

# GAS SYSTEM

## SERIES 400 NATURAL GAS

400V / 50 Hz  
NOx < 500 mg/Nm<sup>3</sup>



### SYSTEM RATINGS

#### Gas genset with optional heat recovery (90°/70°C heating water circuit)

Genset Type	Engine Type	Output				Energy input <sup>4)</sup> kW	Efficiency		Methane number <sup>5)</sup>
		Elect. <sup>1)</sup>	Therm. <sup>2)</sup>	Exhaust <sup>3)</sup>	Low Temp.		Electr.	Total	
		kW <sub>el.</sub>	kW <sub>th.</sub>	kW <sub>th.</sub> (°C)	kW <sub>th.</sub> (°C)		η <sub>el.</sub> (%)	η <sub>tot.</sub> (%)	
MTU 6R400 GS*	E3066 D4*	135	115	89 (90)	---	371	36.4	91.4	≥ 70
MTU 6R400 GS	E3066 L9	182	122	143 (120)	---	506	36.0	88.3	≥ 70
MTU 6R400 GS	E3066 L9	191	103	149 (120)	29 (50)	534	35.8	83.0	≥ 70
MTU 6R400 GS	E3066 L9	201	106	154 (120)	36 (40)	560	35.9	82.3	≥ 70
MTU 6R400 GS	E3066 Z5	220	117	134 (120)	17 (40)	558	39.4	84.4	≥ 80
MTU 12V400 GS*	E3042 D4*	245	224	154 (100)	---	675	36.3	92.3	≥ 70
MTU 12V400 GS	E3042 L9	357	235	256 (120)	---	952	37.5	89.1	≥ 70
MTU 12V400 GS	E3042 L9	370	194	263 (120)	52 (50)	988	37.4	83.7	≥ 70
MTU 12V400 GS	E3042 Z6	390	233	241 (120)	28 (40)	995	39.2	86.8	≥ 70
MTU 12V400 GS	E3042 Z6	420	247	257 (120)	31 (40)	1064	39.5	86.8	≥ 80

#### Cogeneration Module 100°/80°C heating water circuit

Genset Type	Engine Type	Output				Energy input <sup>4)</sup> kW	Efficiency		Methane number <sup>5)</sup>
		Elect. <sup>1)</sup>	Therm. <sup>2)</sup>	Exhaust <sup>3)</sup>	Low Temp.		Electr.	Total	
		kW <sub>el.</sub>	kW <sub>th.</sub>	kW <sub>th.</sub> (°C)	kW <sub>th.</sub> (°C)		η <sub>el.</sub> (%)	η <sub>tot.</sub> (%)	
MTU 6R400 GS*	E3066 DH3*	116	110	80 (120)	---	337	34.4	90.8	≥ 70
MTU 6R400 GS	E3066 LH9	165	111	130 (120)	---	465	35.5	87.3	≥ 70
MTU 12V400 GS*	E3042 DH3*	227	210	141 (120)	---	628	36.1	92.0	≥ 80
MTU 12V400 GS	E3042 LH9	323	206	250 (120)	---	879	36.7	88.6	≥ 70

\* λ = 1 with 3-Way-Catalyst, NOx < 250 mg/Nm<sup>3</sup>

- 1) Rated power at nominal voltage, power factor = 1,0 and nominal frequency
- 2) Heat output from engine cooling with tolerance of ± 8%
- 3) Heat output from exhaust (exhaust cooling to 90°C, 100°C or 120°C) with tolerance of ± 8%
- 4) Performance data in accordance with ISO 3046/I-2002 with tolerance of 5%
- 5) Referenced methane number

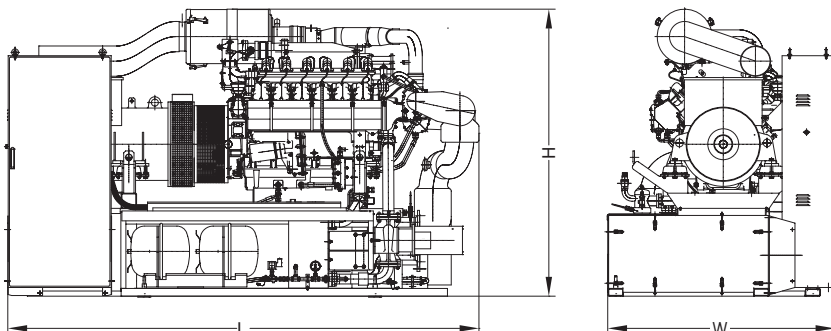
#### Project specific data on request:

- different alternator voltage

- different flow-/return-temperatures, hot cooling, methane number, installation conditions etc.

- Container

## DRAWINGS AND DIMENSIONS



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

### Genset Type

MTU 6R400 GS (D4)  
 MTU 6R400 GS (L9)  
 MTU 6R400 GS (Z5)  
 MTU 12V400 GS (D4/L9)  
 MTU 12V400 GS (Z6)  
 MTU 6R400 GS (DH3)  
 MTU 6R400 GS (LH9)  
 MTU 12V400 GS (DH3/LH9/ZH6)

### Dimensions Genset (L x W x H)

---  
 3400 x 1700 x 2100 mm  
 3900 x 1900 x 2150 mm  
 4000 x 1700 x 2200 mm  
 4000 x 1700 x 2200 mm  
 ---  
 ---  
 ---

### Cogeneration module (L x W x H)

3650 x 960 x 1875 mm  
 3700 x 1900 x 2100 mm  
 3900 x 1900 x 2150 mm  
 3700 x 1900 x 2300 mm  
 3900 x 1900 x 2300 mm  
 3950 x 960 x 1875 mm  
 3900 x 1900 x 2100 mm  
 4000 x 1900 x 2300 mm

## ENGINE DATA

### 3066

Configuration in-line  
 No. of cylinders 6  
 Bore/Stroke 130/155 mm  
 Cyl. displacement 2.06 lit.  
 Rated speed 1500 rpm

### 3042

Configuration 90°V  
 No. of cylinders 12  
 Bore/Stroke 130/142 mm  
 Cyl. displacement 1.88 lit.  
 Rated speed 1500 rpm

## DESIGN AND EQUIPMENT (EXTRACT)

- // Sliding gear starter 24V
- // Gas supply with electronically controlled gas metering valve
- // 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

Any specifications, descriptions, values, data or other information related to dimensions, power or other technical performance criteria of the goods as provided in this general product information are to be understood as non-binding and may be subject to further changes such as but not limited to technical evolution at any time. Version: 01.01.2016, materials and specifications subject to change without notice due to technical advances.

**MTU Onsite Energy**

A Rolls-Royce Power Systems Brand

[www.mtuonsiteenergy.com](http://www.mtuonsiteenergy.com)