

VECTOR 1200

V08 ENT M12

FOR MARINE APPLICATIONS

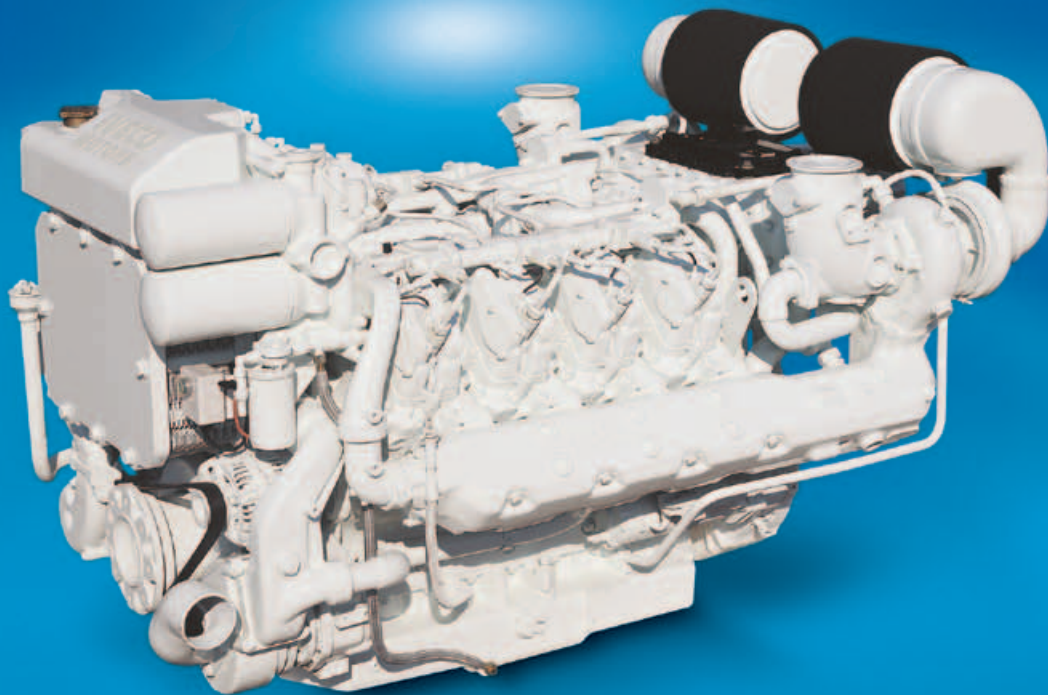
90° V 8 CYLINDERS - DIESEL CYCLE

883 kW (1200 CV) @ 2300 rpm (A1)

810 kW (1100 CV) @ 2300 rpm (A2)

750 kW (1020 CV) @ 2300 rpm (B)

635 kW (863 CV) @ 2100 rpm (C)



T E C H N O L O G I C A L E X C E L L E N C E



a brand of



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Thermodynamic cycle		Diesel 4 stroke - C.R.
Air intake		TAA
Arrangement		V8
Bore x Stroke	mm	145 X 152
Total displacement	l	20.08
Valves per cylinder		4
Cooling		liquid
Direction of rotation (viewed facing flywheel)		CCW
Compression ratio		15.3 : 1
Rotation mass moment of inertia (without flywheel)	kgm ²	1.281
Standard flywheel inertia	kgm ²	3.18

Air induction

Max suggested intake restriction with clean air filter	kPa(bar)	3.5 (0.035)
Max allowable restriction with dirty air filter	kPa(bar)	60 (0.06)
Air requirement for combustion at 100% load/rated speed (comb. + ventilation)	kg/h (m ³ /h)	17,500 (15,000)
Turbocharging pressure at full load/rated speed	kPa(bar)	250 (2.5)
Turbocharging air max temperature (engine inlet)	°C	45

Exhaust system

Max allowable backpressure	kPa(bar)	10 (0.1)
Max exhaust temperature at maximum power	°C	660
Exhaust flow at max output	kg/h	4800

