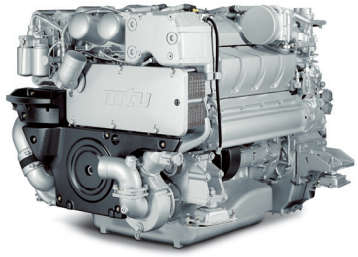
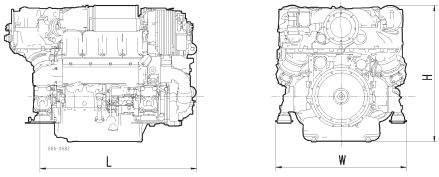
Marine

DIESEL ENGINES 8V 2000 M84/M84L

for fast vessels with intermittent load factors (1D)



Engine	Dimensions (L x W x H) mm (in)	Mass, dry kg (lbs)
8V / M84/M84L	1416 x 1130 x 1200 (55.7 x 44.5 x 47.2)	1970 (4343)
Engine with gearbox	**Dimensions (L x W x H) mm (in)**	**Mass, dry kg (lbs)**
8V / ZF 665	2062 x 1130 x 1200 (81.2 x 44.5 x 47.2)	2535 (5589)



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

Optional equipment and finishing shown. Standard may vary.

Engine type		8V 2000 M84	8V 2000 M84L
Rated power ICXN	kW	810	895
	(bhp)	(1085)	(1200)
Speed	rpm	2450	2450
No. of cylinders		8	8
Bore/stroke	mm (in)	135/156 (5.3/6.1)	135/156 (5.3/6.1)
Displacement, total	l (cu in)	17.9 (1093)	17.9 (1093)
Flywheel housing		SAE 1	SAE 1
Gearbox model, standard [1]		ZF 665	ZF 665
Optimization of exhaust emissions [2]		IMO II/EPA 2/EU [3]	IMO II/EPA 2
Solas compliance		Yes (without accessory kit)	Yes (without accessory kit)

1) gear ratio on request

2) IMO – International Maritime Organisation (MARPOL)
EPA – US Marine Directive 40 CFR 94
EU - Recreational crafts 94/25 EC

3) EU IIIA/RheinSchUO (CCNR) on request

A Rolls-Royce solution

Performance & fuel consumption [1]		8V 2000 M84				8V 2000 M84L			
Speed	rpm	2450	2100	1700	1200	2450	2100	1700	1200
Maximum power	kW	810	800	655	375	895	870	660	390
	bhp	1085	1073	878	503	1200	1167	885	523
Power on propeller curve (n^3)	kW	810	520	275	100	895	570	300	105
	bhp	1085	697	369	134	1200	764	402	141
Fuel consumption	g/kWh	221	216	232	222	227	215	229	221
	l/h	212.7	133.4	75.8	26.3	244.8	147.7	82.8	28.0
	gal/h	56.2	35.2	20.0	6.9	64.7	39.0	21.9	7.4

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

Standard equipment	
Starting system	Electric starter 24 V
Auxiliary PTO	Alternator, 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 bellow horizontal discharge
Mounting system	Resilient mounts at free end
Engine management system	Engine control and monitoring system (ADEC)

Optional equipment	
Auxiliary PTO	Alternator, 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 bellow vertical discharge
Mounting system	Resilient mounts at driving end, multiple-fix-volume mounting device
Engine management system	In compliance with classification society regulations
Monitoring/control system	smartline, blueline, bluevision, BlueVision|NewGeneration, Callosum
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

Reference conditions:
> Power definition according ISO 3046
> Intake air temperature 25°C/Sea water temperature 25°C
> Intake air depression 15 mbar/Exhaust back pressure 30 mbar
> Barometric pressure 1000 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 installations drawing. For further information consult your MTU distributor/dealer.

Subject to change. | 3234091 | Edition 01/20 | ESM 2020-09.

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