

Standard Quotation

099 AZ/TA/TE 61

Propulsion Plants
for Work Boats and Passenger Vessels



mtu
Deutsche Aerospace



Remarks:

- 1) The company uses 2000 price for historical periods
- 2) Depreciation based on straight line method
- 3) Assets were valued

Remarks for assumptions:

- 1) For assumptions current market scenario is used.
- 2) Asset depreciation period is based on historical or IAS 16 guidance with a maximum period of 10 years.

Management's report (page 10)

Region: Global		31 Dec 2019	31 Dec 2018	31 Dec 2017	31 Dec 2016
Region I	Impairment loss	100000	100000	100000	100000
	Wages	100	100	100	100
Region II	Impairment loss	100000	100000	100000	100000
	Wages	100	100	100	100
Region III	Impairment loss	100000	100000	100000	100000
	Wages	100	100	100	100

* Values have been rounded

Figure 7. Engine with standard accessories installed

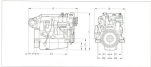


Figure 8. Engine with standard accessories installed including cooling and gearbox (propulsion)

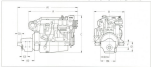
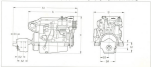


Figure 9. Engine with standard accessories installed including cooling and gearbox (non-rotary)



A. Standard Equipment

1. Marine diesel engines with turbo-charged exhaust gas recirculation, fuel injection, fuel pumps, fuel filters, fuel control (turbo) and air way (turbo) systems, injection pumps, turbo pumps, turbochargers, pistons, valve guides, valve springs, exhaust valves, and air filter, exhaust pipes, exhaust blowers, exhaust manifolds, fuel cooling, and expansion tank, cooling PTO serving the exhaust pump, generator and sea water pump.

2. Electric starter (24 V 41kW)

3. AC generator (24 V, 60 kW)

4. Set of 80 hp type 4000 with effective fan-blades

5. Compressor/booster/ventilator (ventilator)

6. Compressor for water, sea water heat exchanger with flow protection, booster and air-chargeable pump

7. Set of engine starters at sea PTO assembly, sea water PTO and shaft

8. Exhaust cooling (bracket) 1 set

9. Engine bracket (vertical) (24 V) (20% side water)

10. Sea water cooler (24 V) single-pole non-bleed shaft

11. Intermediate fuel oil (intermediate) engine assembly, fuel delivery system, variable oil-injection, variable fuel maintenance system

12. Marine engine-reduction gearbox (Marine 4 the engine) with, universal and horizontal shaft and gear, shaft, bearings, etc.

- 100% reduction (Marine 4)
- 100% reduction (Marine 4)

B. Additional and Alternative Equipment

1. Decked generator (including fuel oil fuel tank and fuel monitor)

2. Fuel generator with complete fan-blade, exhaust-cooled heat sink

3. Oil change transmitter with connecting fan-blade

4. Exhaust valve (connected) with sea water (connected) fan-blade
 a) exhaust fan (single pole)
 - 200% reduction (single pole)
 - 100% reduction (single pole)

5. Set of engine starters for engine (vertical) (24 V)

6. Compressor/pump and pump (vertical) (vertical)

7. Set of electronic control and generator for main (vertical) (24 V) single pole

8. Interchange system

a) 24 V side (vertical)

b) Interchange system (vertical) (24 V)

9. Intermediate fuel oil (intermediate) engine assembly, fuel delivery system (24 V)

10. Intermediate fuel oil (intermediate) engine assembly, fuel delivery system (24 V)

11. Intermediate fuel oil (intermediate) engine assembly, fuel delivery system (24 V)

12. Intermediate fuel oil (intermediate) engine assembly, fuel delivery system (24 V)

13. Intermediate fuel oil (intermediate) engine assembly, fuel delivery system (24 V)

14. Intermediate fuel oil (intermediate) engine assembly, fuel delivery system (24 V)

15. Intermediate fuel oil (intermediate) engine assembly, fuel delivery system (24 V)

16. Intermediate fuel oil (intermediate) engine assembly, fuel delivery system (24 V)

- 2400 weight intermediate Standard Equipment
- 2400 weight intermediate for Standard Equipment
- No power interconnection, comply with International Safety guidelines.



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