## Marine

## Diesel Engine 8V 2000 M84 for Fast Vessels with Medium Load Factors (1D)



## **Dimensions and Masses**

8V 2000	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
M84	1416x1130x1200 (55.7x44.5x47.2)	1980 (4365)
8V 2000 - with standard gearbox	Dimensions (LxWxH) mm (in)	Mass, dry kg (lbs)
M84 - ZF 550	2078x1130x1200 (81.8x44.5x47.2)	2360 (5203)





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

Engine Model	8V 2000 M84
Rated power ICFN kW (bhp)	810 (1085)
Speed rpm	2450
No. of cylinders	_ 8
Bore/stroke mm (in)	135/156 (5.4/6.1)
Displacement, total I (cu in)	17.9 (1093)
Flywheel housing	SAE 1
Gearbox model, standard 1)	ZF 550
Optimization of exhaust emissions 2)	IMO 2/EPA 2/EU <sup>3)</sup>
Solas compliance	Yes (without accessory kit)

<sup>1)</sup> gear ratio on request

EU - Recreational crafts 94/25 EC



<sup>2)</sup> IMO - International Maritime Organisation (MARPOL) EPA - US Marine Directive 40 CFR 94

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

Performance & Fuel Consumption 4)		8V 2000 M84				
Speed	rpm	2450	2100	1700	1200	
Maximum power	kW	810	800	655	375	
	bhp	1085	1073	878	503	
Power on propeller curve (n³) kW		810	520	275	100	
	bhp	1085	697	369	134	
Fuel consumption	g/kWh	221	216	232	222	
on propeller curve (n³)	I/h	212.7	133.4	75.8	26.3	
	gal/h	56.2	35.2	20.0	6.9	

<sup>&</sup>lt;sup>4)</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			
Starting 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,		
	hand pump 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, 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 PTOs			
Fuel System	Duplex fuel pre-filter			
Cooling System	Coolant preheating system engine mounted, integrated seawater gearbox piping			
Exhaust System	Exhaust bellows horizontal discharge			
Mounting System	Resilient mounts at driving end, Multiple-Fix-Volume mounting device			
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, electronically actuated, gearbox mounts, trolling mode for dead-slow propulsion,			
	free auxiliary PTO, hydraulic pump drives			
Rough Water Kit	Accessory Kit (oil-, mounting-, exhaust system) for applications with increased requirements (high accelerations,			
	capsizing) like SAR, fast Patrol boats, fast Pilot boats			

<sup>&</sup>gt; Power definition according ISO 3046

<sup>&</sup>gt; Intake air temperature 25°C/Sea water temperature 25°C

<sup>&</sup>gt; Intake air depression 15 mbar/Exhaust back pressure 30 mbar

<sup>&</sup>gt; Barometric pressure 1000 mbar

<sup>&</sup>gt; 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.