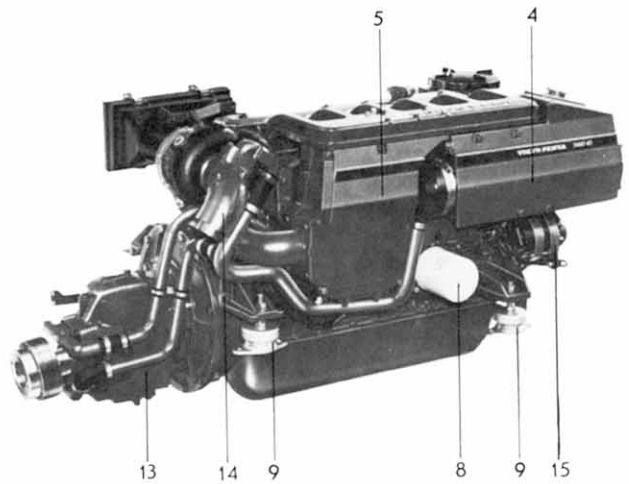
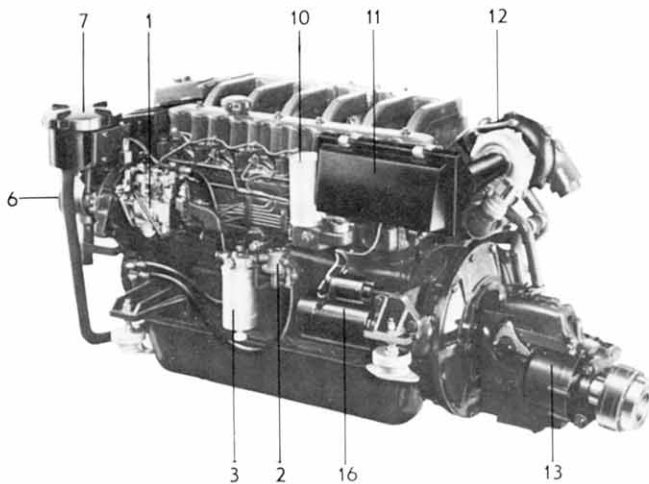




## TAMD 40A

**6-cylinder, 4-stroke turbo-charged marine diesel engine with swirl chambers and aftercooler.**  
**Propeller shaft output pleasure boats 109 kW (148 hp) with MS3B, 102 kW (138 hp) with BW.**



### STANDARD EQUIPMENT

**ENGINE BODY** – Cast iron cylinder block and cylinder head. Replaceable wet cylinder liners. Oilcooled pistons made of light-alloy with two compression rings and one oil scraper ring. Crankshaft journalled in seven bearings. The cylinder head is provided with replaceable valve seats and valves of high quality material.

Tool kit for minor adjustments supplied with engine.

**FUEL SYSTEM** – Rotor-type injection pump with mechanical governor for accurate speed regulation (1).

Feed pump (2) with hand primer and flexible hoses with fuel pipe connection for suction and return lines.

Fine filter (3) with water separator.

Electrical stop device.

**COOLING SYSTEM** – Thermostat-controlled fresh-water cooling with heat exchanger (4) and circulation pump. Expansion tank. Sea-water pump with neoprene rubber impeller (6). Cleanable sea-water filter (7).

**LUBRICATING SYSTEM** – Pressure lubricating system with full-flow lubricating oil filter of the spin-on type (8). Cleanable, tubular-type oil cooler. Crankcase ventilation with replaceable filter (10).

**INTAKE SYSTEM** – Intake silencer with replaceable filter (11).

**SUPERCHARGING SYSTEM** – Exhaust gas driven turbo compressor with fresh-water cooled turbine housing (12). See-water-cooled aftercooler (5) for cooling of the turbo-charged air for better degree of efficiency.

**EXHAUST SYSTEM** – Fresh-water cooled exhaust manifold (13). Sea-water cooled exhaust manifold elbow of cast iron/stainless steel (14) can be fitted in any angle.

