuit with built in HT thermostatic valve Integrated fresh water expansion tank High efficiency plate heat exchanger Gear driven centrifugal fresh water pump Self priming raw water pump with bronze impeller
Lubrication System	Full flow lube oil filters duplex type Fresh water cooled lube oil heat exchanger Electrical draining and pre-lub pump
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	Fresh water cooled charge air cooler module High efficiency dry turbocharger with ball bearing technology 4 TC Turbocharging system
Electrical System	Voltage: 24V DC insulated Electrical starter 55A battery alternator STD BMS with IV5 display



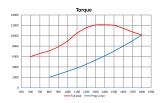
FC (L/h)

Performance

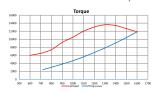




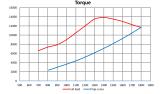
P1 - 1912 kW - 1800 rpm



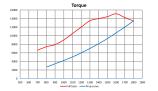
P2 - 1985 kW - 1600 rpm

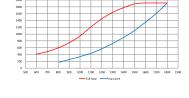


P2 - 2205 kW - 1800 rpm

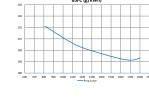


P3 - 2536 kW - 1800 rpm

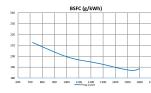


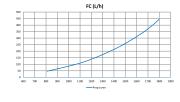


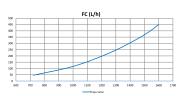


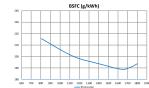


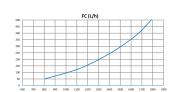
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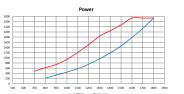


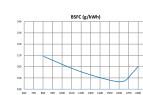


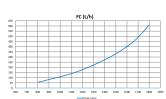












Power definition (Standard ISO 3046/1 - 2002)

Reference conditions

Relative humidity		

Fuel	oil
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25°C / 77°F

25°C / 77°F

100 kPa

30%R

Relative density Lower calorific power Consumption tolerances

Inlet limit temperature

0,840 ± 0,005 42 700 kJ/kg + 5% (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

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