



MARINE DATA SHEET

C90 620 E

456 kW

**Our efficiency.
Your edge.**

SPECIFICATIONS

Thermodynamic cycle	Diesel 4 stroke
Air handling	TCA
Cylinders arrangement	6L
Bore x Stroke	117 x 135 mm
Total displacement	8.7 liters
Valves per cylinder	4
Cooling System	liquid
Direction of Rotation (viewed facing flywheel)	CCW
Engine management	by EDC (Electronic Diesel Control)
Injection System	ECR

STANDARD CONFIGURATION

Flywheel housing	SAE 3
Flywheel size	14"
Air filter	rear side
Turbocharger	Waste Gate (water cooled) Turbo with Aftercooler (TCA)
Heat exchanger	tube type
Exhaust gas water mixer - Exhaust cooled elbow	-
Water charge tank	included
Fuel filter	1 - right side
Fuel prefilter	included (loose)
Fuel pump	1 - gear driven
Oil filter	2 - left side
Oil sump	aluminium
Oil vapours blowby circuit	included
Oil heat exchanger	included
Oil filler	by cylinder head cover
Starter	24 V - 5.5 kW
Alternator	28 V - 90 A
Engine stop device	by electronic central unit
Wiring harness	with negative to ground connection
Painting color	white "ICE"

Legend

Arrangement

L In line
V 90° "V" configuration

Air Handling

TCA Turbocharged with aftercooler
TC Turbocharged
NA Naturally Aspirated

Turbocharger

WG Wastegate
VGT Variable Geometry Turbocharger
TST Twin Stage Turbocharger

Exhaust System

EGR Exhaust Gas Recirculation
SCR Selective Catalytic Reduction

Injection System

M Mechanical
ECR Electronic Common Rail
EUI Electronic Unit Injector
MPI Multi Point Injection

WEIGHT AND DIMENSIONS

Dimensions*	(L**xWxH) 1288 x 823 x 961 mm
Dry Weight	940 Kg

* Dimensions can be changed according to engine options

** Length at flywheel

ELECTRICAL SYSTEM

Voltage	24 V
---------	------

NOT INCLUDED IN STANDARD CONFIGURATION

Battery - minimum capacity recommended	2 x 120 Ah
Battery - minimum cold cranking capacity recommended	900 Ah

RATING TYPE		A1	A2	B	C
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	bar	24.8	22.1	20.1	18.1
Specific fuel consumption at full load (best value)	g/kWh @ rpm	228.5	224.6	226.3	228.6
Oil consumption at max rating	(% of fuel cons.)	= 0.2	= 0.2	= 0.2	= 0.2
Minimum starting temperature without auxiliaries	°C	-10°	-10°	-10°	-10°
Oil and oil filter maintenance interval for replacement	hours	300	300	300	300

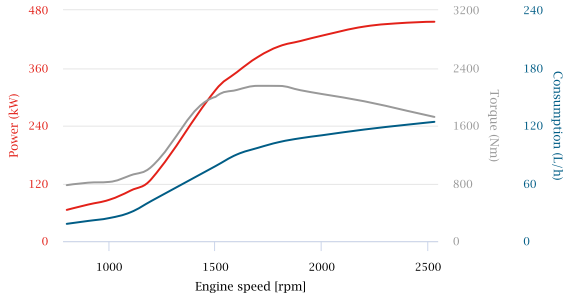
* Net Power at flywheel according to ISO 3046/1, after 50 hours running, Fuel Diesel EN 590. Power tolerance 5%.

Rating

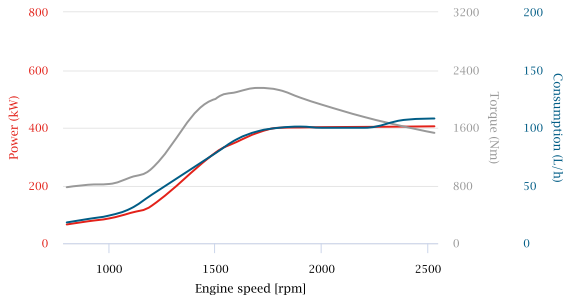
- | | |
|---|--|
| <p>A1 High performance crafts. Full throttle operation restricted within 10% of total use period Cruising speed at engine rpm <90% of rated speed setting. Maximum useage 300 hours per year.</p> <p>A2=B1 Pleasure/commercial vessels. Full throttle operation restricted within 10% of total use period Cruising speed at engine rpm <90% of rated speed setting. Maximum useage 1000 hours per year.</p> | <p>B Light duty. Full throttle operation restricted within 10% of total use period. Cruising speed at engine rpm <90% of rated speed setting. Maximum useage 1500 hours per year.</p> <p>C Medium duty. Full throttle operation <25% of use period. Cruising speed at engine rpm <90% of rated speed setting. Maximum useage 3000 hours per year.</p> <p>D Heavy duty.</p> |
|---|--|

