



MARINE DATA SHEET

C90 650 E

478 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 1
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
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NOT INCLUDED IN STANDARD CONFIGURATION

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

RATING TYPE

A1

Maximum power [*]	kW(HP)	478 (650)
At speed	rpm	2530
Maximum no load governed speed at max rating	rpm	2700
Minimum idling speed	rpm	600
Mean piston speed at rated speed	m/s	11.4
BMEP at max power	bar	26.5
Specific fuel consumption at full load (best value)	g/kWh @ rpm	228.5
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

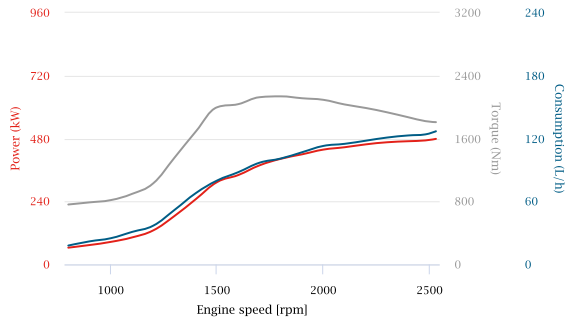
* Net Power at flywheel according to ISO 3046/1, after 50 hours running, Fuel Diesel EN 590. Power tolerance 5%.

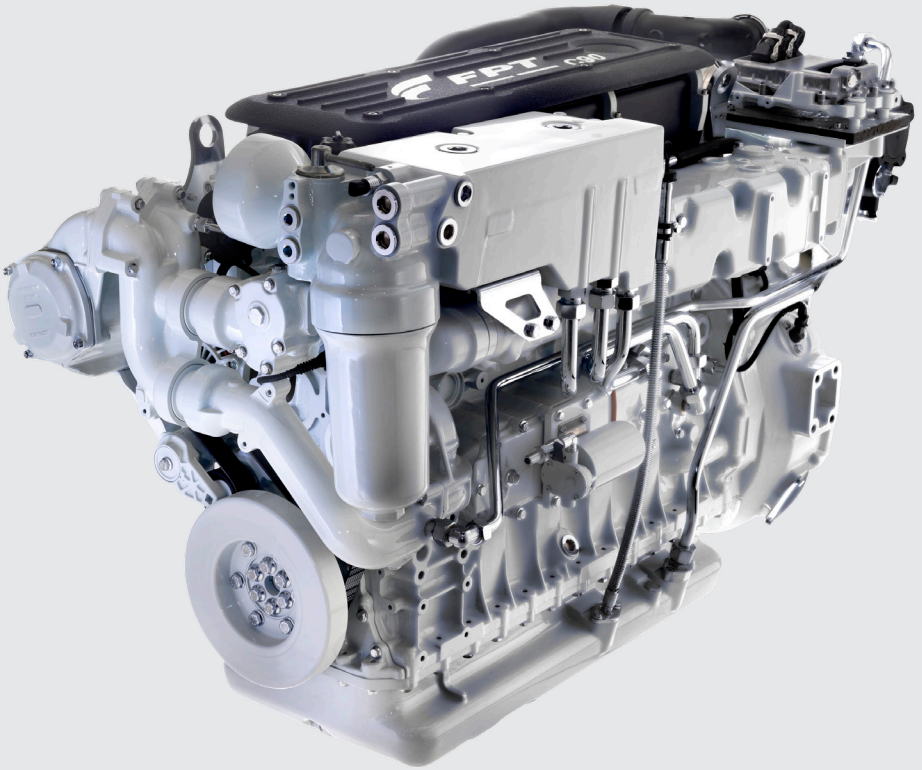
Rating

- | | |
|---|--|
| <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> |
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POWER & TORQUE

IMO MARPOL Tier2,
EU-RCD Stage II,
USA-EPA Tier3
RECREATIONAL | C90 650 E
478 kW - Class A1 478 kW





Rating type A1: 478 kW (650 HP) @ 2530 rpm



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