# GAS SYSTEM
# SERIES 400 BIOGAS

**480 V / 600 V / 60 Hz***

## SYSTEM RATINGS

### Biogas / Sewage gas / Landfill gas genset without heat extraction

| MTU Onsite Energy Type | Former Genset Type | Output Elec.[1] $kW_{el.}$ | Output Therm.[2] kBTU/hr | Output Low Temp.[4] kBTU/hr (°F) | Energy input[5] kBTU/hr | Efficiency Electr. $\eta_{el.}$ (%) | Efficiency Total $\eta_{tot}$ (%) | Methane Content | Dimensions (L x W x H) in |
|---|---|---|---|---|---|---|---|---|---|
| GB 200 B6 | AoB 3066 Z8 | 200 | *(512)* | 44 (122) | 1909 | 35.8 | *(62.6)* | 45-65 | 133 x 69 x 83 |
| GB 350 B6 | AoB 3042 Z7 | 350 | *(816)* | --- | 3248 | 36.8 | *(61.9)* | 45-65 | 155 x 67 x 84 |

### Biogas / Sewage gas / Landfill gas genset with heat extraction from jacket water

| MTU Onsite Energy Type | Former Genset Type | Output Elec.[1] $kW_{el.}$ | Output Therm.[2] kBTU/hr | Output Low Temp.[4] kBTU/hr (°F) | Energy input[5] kBTU/hr | Efficiency Electr. $\eta_{el.}$ (%) | Efficiency Total $\eta_{tot}$ (%) | Methane Content | Dimensions (L x W x H) in |
|---|---|---|---|---|---|---|---|---|---|
| GR 200 B6 | AB 3066 Z8 | 200 | 512 | 44 (122) | 1909 | 35.8 | 62.6 | 45-65 | 137 x 69 x 83 |
| GR 350 B6 | AB 3042 Z7 | 350 | 816 | --- | 3248 | 36.8 | 61.9 | 45-65 | 155 x 67 x 84 |

### Biogas / Sewage gas genset with heat extraction from jacket water and exhaust gas (Cogeneration Module 194°/158°F)

| MTU Onsite Energy Type | Former CHP Type | Output Elec.[1] $kW_{el.}$ | Output Therm.[3] kBTU/hr | Output Low Temp.[4] kBTU/hr (°F) | Energy input[5] kBTU/hr | Efficiency Electr. $\eta_{el.}$ (%) | Efficiency Total $\eta_{tot}$ (%) | Methane Content | Dimensions (L x W x H) in |
|---|---|---|---|---|---|---|---|---|---|
| GC 175 B6** | MB 3066 L8 | 175 | 795 | --- | 1676 | 35.6 | 83.1 | 45-65 | 145 x 74 x 84 |
| GC 200 B6 | MB 3066 Z8 | 200 | 1011 | 44 (122) | 1909 | 35.8 | 88.7 | 45-65 | 145 x 74 x 84 |
| GC 350 B6 | MB 3042 Z7 | 350 | 1588 | --- | 3248 | 36.8 | 85.7 | 45-65 | 150 x 72 x 89 |

* NOx < 1 g/bhp-hr

** NOx < 2 g/bhp-hr

1) Rated power at nominal voltage, power factor = 1 and nominal frequency

2) from jacket water, tolerance 8%

3) from jacket water and exhaust gas, tolerance 8%

4) data only provided for external gas mixture cooler

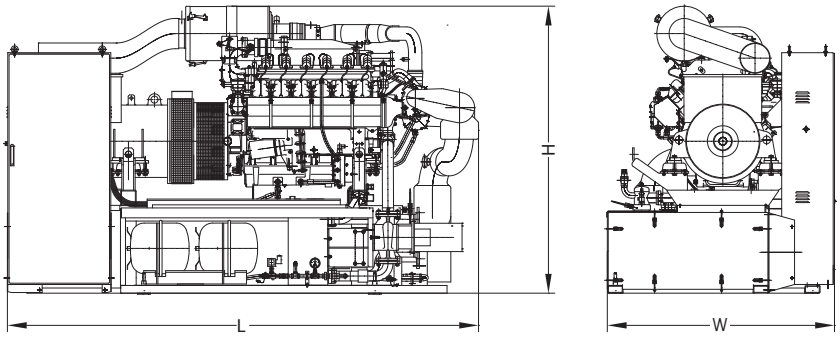
5) performance data in accordance with ISO 3046/I-1991, tolerance 5%

All data according to full load, indicated gas mixture cooler water inlet temperature and are subject to technical development.

**Project specific data on request:**

- Other gas types
- Container
- Individual data (e.g. flow-/return-temperatures, hot cooling, methane number, assembly space, etc.)
- Gas Processing

## DRAWINGS AND DIMENSIONS




Note: This drawing is provided for reference only and should not be used for planning installation.

## ENGINE DATA

| 3066 | |
|---|---|
| Configuration | in-line |
| No. of cylinders | 6 |
| Bore/Stroke | 130/155 mm (5.12/6.10 in) |
| Cyl. displacement | 2.06 lit. (126 cu in) |
| Rated speed | 1800 rpm |

| 3042 | |
|---|---|
| Configuration | 90°V |
| No. of cylinders | 12 |
| Bore/Stroke | 130/142 mm (5.12/5.59 in) |
| Cyl. displacement | 1.88 lit. (115 cu in) |
| Rated speed | 1800 rpm |

## DESIGN AND EQUIPMENT (EXTRACT)

- Sliding gear starter 24V
- Flexible coupling, interconnecting bell housing, service opening so that replacement of the rubber element can be achieved without displacing engine o generator
- Gas supply through venturi air-gas mixer with electronically controlled gas metering valve
- Components of the gas regulation line approved per Directive for Gas Components 90/356/EWG
- Electronic high-voltage capacitor ignition system with one ignition coil per cylinder
- Electronic speed governor for speed and power output control with automatic knocking control
- Oil sump, removable without lifting the engine

Version: 28.09.2012, materials and specifications are subject to change without notice due to technical advances.

Subject to change. | 3236761 | Edition 01/14 | ENC 2014-01 | Printed in Germany on chlorine-free bleached paper.