Lubrication system

Minimum oil pressure at idle (at 100°C)	kPa(bar)	200 (2)
Max oil temperature at full load/rated speed	°C	120
Engine angularity limits continuous operation: max front up and front down	0/360	20
max left hand and right hand	0/360	22
Total system capacity including pipes, filters etc.	liters	50

Sea water cooling system (open circuit)

Max intake restriction	kPa(bar)	30 (0.3)
Sea water pump flow	m ³ /h	78
Heat rejected (total) at max power	kJ/s(kcal/h)	571 (489,584)
Sacrificial zinc anodes	n°	

Cooling system (closed circuit)

Coolant capacity (engine only)	liters	50
Water pump flow at rated speed	m ³ /h	56.5
Thermostat (modulating range)	°C	65 ÷ 80
Cooling liquid max temperature	°C	100
Min/max inner pressure in the cooling circuit (for keel cooling)	kPa(bar)	-
External cooling system max pressure drop (for keel cooling)	kPa(bar)	-

Fuel system

Injection system		Common Rail
Gas oil max intake restriction	kPa(bar)	50 (0.5)
Gas oil max intake temperature	°C	70
Max fuel backpressure to tank	kPa(bar)	20 (0.2)

Electrical system

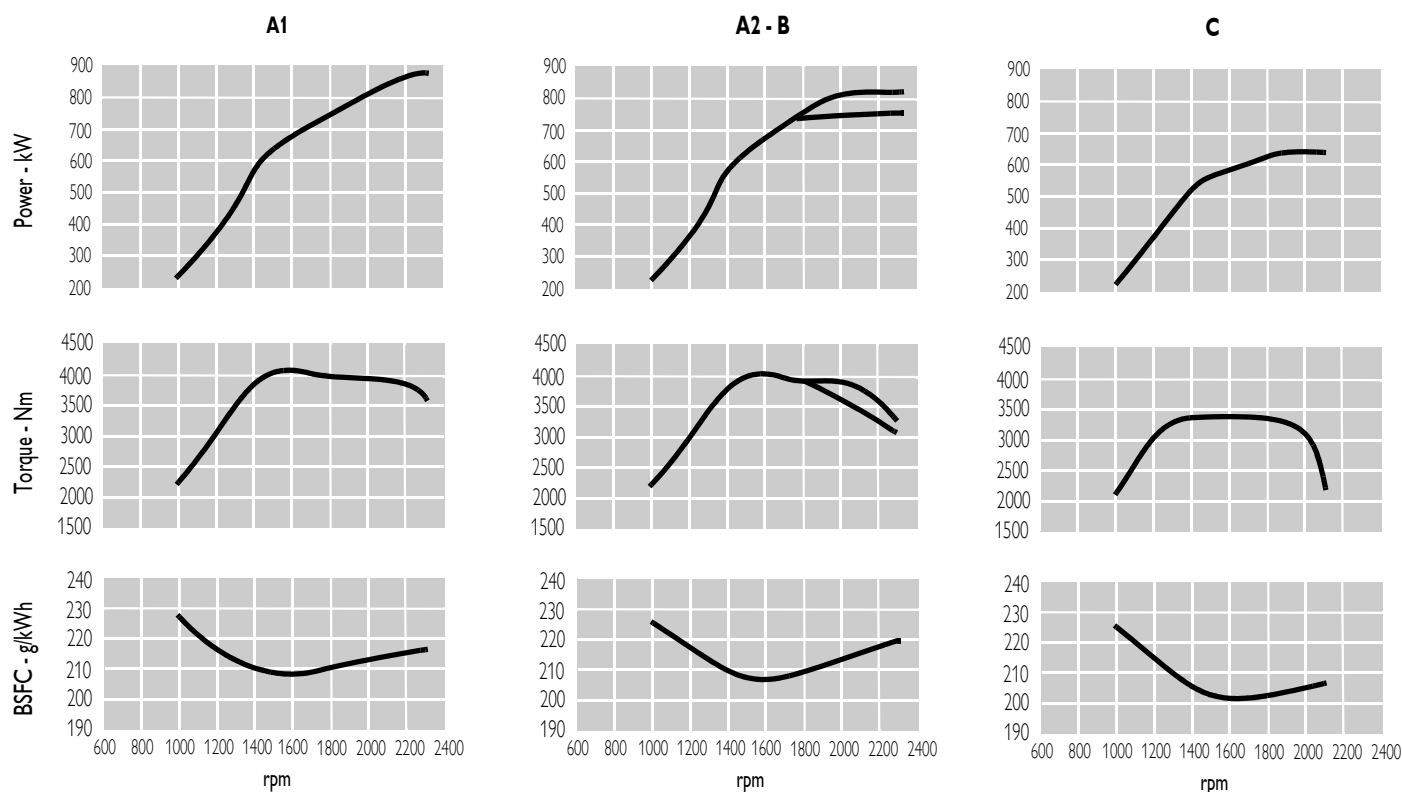
Voltage	V	24
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Rating type		A1	A2	B	C
Maximum power *	kW(CV)	883 (1200)	810 (1100)	750 (1020)	635 (863)
At speed	rpm	2300	2300	2300	2100
Maximum no load governed speed at max rating	rpm	2400	2400	2400	2200
Minimum idling speed	rpm	600	600	600	600
Mean piston speed at rated speed	m/s	11.7	11.7	11.7	10.6
BMEP at max torque	kg/cm ²	25.7	25.7	25.7	22.0
Specific fuel consumption at full load (best value)	g/kWh @ rpm	207 @ 1700	207 @ 1700	207 @ 1700	200 @ 1600
Oil consumption at max rating	(% of fuel consumption)	0.15	0.15	0.15	0.1
Minimum starting temperature without auxiliaries	°C			-10	
Oil and oil filter maintenance interval for replacement	hours	500	500	500	1000
Dry weight (without marine gear)	kg			1980	

