

C90 620

## **6 CYLINDERS IN LINE - DIESEL CYCLE**

456 kW (620 HP) @ 2530 rpm (A1) 405 kW (550 HP) @ 2530 rpm (A2) 368 kW (500 HP) @ 2530 rpm (B) 331 kW (450 HP) @ 2530 rpm (C)

		001 MW (100111 ) @ 2000 1pm (0)		
Specifications				
Thermodynamic cycle		Diesel 4 stroke		
Air intake		TCA		
Arrangement		6L		
Bore x Stroke	mm	117 x 135		
Total displacement		8.7		
Valves per cylinder	n.	4		
Cooling system		liquid		
Direction of rotation (viewed facing flywheel)		CCW		
Engine management		by EDC (Electronic Diesel Control)		
Injection system		Electronic Common Rail (E.C.R.		
Electrical system				
Voltage	V	24		
Standard configuration				
Flywheel housing	type	SAE 1		
Flywheel size	inch	14		
Air filter		rear side		
Turbocharger		Waste Gate (water cooled) Turbo with Aftercooler (TCA)		
Double water circuit heat exchanger		tube type		
Exhaust cooled elbow		-		
Water charge tank		included		
Fuel filter	n.	1 - right side		
Fuel prefilter		1 (loose)		
Fuel pump		1 - gear driven		
Oil filter	n.	2 - left side		
Oil sump		aluminium		
Oil vapours blow-by circuit		included		
Oil heat exchanger		included		
Oil filler		by cylinder head cover		
Starting motor		24V - 5.5kW		
Alternator		28V - 90A		
Engine stop device		by electronic central unit		
Electric wiring		with negative to ground connection		
Painting	color	white "ICE"		
Not included in the standard configuration				
Battery - minimum capacity recommended		2 x 120 Ah		
Battery - minimum cold cranking capacity recommended		900 A		
<u> </u>				

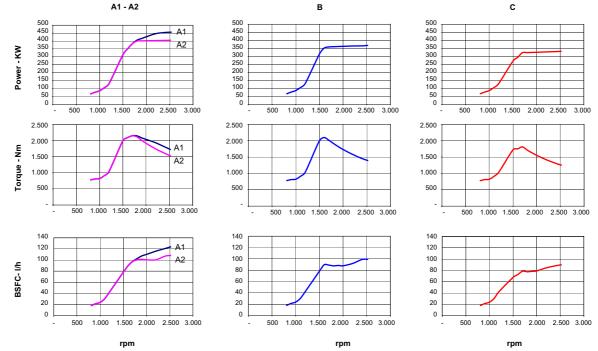
FPT OFFERS THE WIDEST AVAILABILITY OF ENGINE BUILD OPTIONS TO CUSTOMER SPECIFIC REQUIREMENTS WITHIN THE ENGINE SUPPLY. TO FIND OUT MORE ABOUT THE CONFIGURATIONS AND ACCESSORIES WHICH ARE AVAILABLE, CONTACT THE FPT SALES NETWORK.



Rating type		<b>A</b> 1	A2	В	С	
Maximum power [*]	kW(HP)	456 (620)	405 (550)	368 (500)	331 (450)	
At speed	rpm	2530	2530	2530	2530	
Maximum no load governed speed at max rating	rpm	2700	2700	2700	2700	
Minimum idling speed	rpm	600	600	600	600	
Mean piston speed at rated speed	m/s	11.4	11.4	11.4	11.4	
BMEP at max power	kg/cm <sup>2</sup>	24.8	22.1	20.1	18.1	
Specific fuel consumption at full load (best value)	g/kWh	228.5	224.6	226.3	228.6	
Oil consumption at max rating	(% of fuel cons.)	≤ 0.2				
Minimum starting temperature without auxiliaries	°C		-10			
Oil and oil filter maintenance interval for replacement	hours		300			

<sup>\*</sup> Net Power at flywheel according to ISO 8665, after 50 hours running, Fuel Diesel EN 590. Power tolerance 5%.

Test conditions: 25 °C air temperature, 100 kPa atmospheric pressure, 30 % relative humidity .



## Fuel density = 840 g/l

A1 = High performance crafts.
A2 = Pleasure/commercial vessels.
Full throttle operation restricted within 10% of total use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum useage:

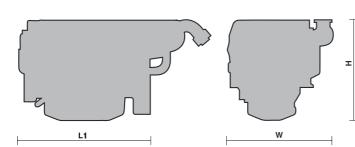
- 300 hours per year (A1 service)
- 1000 hours per year (A2 service)

B = Light duty:
Full throttle operation restricted within
10% of total use period.
Cruising speed at engine rpm <90%

Cruising speed at engine rpm <90% of rated speed setting - Maximum useage 1500 hours per year.

C = Medium duty: Full throttle operation <25% of use

Cruising speed at engine rpm <90% of rated speed setting - Maximum useage 3000 hours per year.



L1 = 1288 mm. W = 868 mm.

 $H = 961 \, \text{mm}.$ 

Dry weight (without marine gear) = 940 kg.



