## Marine

## Diesel Engine 10V 2000 M84 for Fast Vessels with Intermittend Load Factors (1D)





## **Dimensions and Masses**

10V 2000 M84	Dimensions (LxWxH) mm (in) 1600x1135x1250 (63.0x44.7x49.2)	Mass, dry kg (lbs) 2240 (4938)	
10V 2000 - with Gearbox type*	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)	
M84 - ZF 2000	2135x1135x1245 (84.1x44.7x49.0)	2660 (5864)	

\* gear ratio on request

## Typical applications: Fast yachts, fast patrolboats, police craft and fire-fighting vessels

Engine Model	10V 2000 M84
Rated power ICFN kW (bhp)	1015 (1360)
Speed rpm	2450
No. of cylinders	10
Bore/stroke mm (in)	135/156 (5.3/6.1)
Displacement, total I (cu in)	22.3 (1361)
Flywheel housing	SAE 1
Gearbox type	ZF 2000
Optimization of exhaust emissions <sup>2)</sup>	IMO 2/EPA 2/EU <sup>3)</sup>
Solas compliance	Yes (without accessory kit)

<sup>2)</sup> IMO – International Maritime Organisation EPA – US Marine Directive 40 CFR 94 EU – Recreational crafts 94/25 EC

<sup>3)</sup> EU IIIA/RheinSchUO (CCNR) on request



Power. Passion. Partnership.

Performance & Fuel C	onsumption <sup>1)</sup>		10V 2000 M84			
Speed	rpm	2450	2100	1700	1200	
Maximum power	kW	1015	1015	820	480	
	bhp	1360	1360	1100	644	
Power on propeller curve (n <sup>3</sup> ) kW		1015	650	340	125	
	bhp	1360	872	456	168	
Fuel consumption	g/kWh	215	212	214	218	
on propeller curve	l/h	266.6	166.0	87.7	32.8	
	gal/h	70.4	43.9	23.2	8.7	

<sup>1)</sup> Tolerance +5% per ISO 3046, Diesel fuel to DIN EN 590 with a min L.H.V. of 42800kJ/kg (18390 BTU/lb)

Standard Equipment			
tarting system	Electric starter 24 V		
Auxiliary PTO	Charging generator, 80A, 28V, 2 pole		
Oil system	Gear driven lube oil pump, lube-oil duplex filter with diverter valve, lube-oil heat exchanger, handpump for oil extraction		
Fuel system	Fuel feed pump, fuel hand pump, fuel pre-filter, fuel main filter with diverter valve, on-engine fuel oil cooler, HP fuel		
	pump, jacketed HP fuel lines, injection nozzles (Common rail system) flame proof hose lines, leak-off tank level		
	monitored		
Cooling system	Coolant-to-raw water plate core heat exchanger, self priming centrifugal raw water pump, gear driven coolant		
	circulation pump		
Combustion air system	Sequential turbocharging with 2 water-cooled exhaust-gas turbochargers, on-engine intake air filters		
Exhaust system	Triple-walled, liquid-cooled, on-engine exhaust manifolds, single centrally located exhaust outlet, 1 exhaust bellows		
	vertical discharge		
Mounting system	Resilient mounts at free end		
Engine management system	Engine and gearbox control and monitoring system (ADEC)		
Optional Equipment			
Auxiliary PTO	Charging generator, 140A or 200A, 28V, 2 pole, bilgepump, on-engine PTPs		
Fuel System	Duplex fuel pre-filter		
Cooling System	Coolant preheating system, integr. seawater gearbox piping		
Exhaust System	Exhaust bellows horizontal discharge		
Mounting System	Resilient mounts at driving end		
Engine Management System	In compliance with Classification Society Regulations (EMU + MEU)		
Monitoring/Control System	smartline, blueline, bluevision		
Power Transmission	Torsionally resilient coupling		
Gearbox Options	Reverse reduction gearbox, el. actuated, gearbox mounts, trolling mode for dead-slow propulsion, free auxiliary PTO,		
	hydraulic pump drives		

> Power definition according ISO 3046

> Intake air temperature 25°C/Sea water temperature 25°C
> Barometric pressure 1000 mbar

> Intake air depression 15 mbar/Exhaust back pressure 30 mbar > Power reduction at 45°C/32°C: none

Specifications are subject to change without notice. All dimensions are approximate, for complete information refer to installation drawing. For further information consult your MTU or MTU Detroit Diesel distributor/dealer.

Europe | Middle East | Africa | Latin America, MTU Friedrichshafen GmbH, 88040 Friedrichshafen, Germany, T +49 7541 90 7015, F +49 7541 90 7081, marineregion1@mtu-online.com, www.mtu-online.com | Asia | Australia | Pacific, MTU Asia Pte. Ltd., 1 Benoi Place, Singapore 629923, Republic of Singapore, T +65 6861 5922, F +65 6861 3615, marineregion2@mtu-online.com, www.mtu-online.com.sg | USA | Canada | Mexico, MTU Detroit Diesel, Inc., 13400 Outer Drive West, Detroit, Michigan 48239, USA, T +1 313 592 7806, F +1 313 592 5137, marineregion3@mtu-online.com, www.mtudetroitdiesel.com