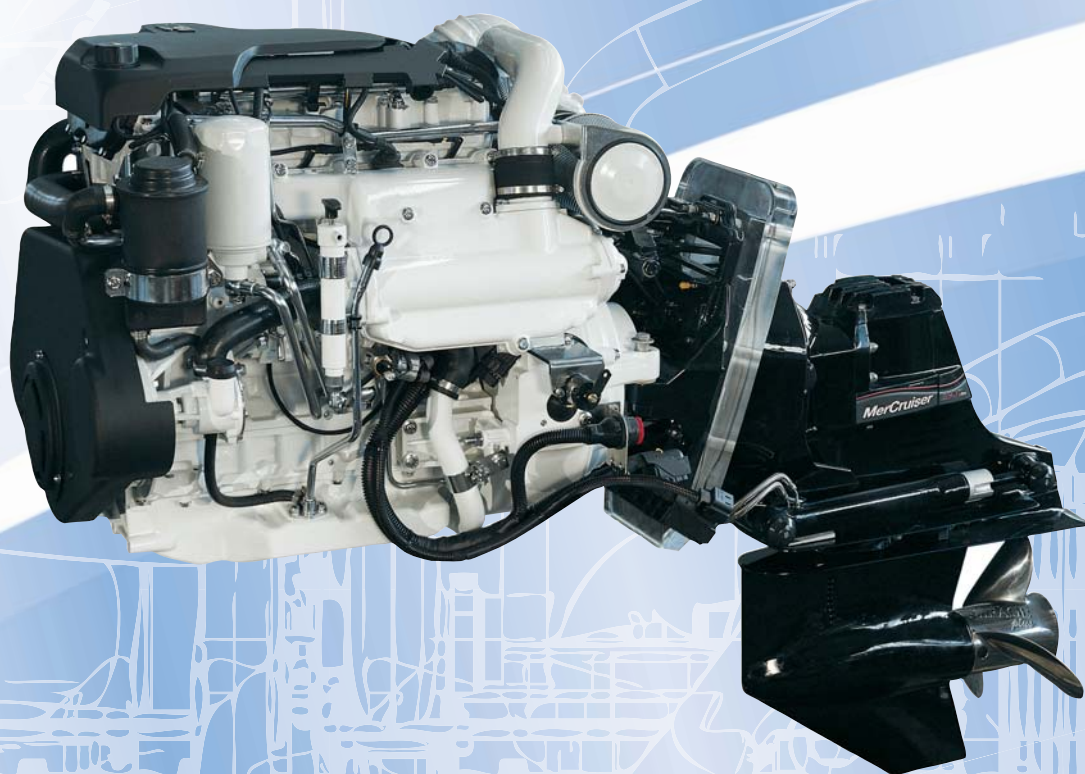


# S30 230SD

## S30 ENT M23SD

4 CYLINDERS IN LINE - DIESEL CYCLE  
169 kW (230 HP) @ 4000 rpm (A1)



# MARINE APPLICATIONS

## S30 ENT M23SD FOR MARINE APPLICATIONS

Thermodynamic cycle		Diesel 4 stroke
Air intake		TAA
Arrangement		4L
Bore x Stroke	mm	95.8 X 104
Total displacement	l	2.998
Valves per cylinder		4
Cooling		liquid
Direction of rotation (viewed facing flywheel)		CCW
Engine management		electrical
Injection system		Common Rail

### Electrical system

Voltage	V	12
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### Standard configuration

Flywheel housing	type	SAE 4
Flywheel size	inch	8
Air filter		rear side
Turbocharger		water cooled
Heat exchanger		tube type
Exhaust cooled elbow		–
Water charge tank		included
Fuel filter	n°	1
Fuel prefilter		included (loose)
Fuel pump		included (loose)
Oil filter	n°	1
Oil sump		aluminium
Oil vapours blow-by circuit		front
Oil heat exchanger		built in the crankcase
Oil filler		on front cover
Starting motor		12 V - 2.3 kW
Alternator		12 V - 110 A
Engine stop device		by electronic central unit
Wiring harness		with EDC (Electronic Diesel Control)
Painting	colour	white "ICE"

