Standard Features

Engine Block

- Lugger four and six cylinder, inline, liquidcooled, overhead valve marine diesels.
- Four cycle and direct injection give fuel efficiency and quiet operation.
- Replaceable, liquid-cooled cylinder liners for long life and low rebuild costs.
- Bimetallic valves have chrome stems, replaceable valve seats and rotators.
- Three-ring aluminum alloy pistons with iron ring inserts. Keystone piston ring reduces carbon buildup under light loads.

Fuel System

- Distributor-type injection pump has cold start advance.
- Small diameter injectors are teflon coated and protected by an edge filter at the nozzle inlet.
- · Electric rack solenoid for quick shutdowns.
- · Spin-on fuel filter with air bleed and drain.
- Diaphragm-type, mechanically driven fuel transfer pump with manual priming handle.
- Flexible fuel lines routed to fuel manifold for easy installation.

Lubrication System

- Positive displacement gear-type oil pump.
- · Full flow, spin-on oil filter.
- Oil spray cooling reduces piston crown temperature for longer life.
- · Plate-type, full flow oil cooler extends oil life.
- Valve cover recycles crankcase oil vapors for a cleaner engine room. Quiets valve noise too.
- · Lube oil drain for quick, clean oil changes.

Cooling System

- Freshwater cooling system has two thermostats for safety and quicker warm-ups.
- Unit mounted expansion tank with brass filler neck for easy filling.
- Cast-iron exhaust manifold. Double pass freshwater flow for even temperature control and fast warm-up. No hot spots.
- Engine is available in heat exchanger or keel cooled configuration.
- Heat exchanger cooling includes: Gear-driven Jabsco seawater pump. Easy-clean, tube-type heat exchanger is cupro-nickel for long life.
- · Zinc anode electrolysis protection.

Intake and Exhaust System

- Dry air filter silences intake noise.
- · Wet and dry exhaust elbows are optional.
- T, TH and QT models are turbocharged to increase output. Turbochargers are freshwater cooled for safety.

DC Electrical System

- Negative ground, 12 volt system with DC circuit breaker, battery charging alternator with regulator and starter motor.
- Remote mount S-3B control panel with enclosure has VDO instruments: engine hour meter, coolant temperature gauge, oil pressure

gauge, DC voltage meter, start- stop switch, preheat and shutdown bypass switch.



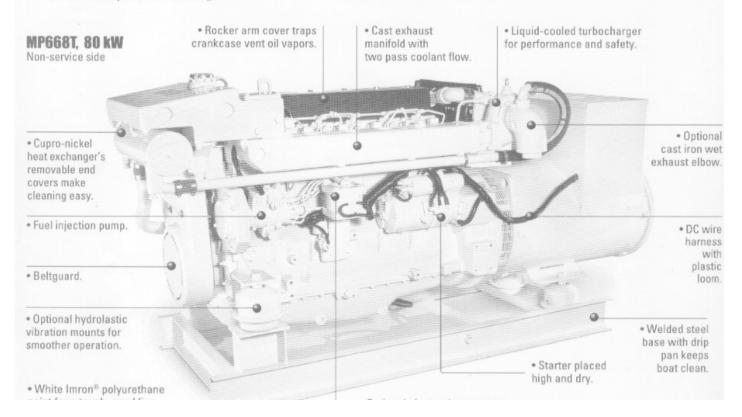
- Reliable relay-based DC logic makes system easy to troubleshoot and repair. No "black-box" electronics to
 - fail. Relays make multiple panel installations quick and simple.
- Prewired engine and panel have terminal strips.
- Safety shutdowns protect engine in event of oil pressure loss or high coolant temperature.
- 24 volt systems, isolated ground systems and additional panels are available options.

AC Generator

- Direct coupled, single bearing, brushless 12-lead reconnectable generator meets or exceeds ABS standards with class F/H or H insulation, accessible diodes, oversized ball bearings, marine grade shafts and conservative heat rise ratings.
- Engines and generators are torsionally matched for long life.
- Automatic voltage regulator gives response to electrical load changes. Voltage is regulated to ±0.25% over the entire range from no load to full load. Clean power protects your equipment and promotes motor life.

Special Equipment

- Welded steel base frame with drip pan. Easy to mount and keep clean. Aluminum base optional.
- * Beltguard protects operator.
- Centerbonded anti-vibration mounts isolate set for smooth operation.
- Sparkling white Imron[®] polyurethane paint protects your set and improves service visibility.
- · Operator's and parts manuals are standard.



paint тог a tougn, sparкiing finish. Optional electronic governor for critical power regulation and paralleling.