**ELECTRICAL SYSTEM** – Corrosionproof 12 V electrical system, with complete instrument panel. Automatic fuse with resetting

button fitted on engine. Brushless alternator with built-in transistor regulator, 35 A, 420 W (15). Starter motor output 3 kW (4 hp) (16). Automatic alarm for oil pressure and water temperature.



The instrument panel is provided with a key switch, rev counter, temperature gauge, oil pressure gauge and voltmeter, warning lamp for connection of glow plugs, reostated switch for instrument panel light. Cable harness, 7 m (23 ft.) in length, with plug-in contact already fitted, for connection to engine and instrument.

**ENGINE MOUNTING** – The engine is supplied with flexible mounting (9).

### EQUIPMENT

**POWER TRANSMISSION** – Reverse gear type MS3B with cone clutch and 8° propeller shaft angle or hydraulic reverse gear type Borg Warner. Delivered without prop. shaft flange.

Reverse gear type MS3B red. ratio 1.54:1, L and R-H prop. (13).

Reverse gear type MS3B ratio 1.93:1, L and R-H prop. (13).

Reverse gear type BW71CR red. ratio 1.91:1, R-H prop.

Reverse gear type BW71CR red. ratio 2.1:1, L-H prop.

Reverse gear type BW71CR red. ratio 2.9:1, L-H prop.

## EXTRA EQUIPMENT

### FUEL SYSTEM

Water-separating filter with or without flexible hoses.  
Water separator.  
Copper fuel pipe.

### COOLING SYSTEM

Cooling water intake complete with cock and hose.

### EXHAUST SYSTEM

Hull through fitting.  
Exhaust rubber hose wet.  
Water-cooled silencer.  
Exhaust bend 45°.  
Exhaust line dry.  
Silencer dry.

### LUBRICATING SYSTEM

Electrical oil scavenging pump 12 V or 24 V

### ELECTRICAL SYSTEM

Extra alternator 12 V 35 A.  
Extra alternator 24 V 25 A.  
Charging distributor for charging 2-battery system.  
Instrument panel for extra instrument.  
Master switch.  
Cable harness extension for instrument panel.  
Safety contact for stop of engine.

### POWER TRANSMISSION

V-belt pulley for crankshaft 3.  
B-grooves Ø 165 mm.

### BOAT ACCESSORIES

Electrically operated bilge pump.  
Original paint.  
Oils.  
Electro-mechanical trim tabs.

### CONTROL and CONTROL SYSTEM

VP single-control lever for both speed and forward-reverse operation, topmounted or side-mounted. Single or twin installation.  
Neutral position switch – automatic safety interlock, VP controls.  
Control cables.  
Steering gears.  
Steering wheel.  
Steering cables.  
Ball joint and fork kit for steering cable.  
Dual station control unit.

### PROPELLER EQUIPMENT

Propeller shaft flange.  
Propeller shaft coupling, clamping type.  
Propeller shaft.  
Propeller shaft sleeves.  
Propellers.

## DATA

Type of operation .....	4-stroke turbo charged diesel engine with swirl chambers and aftercooler
Designation .....	TAMD40A
Propeller shaft power pleasure boats MS3B "B2" .....	148 hp at 3600 r.p.m. (109 kW at 60 r.p.s.)
Propeller shaft power pleasure boats BW "B3" .....	138 hp at 3600 r.p.m. (102 kW at 60 r.p.s.)
Propeller shaft power light commercial duty BW <sup>2)</sup> .....	111 hp at 3250 r.p.m. (82 kW at 50 r.p.s.)
Number of cylinders .....	6 in-line
Capacity .....	3.59 dm <sup>3</sup> (220 in <sup>3</sup> )
Bore/stroke .....	92/90 mm (3.62/3.54 in)
Valves .....	overhead
Weight, engine with MS3B rev. gear, approx. ....	485 kg (1069 lb)
Weight, engine with BW rev. gear, approx. ....	505 kg (1113 lb)

