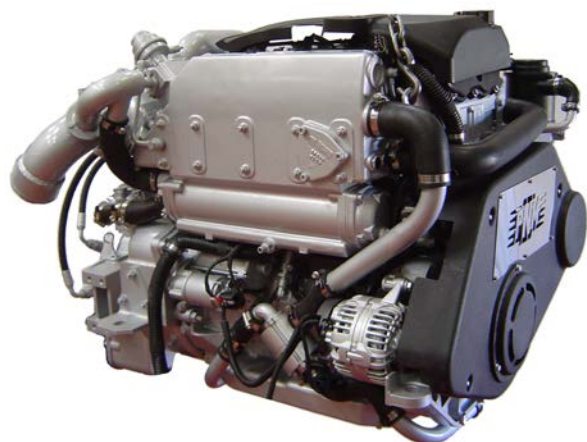




## FNM® MARINE DIESEL ENGINES INBOARD DIESEL ENGINE

# 30HPE<sub>250,225,180,145</sub>

### TECHNICAL DATA



Engine designation	30HPE250	30HPE225	30HPE180	30HPE145
<b>teljesítmény f tengelyen</b> Crankshaft Power [kW] (hp)	184 (250)	165 (225)	132 (180)	107 (145)
<b>teljesítmény propeller tengelyen</b> Propeller shaft power [kW] (hp)	180 (245)	161 (220)	129 (176)	104 (141)
<b>fordulatszám max.</b> Engine speed [min <sup>-1</sup> ]	4100	4100	3800	3800
<b>henger rtartalom</b> Displacement [l] (in <sup>3</sup> )	3,0 (183)	3,0 (183)	3,0 (183)	3,0 (183)
<b>hengerek száma</b> Number of cylinders	4	4	4	4
<b>furat / löket</b> Bore/stroke [mm] (in)	95,8/104 (3,77/4,04)	95,8/104 (3,77/4,04)	95,8/104 (3,77/4,04)	95,8/104 (3,77/4,04)
<b>kompreszió arány</b> Compression ratio	18:1	18:1	18:1	18:1
<b>száraz tömeg TM880A váltóval</b> Dry weight with TM880A [kg]	385	385	385	385
<b>száraz tömeg ZF63-IV váltóval</b> Dry weight with ZF63-IV [kg]	393	393	393	393
<b>Power Rating</b>	A	A1	B	C

The engine illustrated may not be entirely identical to production standard engines.

#### Emission compliance

RCD Stage II 2013/53/UE, US EPA Tier III (40CFR1042), IMO NOx (30HPE250)

Technical data according to ISO8665. Fuel complies EN590. Merchant fuel may differ in specification and may influence engine power output and consumption. Production tolerance within 5% (of power). Not all models, standard equipment and accessories are available in all countries. All specifications are subject to change without notice.

### RELIABLE AND ENDURING

FNM® 4-cylinder 30HPE engine is based upon the best-selling F1C platform, a reference in modern commercial engines. The engine utilize a common-rail fuel injection system electronically controlled by a proprietary electronic control unit, expressly set for this unit. The engine spots a high displacement per cylinder and is capable to perform at fast powers, resulting in a high power-to-displacement ratio propulsion unit.

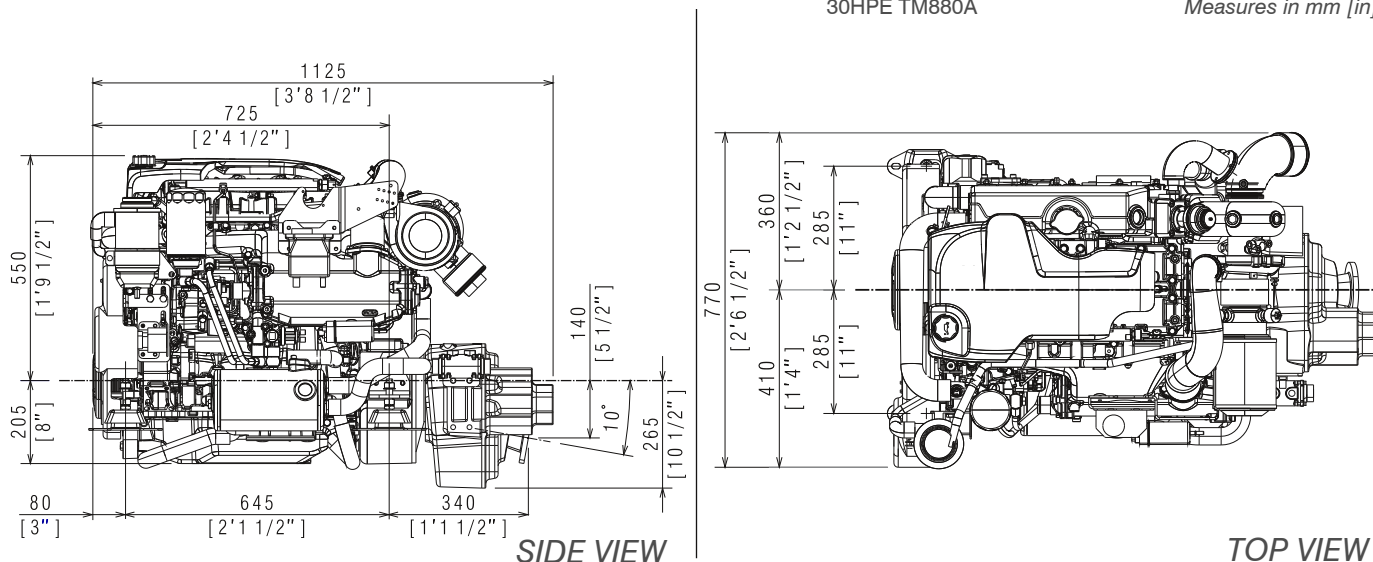
### FIRST CLASS PERFORMANCE

Set for recreational use, where the engine reaches up to 184kW (250HP), or for any of the commercial rating, where this engine is capable to achieve up to 3000h per year, this unit will guarantee first-class performance in every functioning condition.

