

# Marine Gas Engine Range (Miller Cycle) up to 1.5 MW



Spark ignited prechamber system

# **Applications**

- Ferries
- Offshore Vessels
- Harbour Tugboats
- Inland Cargo Vessels

#### **Features**

- Higher thermal efficiency
- Highly efficient turbocharger
- Lower exhaust gas emissions
- Ultra lean burn gas to air ratio

#### **Specifications**

- Gas electric propulsion / auxiliary use
- Equipped with high-performance proprietary turbochargers





### technical information

|   |               | GS6R-MPTK                                      | GS6R2-MPTK                                     | GS12R-MPTK                                     | GS16R-MPTK                                     | GS16R2-MPTK                                    |
|---|---------------|--|--|--|--|--|
| Туре  |               | 4-cycle,<br>intercooled,<br>Natural Gas engine |
| Aspiration                                      |               | Turbocharged                                   | Turbocharged                                   | Turbocharged                                   | Turbocharged                                   | Turbocharged                                   |
| Number of cylinders                             |               | 6  | 6  | 12V  | 16V  | 16V  |
| Bore x stroke mm                                |               | 170x180  | 170x220  | 170x180  | 170x180  | 170x220  |
| Displacement Ltr                                |               | 24,52  | 29,96  | 49,03  | 65,37  | 79,9   |
| Combustion system                               |               | Prechamber,<br>Spark Ignited                   |
| Fuel  |               | Natural Gas                                    |
| Dry weight<br>50Hz / 60Hz kg                    |               | 2400 / 2400                                    | 2650 / 2650                                    | 5350 / 5350                                    | 6770 / 6830                                    | 8105 / 7845                                    |
| Continuous 'C'<br>power rating<br>output kWm hp | 50Hz 1500rpm  | 363  | na   | 722  | 959  | 1563   |
|   | 60Hz 1200rprn | 315  | 394  | 632  | 845  | 1250   |
| Emission compliance                             |               | _  | _  | _  | _  | _  |
| Dimensions mm                                   | LxHxW         | 1797 x 1638 x 1088                             | 1864 x 1718 x 1063                             | 2421 x 2137 x 1832                             | 2901 x 2137 x 1899                             | 3067 x 2301 x 1980                             |

# Reliability combined with a Cleaner Environment

Since 1999, we have delivered gas engines to currently nine out of the seventeen Norwegian LNG-fuelled car/passenger ferries.

Mitsubishi Gas Engines are engineered and manufactured at the Mitsubishi Sagamihara factory in Japan, and operate using the Miller Cycle. They all have a combustion system with an ultra lean burn gas-to-air ratio, and a highly efficient turbocharger, which creates high boost pressure, higher thermal efficiency and lower exhaust gas emissions.

Mitsubishi Gas Engines have lower combustion temperatures thereby reducing thermal stress, and

resulting in higher reliability. To top it off, we provide you with the compact sized engine you are accustomed to when choosing Mitsubishi engines, benefiting both installation and maintenance.

#### **Typical Operation:**

- · Average Load Factor is 60-80% of Rated Power.
- Operating hours: 3,000-6,000hrs per year.
- Momentary overload: 110 % is available for less than 25hrs per year on emergency basis.
- 100% of Rated Power is available for maximum of 3hrs per every 12hrs operation.









## 🙏 MITSUBISHI TURBOCHARGER AND ENGINE EUROPE B.V.

Headquarters Engine, Genset & Powerplant Division Europe, Middle East and Africa

Damsluisweg 2 1332 EC Almere P.O. Box 30101

1303 AC Almere

The Netherlands www.mtee.eu

Phone: +31 (0)36 5388311 Fax: +31 (0)36 5388342