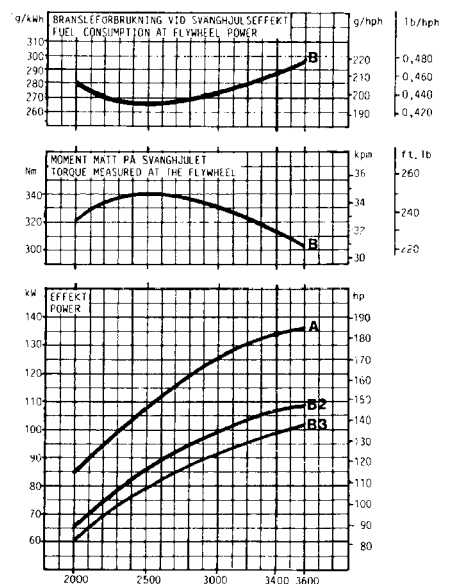
**Curve A:** Highest flywheel power obtainable in the test room without thermal overload. This power corresponds to DIN 6270 "Höchstleistung".

**Curve B2\* and B3\*\*:** Propeller shaft power for pleasure craft duty according to DIN 6270 Leistung B (corresponds for practical use also to 1-hour's power according to BS 649, 1958). Only occasional use at full engine throttle. Normal cruising is expected to be at a comfortable part-throttle operation.

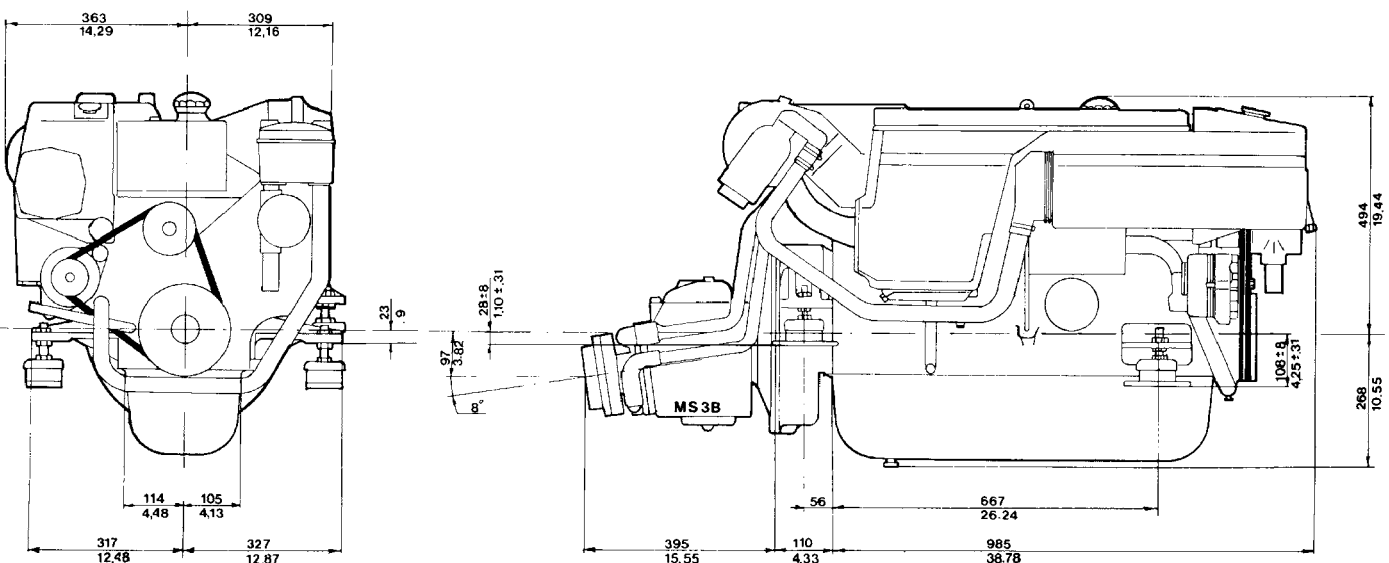
\* Propeller shaft power with reverse gear MS3B.

\*\* Propeller shaft power with reverse gear BW.

<sup>2)</sup> Power and diagram see separate sheet "Engine Diagram" Group 21 No 100-1.



## DIMENSION DRAWING



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