### A PROPRIETARY ELECTRONIC CONTROL UNIT

The engine electronic control unit results from a 10-year development from CMD electronic department and is especially made for HPE engine's marine application. The ECU fits the first-class Bosch common rail system parts that carry out the fuel injection perfectly; this ECU includes unique control strategies, such as anti-shutdown on gear insertion for high-inertia installation, or fast-reversing situations, and guarantees high performances within emission limits.

### DIMENSIONAL





30HPE250,225,180,145

**FNM® MARINE DIESEL ENGINES**  
**INBOARD DIESEL ENGINE**

## TECHNICAL CHARACTERISTICS

### Engine block and head

- Cylinder block made of cast-iron
- Cylinder head made of aluminium
- 4-valve per cylinder technology with hydraulic lash adjusters

### Double overhead camshafts

- Oil-cooled pistons with compression and scraper rings

### Five bearing crankshaft

- Automotive-class availability of service and parts

### Metal chain gear

### Engine mounting

- Flexible engine mounting

### Lubrication system

- Easily replaceable oil filter, on top of engine
- Easily to inspect or replace oil separator, on top of engine

### Double oil vapour filter technology

- Integrated cooler with engine's coolant

### Fuel system

- Common rail fuel injection system
- CMD proprietary ECU

### Fuel filter with water separator and alarm

### Air inlet and exhaust system

- Commercial-grade air filter
- Oil vapours vented into inlet air
- Exhaust elbow or raiser depending on application

### Coolant-cooled turbocharger

### Raw-water cooled intercooler

### Cooling system

- Thermostatically regulated freshwater cooling

- Thermal unit that integrates exhaust manifold, thermostat, tubular heat exchanger and expansion tank

### Easily accessible seawater impeller pump

### Electrical system

- 12V standard two-pole electrical system

### 12V-2,3kW starter

### Alternator 12V-110A

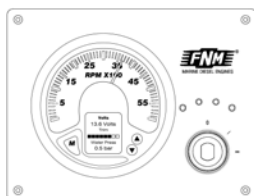
- Emergency stop button on engine's ECU

### CANBUS Panel with 8m extension and digital display of engine data

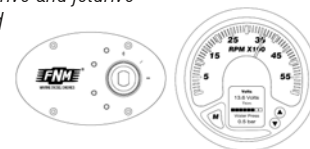
## CONTROL PANEL

Every tachometer integrates CANBUS technology and spots a multifunction display for monitoring alarms, engine's hours, coolant temperature's, oil pressure, battery voltage, turbo pressure, fuel level, trim angle, rudder angle and water tank level. Standard CANBUS J1939 upgradable to NMEA2000.

Assembled panel (standard for gearboxes applications): integrates tachometer, alarm lights and key block.



Disassembled panel (standard for sterndrive and jetdrive applications): panel with alarm lights and key block and separated tachometer (5", available upon request 4").



## GEARS

### Angled gearboxes

- TM880A (10°): R. 1,53:1, 2,08:1, 2,60:1

### V-line gearboxes

- ZF63-IV (12°): R. 1,29:1, 1,56:1, 1,99:1, 2,48:1

### In-line and coaxial gearboxes

- ZF63 (in line): R. 1,26:1, 1,51:1, 1,75:1, 1,93:1, 2,48:1, 2,78:1
- ZF63C (coaxial): R. 1,00:1

## OPTIONALS

Single or double electronic CANBUS control station

### Boiler kit for heating

Various length panel extension

Second control panel for flybridge installation

### RACOR and Mediterraneo filters

Trolling Valve

Additional PTO (ISO4183 Z/SPZ)

Steering pump

NMEA2000 compatibility kit

Wide range of additional instruments

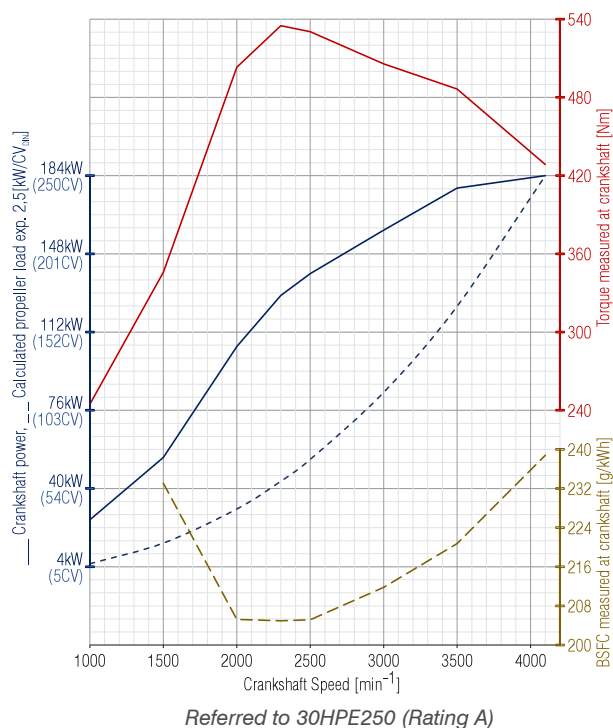
## CONTACT US

www.fnm-marine.com



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 CMD - Costruzioni Motori Diesel SpA  
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## PERFORMANCE CURVES



Referred to 30HPE250 (Rating A)