

MARINE ENGINES | INDUSTRIAL | GENERATORS | SOLAR

MARINE Application

4000

SPECIFICATIONS	
Thermodynamic Cycle	Diesel 4 stroke
Air Handling	NA
Arrangement	4L
Bore x Stroke (mm)	75 X 77.6
Total Displacement (L)	1.372
Valves per cylinder (n°)	2
Cooling System	liquid
Direction of Rotation (viewed facing flywheel)	CCW
Engine management	mechanical
InjectionSystem	MUI

STANDARD CONFIGURATION	
Flywheel housing (type)	SAE B
Flywheel size (inch)	alignment, flexible couplig Ø 121.5 mm
Air Filter	dry
Turbocharger	-
Heat Excharger	tube type
Exhaust gas water mixer - Exhaust cooled elbow	stainless steel Ø 45 mm
Water charge tank	included
Fuel filter (n°)	1 - right side
Fuel prefilter	-
Fuel Pump	included
Lift pump	-
Oil filter (n°)	1 - left side
Oil sump	pressed steel with
	corrosion inhibiting
01	treatment
Oil vapours blow-by circuit	yes
Oil heat exchanger Oil filler	yes
Oli filler	on timing cover frontward
Starter	12V - 1.8kW
Alternator	12V - 1.6KW 12V - 65A
Engine stop device	electrical excitation
Wiring harness	wiring harness and
wining namess	electrical panel
Painting color	white "ICE"

WEIGHT AND DIMENSIONS

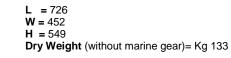
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ELECTRICAL SYSTEM	
Voltage	12
NOT INCLUDED IN STANDARD CONFIGURATION	
Battery - minimum capacity recommended [*] (Ah)	66
Battery - minimum cold cranking capacity recommended	

[*] (A)



Legend

Arrangement L (in line) Air Handling TAA (Turbocharged with aftercooler) TC (Turbocharged) NA (Naturally Aspirated) Turbocharger WG (Wastegate) VGT (Variable Geometry Turbocharger) InjectionSystem M (Mechanical) ECR (Electronic Common Rail)

EUI (Electronic Unit Injector)

SD: Stern Drive version PD (POD Drive version)

FOR INFORMATION ON THE AVAILABLE RATINGS NOT LISTED IN THIS DOCUMENT PLEASE CONTACT THE FPT INDUSTRIAL SALES NETWORK OR VISIT OUR SITE WWW.FPTINDUSTRIAL.COM





RATING TYPE	A1	A2	В	С
Maximum power (kW(HP)@rpm)	29.4 (40) @ 3600	-	-	-
High idle speed (rpm)	3850	-	-	-
Low idle speed (rpm)	± 850			
Mean piston speed at rated speed (m/s)	9.3	-	-	-
BMEP at max power (kg/cm)	8.17	-	-	-
Specific fuel consumption at full load (best value) (g/kWh @ rpm)	248 @ 2100	-	-	-
Oil consumption at max rating (% of fuel cons.)			≤0.2	
Minimum starting temperature without auxiliaries (°C)			-20 °	
Oil and oil filter maintenance interval for replacement [**] (hours)			250	

* Net Power at flywheel according to ISO 3046/1, after 50 hours running, Fuel Diesel EN 590. Power tolerance 5%.

High Performance Crafts. Full throttle operation restricted within 10% of total use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 300 hours per year. Pleasure Commercial Vessels. Full throttle operation restricted within 10% of total use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 1000 hours per year. Light Duty: Full throttle operation restricted within 10% of total use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 1500 hours per year. Medium Duty: Full throttle operation restricted within 10% of use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 1500 hours per year. Heave Duty: Full throttle operation < 25% of use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 3000 hours per year. A1 A2 B C

D Heavy Duty	
FEATURES	BENEFITS
ENGINE DESIGN FOCS Series - The unit injection pumps, located in the pearlitic grey cast iron cylinder head with the cross flow of the intake and exhaust pipes, allow engine length and weight reduction.CHD Series - The innovative design of the gear train, the injection system design and location and the reducedcylinder pitch allow shortening the engine length.	COMPACTNESS AND LIGHTNESS.
TECHNOLOGICAL INNOVATION FOCS Series - The mechanical pump-injector units provide a better injection timing, resulting in great performanceadvantages.CHD Series - The QLC pump offers high performance on all engine speed. Compared to the conventional injectionpump, QLC features a one-way fl ow and a unique delivery fuel system that prevent unwanted variations oninjection pressure and timing, eliminating gas bubbles.	HIGH PERFORMANCE AND EFFICIENCY IN ANY LOAD CONDITION.
NOISE & VIBRATION REDUCTION FOCS Series - Excellent results have been obtained as of noise emission reduction, thanks to the location of the injection system in the cylinder head, to a ribbing system along all the engine structure and to the complete absence of gears. CHD Series - The innovative design of the fuel injection system, as well as the use of hypereutectic pistons reducing piston slap and of a heavy-duty block, allow a strong reduction of noise levels that are normally associated withthose of diesel engines. The special crankshaft balancing ensures exceptionally low vibrations and an excellent operational performance.	EXCELLENT REDUCTION OF NOISE AND VIBRATION LEVELSNAVIGATION CONFORT
REDUCED EMISSIONS FOCS Series - The injection system has been tested for exhaust emission levels to the lowest limits, thuspositioning these engines well below the EEC requirements.CHD Series - The advanced design of the injection and combustion systems results in reduced environmentalimpact.	REDUCED ENVIRONMENTALIMPACT
ÁCCESSORIES - MAINTENANCE - NETWORK A wide range of accessories including the sail drive option are available for the 4000 Series.FOCS Series - Components subject to more frequent checking are located in the upper part of the engine, justunder the cover. This allows easy and low cost equipment maintenance.CHD Series - All maintenance operations are easier due to the simple construction of the product. Furthermore,for the QLC pump maintenance the services of a pump specialist are not required, as parts servicing can becompleted by any qualifi ed workshop.	SAIL DRIVE AVAILABILITYEASY & ECONOMICAL MAINTENANCEWORLDWIDE SERVICE NETWORK

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FPT INDUSTRIAL 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



