



Gas system

SERIES 4000 BIOGAS

480V/60 Hz/NO_x < 500 mg/Nm³

System ratings

Gas genset

Genset type	Engine type	Output				Energy input ⁴⁾	Efficiency		Methane number ⁵⁾
		Elect. ¹⁾	Therm. ²⁾	Exhaust ³⁾	Low Temp.		Electr.	Total	
		kW _{el}	kW _{th}	kW _{th} (°C)	kW _{th} (°C)		n _{el} (%)	n _{tot} (%)	
<i>mtu</i> 8V4000 GS	L32	764	427	349 (180)	67 (53)	1854	41.2	83.1	≥ 120
<i>mtu</i> 8V4000 GS	L32	764	388	321 (180)	74 (40)	1806	42.3	81.6	≥ 120
<i>mtu</i> 12V4000 GS	L32	1152	629	519 (180)	90 (53)	2755	41.8	83.5	≥ 120
<i>mtu</i> 12V4000 GS	L32	1152	581	488 (180)	103 (40)	2716	42.4	81.8	≥ 120
<i>mtu</i> 12V4000 GS	L64FB	1507	1668	703 (120)	70 (64)	3446	43.7	92.1	≥ 130
<i>mtu</i> 16V4000 GS*	L32	1549	638	652 (180)	313 (40)	3616	42.8	87.2	≥ 120
<i>mtu</i> 16V4000 GS*	L32	1549	659	671 (180)	330 (53)	3652	42.4	87.9	≥ 120
<i>mtu</i> 20V4000 GS*	L32	1932	745	873 (180)	373 (40)	4493	43.0	87.3	≥ 120
<i>mtu</i> 20V4000 GS*	L32	1934	797	856 (180)	425 (53)	4576	42.3	87.7	≥ 120
<i>mtu</i> 16V4000 GS	L64FB	2015	1233	974 (120)	78 (64)	4675	43.1	90.3	≥ 130

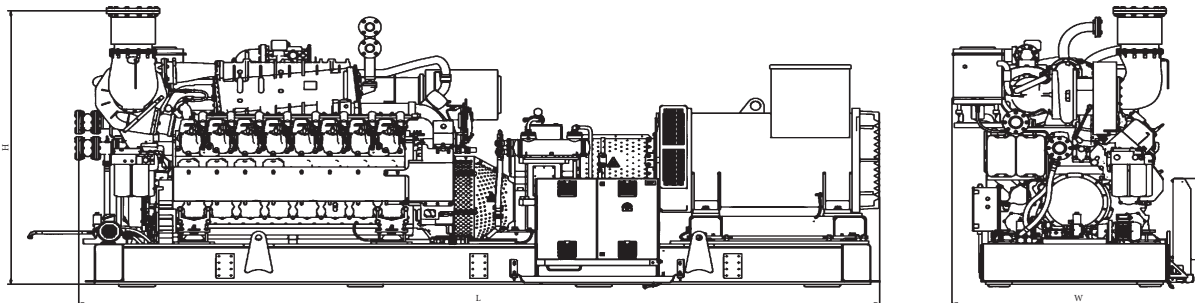
- 1 Rated power at nominal voltage, power factor = 1,0 and nominal frequency
 2 Heat output from engine cooling with tolerance of ± 8%
 3 Heat output from exhaust (exhaust cooling to 180°C) with tolerance of ± 8%
 4 Performance data in accordance with ISO 3046/I-2002 with tolerance of 5%
 5 Referenced methane number
 * with HT-extraction

- Project specific data on request:
 – different alternator voltage
 – different flow-/return-temperatures, hot cooling, methane number, installation conditions etc.
 – Container



A Rolls-Royce solution

Drawings and dimensions



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

Genset type	Dimensions genset (LxWxH) mm (in)
<i>mtu</i> 8V4000 GS	5000 x 2000 x 2500 (200 x 80 x 100)
<i>mtu</i> 12V4000 GS	5850 x 2000 x 2500 (240 x 80 x 100)
<i>mtu</i> 16V4000 GS	6800 x 2000 x 2600 (260 x 80 x 100)
<i>mtu</i> 20V4000 GS	7250 x 2000 x 2600 (280 x 80 x 100)

Engine data

4000		
Configuration		90° V
No. of cylinders		8/12/16/20
Bore/stroke	mm (in)	170/210 (6,7/8,3)
Cyl. displacement	lit. (in ³)	4,77 (34,45)
Rated speed	rpm	1500

Design and equipment (extract)

- Sliding gear starter 24V
- Gas supply with electronically controlled gas metering valve
- Gearbox 1500 – 1800 rpm
- 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.