POWER & TORQUE

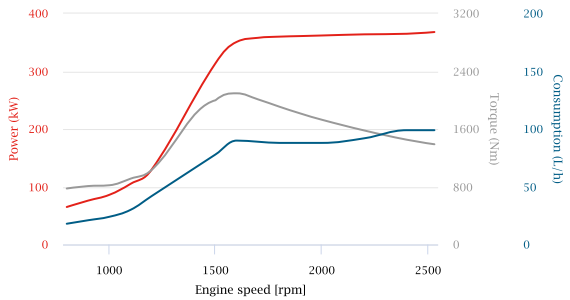
IMO MARPOL Tier2,
 IMO MARPOL CHINA
 EU-RCD Stage II,
 EU-IWV Stage IIIA,
 EU-CCNR Stage II |
 C90 620 E 456 kW -
 Class A1 456 kW



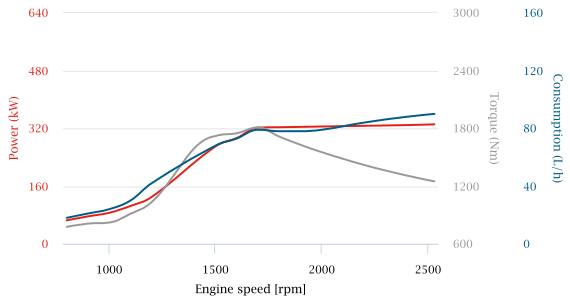
IMO MARPOL Tier2,
 IMO MARPOL CHINA
 U-RCD Stage II,
 EU-IWV Stage IIIA,
 EU-CCNR Stage II |
 C90 620 E 456 kW -
 Class A2 405 kW

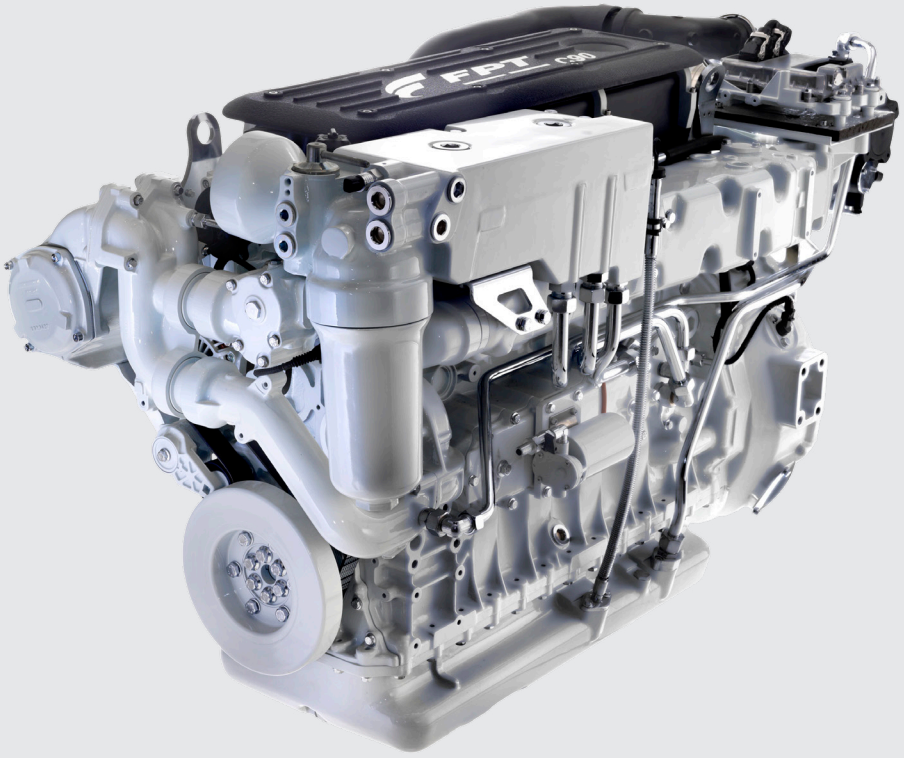


IMO MARPOL Tier2,
 IMO MARPOL CHINA
 EU-RCD Stage II,
 EU-IWV Stage IIIA,
 EU-CCNR Stage II |
 C90 620 E 456 kW -
 Class B 368 kW



IMO MARPOL Tier2,
 IMO MARPOL CHINA
 EU-RCD Stage II,
 EU-IWV Stage IIIA,
 EU-CCNR Stage II |
 C90 620 E 456 kW -
 Class C 331 kW





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



FPT Industrial S.p.A.

Via Puglia 15, 10156
Torino, Italy

fptindustrial.com

[marketing@
fptindustrial.com](mailto:marketing@fptindustrial.com)

All the pictures, drawings illustrations and descriptions contained in this brochure are based on product information available to FPT Industrial at the time of printing (31/01/2018). Some of the engine line-ups may refer to a specific market configuration which may not be present or offered for sale available in all other markets. The colors featured in this brochure may differ from the originals. FPT Industrial reserves the right to introduce any modifications, at any time and without any prior advance notice, to design, material, components equipment and/or technical specifications.