* **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.

A2 = 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 :

- 300 hours per year (A1 service)

- 1000 hours per year (A2 service).

B = 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.

C = Medium duty.

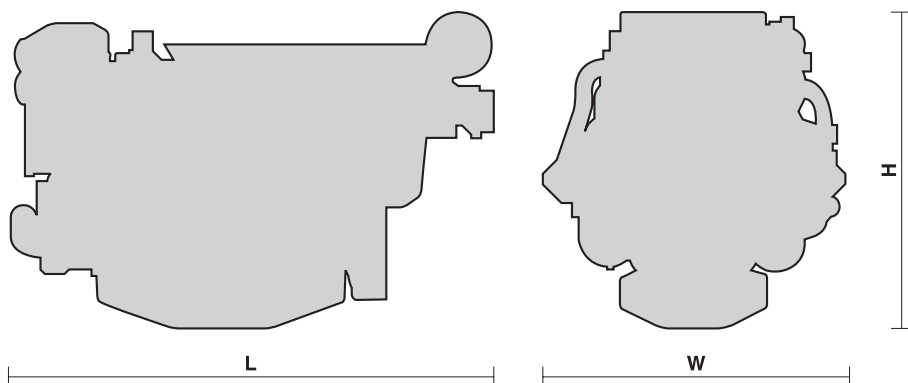
Full throttle operation < 25% of use period.

Cruising speed at engine rpm < 90% of rated speed setting - Maximum usage 3000 hours per year.

L = 1900 mm

W = 1220 mm

H = 1201 mm



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Standard configuration

Flywheel housing	SAE	1
Flywheel size	inch	14
Air filter		included
Turbocharger		water cooled
Heat exchanger		plate type
Exhaust cooled elbow		-
Water charge tank		included
Fuel filter	n°	2
Fuel prefilter		1 (supplied loose)
Fuel pump		included
Oil filter	n°	2
Oil sump		aluminium
Oil vapours blow-by circuit		included
Oil heat exchanger		included
Oil filler		lateral
Starting motor		8,5 kW - 24 V
Alternator		90 A - 24 V insulated poles
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

Battery - minimum cold cranking capacity recommended

IVECO MOTORS 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 IVECO MOTORS SALES NETWORK.

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