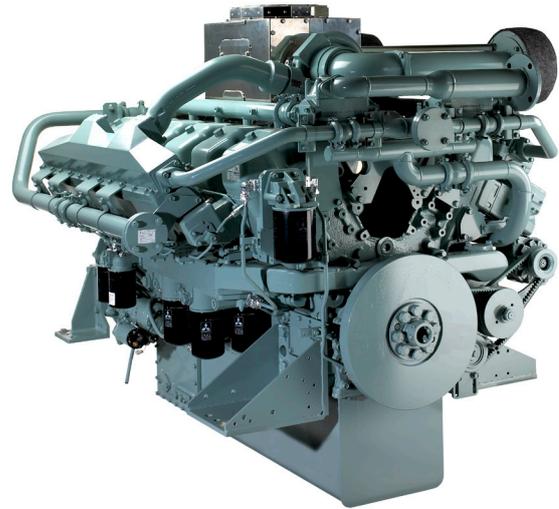


S12A2-MPTAW
 709 - 828 kW | MARINE GENERATOR
 IMO TIER III

MITSUBISHI MARINE ENGINE

RELIABLE MECHANICAL ENGINE



ENGINE DATA

Engine model	S12A2-MPTAW
Cylinder configuration	12/60°V
Total displacement	33.93
Bore x stroke (mm)	150 x 160
Flywheel and housing	SAE 18 / SAE 00
Compression ratio	15.3:1
Dry weight (kg)	3380

Method of operation

4-stroke, water-cooled diesel engine, with direct-injection, turbocharger, air-cooler and exhaust after-treatment by SCR

Cooling method

separate high and low temperature cooling circuit; charge air cooler by closed freshwater system controlled by thermostat (intercooler)

RATING^{1,2}

Application	Diesel-Electric Propulsion		Auxiliary Generator		Harbour Emergency Generator	
	DEP	DEP	Prime	Prime	Prime	Prime
Rating						
Output (kW)	709	752	709	828	709	828
Output (bhp)	950	1008	950	1110	950	1110
Engine speed (rpm)	1500	1800	1500	1800	1500	1800
Gross torque (Nm)	4514	on request	4514	4393	4514	4393
Fuel consumption 100% load (g/kWh) ³	206	on request	206	208	206	208
Fuel consumption 75% load (g/kWh) ³	208	on request	208	205	208	205
Fuel consumption 50% load (g/kWh) ³	212	on request	212	210	212	210
Emissions	IMO Tier III					

¹ For rating definitions, please see our website.

² Atmospheric condition: barometric pressure: 100kPa, ambient temperature: 298K, relative humidity: 30%.

³ Fuel consumption is based on ISO3046/1 with +5% tolerance at rated power, weighing 836 g/liter and a LHV of 42,780 kJ/kg, excluding pump. Average fuel consumption recommended by ISO8178 (E3 standard test cycle for propulsion application FPP).

STANDARD AND OPTIONAL EQUIPMENT

STANDARD EQUIPMENT

Fuel system

- Flexible fuel supply - and return hoses
- Fuel feed pumps
- Fuel fine filters, change-over type
- Fuel injection pumps
- Dual walled high-pressure fuel lines
- Fuel injectors

Lubricating oil system

- Wet type oil pan with inspection covers
- Oil pressure pump, gear driven
- Lubricating oil filters, change-over type
- By-pass filter
- Oil cooler with thermostat

Starting and electrical system

- Electric starter (Earth floated 24V)
- Alternator, 30 Amps.
- Stop solenoid (ETS)

Cooling system

- Freshwater pump including piping and thermostat (HT)
- Cooling water pipe on thermostat housing (HT)
- Front pulley PTO standard

Air inlet system

- Mitsubishi turbochargers

- Air inlet silencers with pre-cleaner
- Inlet air aftercoolers or intercoolers
- Inlet manifolds or ducts

Exhaust system

- Stainless steel insulation (SOLAS)

SCR after-treatment system

- SCR reactor
- Injection unit
- Dosing unit
- Shoot blower system
- Control system

Other

- Mounting brackets for rigid mounting
- Flywheel and housing, SAE standard
- Torsional vibration damper

Fuel system

- Drip tray fuel filters

Lubricating oil system

- Pre-lubrication oil system
- Drip tray oil filters
- Breather kit for emergency gensets

Monitoring system

- Complete digital monitoring system
- Sensor package; sensors mounted on engine with terminal box

Starting and electrical system

- Air starter motor (30 bar)

Cooling system

- Cooling system with freshwater pump, V-belt including piping and thermostat (LT)
- Cooling water heater with circulation pump

Exhaust system

- Flexible expansion joint

SCR after-treatment system

- Urea pump unit

OPTIONAL EQUIPMENT

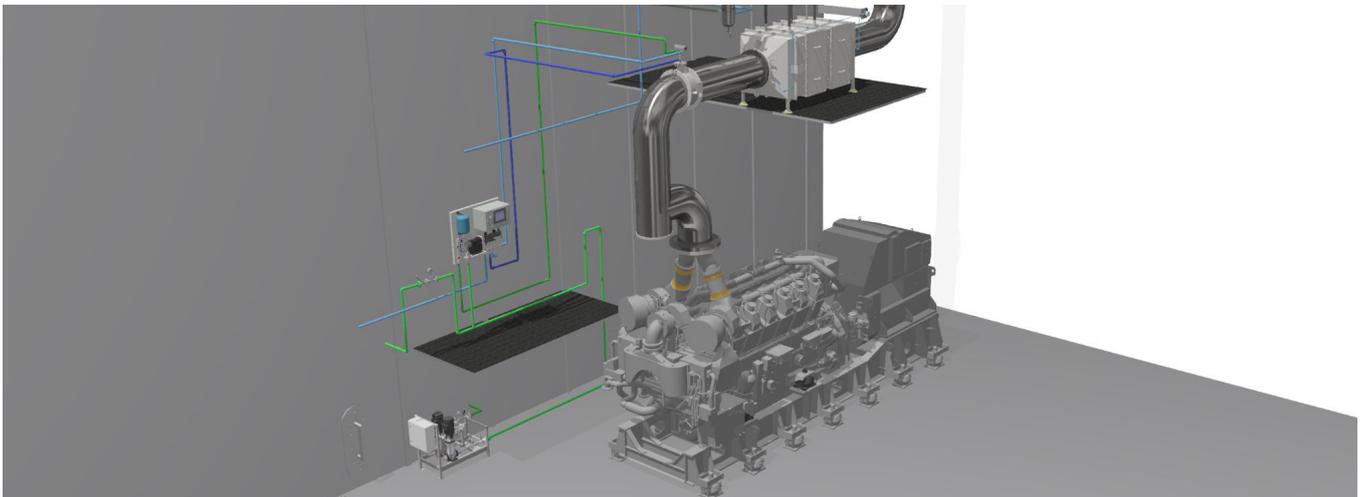
Classification

We are cooperating with many of the major classification societies.

Governor (mandatory)

- Hydraulic governor
- Electronic governor, with speed control box

DIMENSIONS



Dimensions

Engine L x W x H (mm)	2059 x 1654 x 1596
SCR unit (Horizontal or vertical) size (excl. insulation) L x W x H (mm)	893 x 882 x 2349
Mixing pipe requirements diameter (DN)*	400
Mixing pipe length (mm)*	2500

* Insulation of the SCR system is not included in the scope of supply, to be supplied and installed by the shipyard.

More information

Contact your local dealer for more information regarding Mitsubishi Marine Engines and optional equipment or, visit www.mtee.eu

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