### Not included in the standard configuration

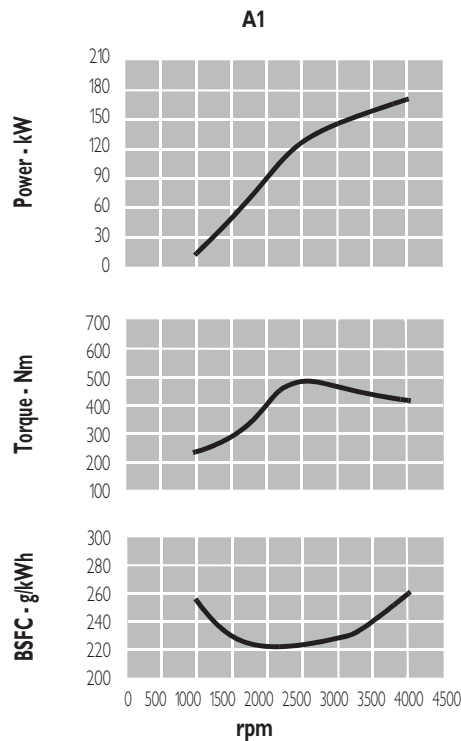
Battery - minimum capacity recommended	110 Ah
Battery - minimum cold cranking capacity recommended	800 A

**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.**

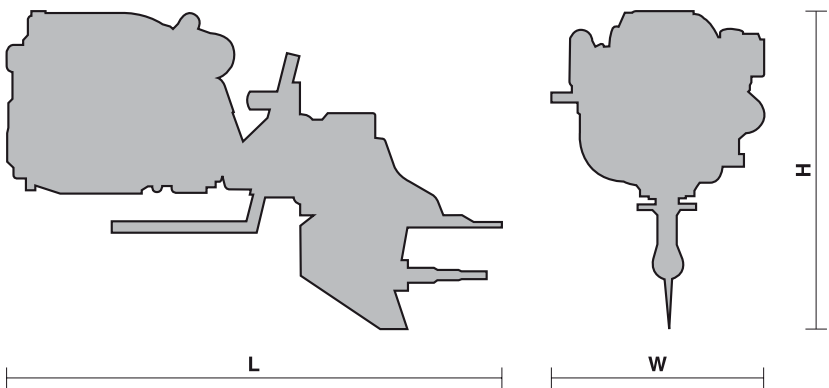
S30 ENT M23SD FOR MARINE APPLICATIONS

Rating type		A1
Maximum power *	kW(HP)	169 (230)
At speed	rpm	4000
Maximum no load governed speed at max rating	rpm	4280
Minimum idling speed	rpm	715 ± 65
Mean piston speed at rated speed	m/s	13.9
BMEP at max torque	kg/cm <sup>2</sup>	20.5
Specific fuel consumption at full load (best value)	g/kWh @ rpm	260 @ 4000
Oil consumption at max rating	(% of fuel consumption)	0.2
Minimum starting temperature without auxiliaries	°C	-10
Oil and oil filter maintenance interval for replacement	hours	600

\* **Net Power** at flywheel according to ISO 3046/1, after 50 hours running, fuel Diesel EN 590. Power tolerance 5%.  
**Test conditions:** ISO 3046/1, 25 °C air temperature, 100 kPa atmospheric pressure, 30% relative humidity.



**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.



**L** = 1780 mm  
**W** = 1340 mm  
**H** = 920 mm  
**Dry weight** (without marine gear) = 405 kg

## ENGINE BENEFITS

- **PERFORMANCE:** Ratings, consumption and emissions optimisation due to electrical engine management and Common Rail system; high specific power; lightness (low weight/power ratio); compactness (low volume/power ratio); high torque at low rpms.
- **SERVICEABILITY:** Control, protection and diagnostic for the main engine components and parameters; widespread and quick service.
- **RELIABILITY:** Compact design; long engine life.
- **COST EFFECTIVENESS:** Fuel consumption reduction; maintenance and overhaul intervals extension.
- **ENVIRONMENTALLY FRIENDLY:** Noise, gaseous emissions and vibrations reduction.
- **CUSTOMER ORIENTATION:** Wideness of uses, propulsion certifications and emissions; availability of stern drive and accessories range.

### FIAT POWERTRAIN TECHNOLOGIES

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