

Marine

Diesel Engine 12V 2000 M61

for Vessels

with Unrestricted Continuous Operation (1A)

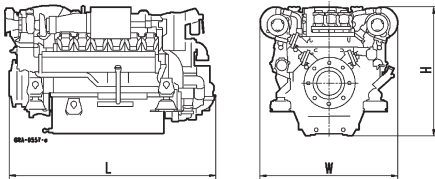


Dimensions and Masses

| 12V 2000 | Dimensions (LxWxH) mm (in) | Mass, dry kg (lbs) |
|-------------------------------|----------------------------------|--------------------|
| M61 | 1890x1400x1290 (74.4x55.1x50.8) | 2600 (5732) |
| 12V 2000 - with Gearbox type* | Dimensions (LxWxH) mm (in) | Mass, dry kg (lbs) |
| M61 - ZF 3050 | 2692x2130x2009 (106.0x83.9x79.1) | 3290 (7253) |

* gear ratio on request

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.



Typical applications: Work Boats, Ferries, Tugs, Barges and Large Sailing Yachts

| Engine Model | 12V 2000 M61 | |
|---|--------------|--------------------------------------|
| Rated power ICFN | kW (bhp) | 600 (805) |
| Speed | rpm | 1800 |
| No. of cylinders | | 12 |
| Bore/stroke | mm (in) | 130/150 (5.1/5.9) |
| Displacement, total | l (cu in) | 23.9 (1458) |
| Flywheel housing | | SAE 0 |
| Gearbox model | | ZF 3050 |
| Optimization of exhaust emissions ¹⁾ | | IMO 2 ²⁾ /EPA 2/CCNR II |
| Solas compliance | | Yes (without optional accessory kit) |

¹⁾ IMO – International Maritime Organisation; EPA – US Marine Directive 40 CFR 94; ReihnSchUO – CCNR, Stage II

²⁾ IMO 2 Certification available from January 2011



Power. Passion. Partnership.

| Performance & Fuel Consumption ¹⁾ | | 12V 2000 M61 | | |
|--|--------------------|--------------|------|------|
| Speed | rpm | 1800 | 1600 | 1200 |
| Maximum power | kW | 600 | 600 | 400 |
| | bhp | 805 | 805 | 537 |
| Power on propeller curve (n ³) | kW | 600 | 420 | 180 |
| | bhp | 805 | 563 | 241 |
| Fuel consumption | g/kWh | 215 | 209 | 214 |
| | on propeller curve | l/h | 129 | 87.8 |
| | gal/h | 34.1 | 23.2 | 10.2 |

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)
All pumps necessary for engine operation included. Heat exchanger version without sea water pump: -2 g/kWh

| Standard Equipment | |
|--------------------------|---|
| Starting system | Electric starter 24 V |
| Auxiliary PTO | Charging generator, 140A, 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 pre-filter, fuel main filter with diverter valve, on-engine fuel oil cooler, 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 | Turbocharging with 2 water-cooled exhaust-gas turbochargers, on-engine intake air filters |
| Exhaust system | Triple-walled, liquid-cooled, on-engine exhaust manifolds, twin exhaust outlet, exhaust bellows horizontal discharge |
| Mounting system | Resilient mounts at free end |
| Engine management system | Engine and gearbox control and monitoring system (MDEC) |

| Optional Equipment | |
|-----------------------------|---|
| Auxiliary PTO | Charging generator, 200A, 28V, 2 pole, bilgepump, on-engine PTOs |
| Fuel System | Duplex fuel prefilter, fuel conditioning system |
| Cooling System | Coolant preheating system, integr. seawater gearbox piping |
| Exhaust System | Exhaust bellows vertical discharge SOLAS Kit |
| 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, trailing mode free auxiliary PTO, hydraulic pump drives |

> Power definition according ISO 3046
> Intake air depression 15 mbar/Exhaust back pressure 30 mbar

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