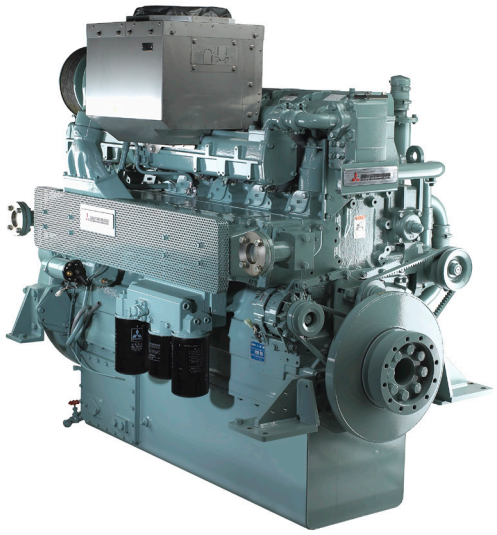
MITSUBISHI HEAVY INDUSTRIES

# S6R-MPTAW

545 - 635 kW | MARINE GENERATOR
IMO TIER III

# MITSUBISHI MARINE ENGINE

## RELIABLE MECHANICAL ENGINE



| ENGINE DATA | |
|---|---|
| Engine model | S6R-MPTAW |
| Cylinder configuration | 6 in-line |
| Total displacement | 24.51 |
| Bore x stroke (mm) | 170 x 180 |
| Flywheel and housing | SAE 18 / SAE 00 |
| Compression ratio | 14.5:1 |
| Dry weight (kg) | 2830 |

| | |
|---|---|
| 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 | |
|---|---|---|---|---|---|---|
| Rating | DEP | DEP | Prime | Prime | Prime | Prime |
| Output (kW) | 545 | 577 | 545 | 635 | 545 | 635 |
| Output (bhp) | 731 | 774 | 731 | 851 | 731 | 851 |
| Engine speed (rpm) | 1500 | 1800 | 1500 | 1800 | 1500 | 1800 |
| Gross torque (Nm) | 3470 | on request | 3470 | 3369 | 3470 | 3369 |
| Fuel consumption 100% load (g/kWh)[3] | 208 | on request | 208 | 224 | 208 | 224 |
| Fuel consumption 75% load (g/kWh)[3] | 208 | on request | 208 | 221 | 208 | 221 |
| Fuel consumption 50% load (g/kWh)[3] | 214 | on request | 214 | 230 | 214 | 230 |
| Emissions | IMO Tier III | | | | | |

[1] For rating definitions, please see our website.
[2] Atmospheric condition: barometic 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 cyle for propulsion application FPP).

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## STANDARD AND OPTIONAL EQUIPMENT

### STANDARD EQUIPMENT

**Fuel system**
- Flexible fuel supply - and return hoses
- Fuel feed pump
- Fuel fine filters, change-over type
- Fuel injection pump
- 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)
- Front pulley PTO standard

**Air inlet system**
- Mitsubishi turbocharger
- Air inlet silencer with pre-cleaner
- Inlet air aftercooler or intercooler
- 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

### OPTIONAL EQUIPMENT

**Classification**
We are cooperating with many of the major classification societies.

**Governor (mandatory)**
- Hydraulic governor
- Electronic governor, with speed control box

**Fuel system**
- Drip tray fuel filters

**Lubricating oil system**
- Lubricating oil drain pump
- 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

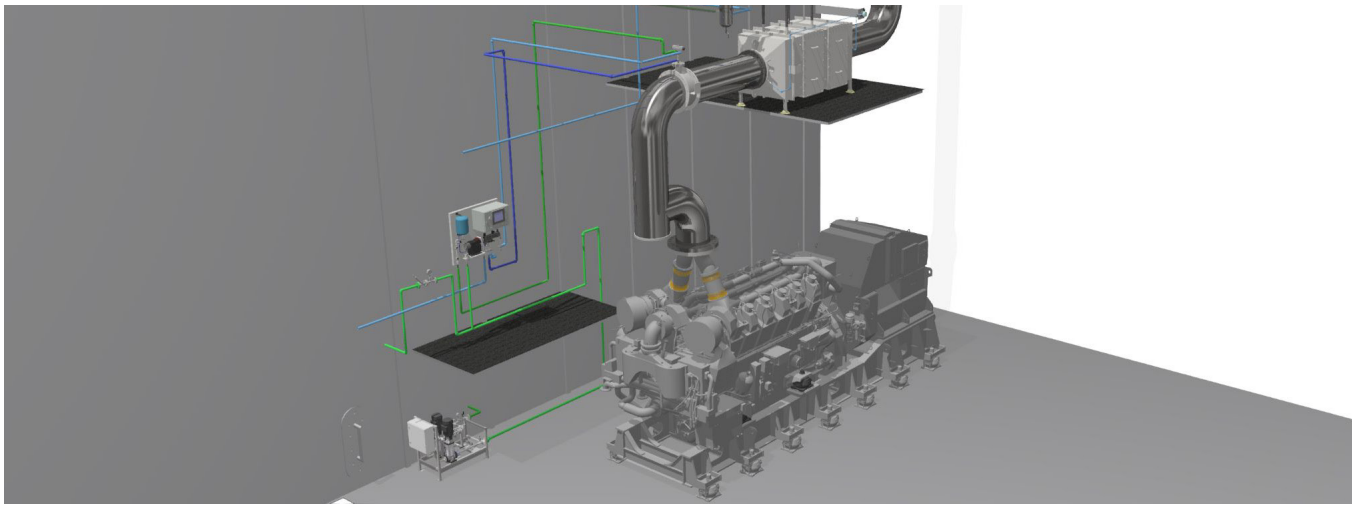
**Starting and electrical system**
- Air starter motor (30 bar)

**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

## DIMENSIONS



### Dimensions

| | |
|---|---|
| Engine L x W x H (mm) | 1786 x 1220 x 1650 |
| 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)* | 2200 |

* 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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CS-M-S6R-MPTAW-2102V1.0