



Gas system

SERIES 500 NATURAL GAS

480V/60 Hz/NO_x < 1g/bhp-hr

System ratings

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

Genset type	Engine type	Output				Energy input ⁴⁾	Efficiency		Methane number ⁵⁾
		Elect. ¹⁾	Therm. ²⁾	Exhaust ³⁾	Low Temp.		Electr.	Total	
		kW _{el}	kBTU/hr	kBTU/hr (°F)	kBTU/hr (°F)	kBTU/hr	n _{el} (%)	n _{tot} (%)	
mtu 6R500 GS	6R500	250	488	491 (248)	72 (104)	2109	40.5	86.9	≥ 80
mtu 8V500 GS	8V500	360	645	720 (248)	113 (104)	3010	40.8	86.2	≥ 80
mtu 12V500 GS	12V500	499	918	1013 (248)	153 (104)	4221	40.4	86.2	≥ 80
mtu 12V500 GS	12V500	550	1037	1109 (248)	174 (104)	4637	40.5	86.8	≥ 80

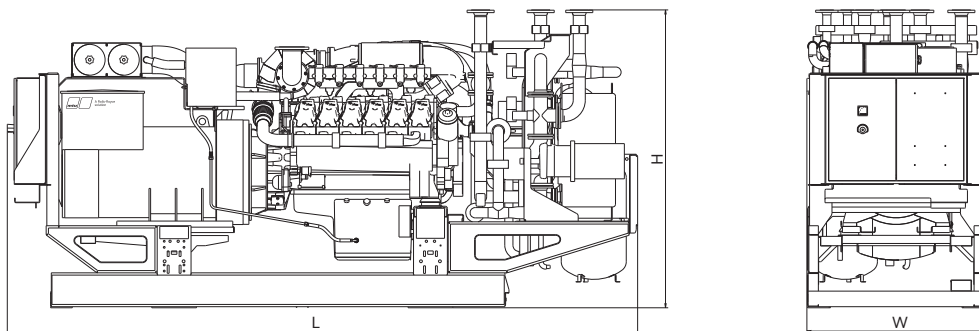
- 1 Rated power at nominal voltage, power factor = 1,0 and nominal frequency
- 2 Heat output from engine cooling with tolerance of ± 8%
- 3 Heat output from exhaust (exhaust cooling to 248°F) with tolerance of ± 8%
- 4 Performance data in accordance with ISO 3046/I-2002 with tolerance of 5%
- 5 Natural gas referenced methane number

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



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	GB - version (LxWxH) inch	GR - version (LxWxH) inch	Cogeneration module GC (LxWxH) inch
mtu 6R500 GS	134 x 47 x 83	185 x 55 x 87	185 x 55 x 87
mtu 8V500 GS	134 x 55 x 94	193 x 63 x 94	193 x 63 x 94
mtu 12V500 GS	154 x 55 x 94	201 x 55 x 94	201 x 55 x 94

Engine data

	6R500	8V500	12V500
Configuration	in-line	V	V
No. of cylinders	6	8	12
Bore/stroke	5.1/6.2 inch	5.1/6.2 inch	5.1/6.2 inch
Cyl. displacement	11.9 lit.	16.7 lit.	25.0 lit.
Rated speed	1800 rpm	1800 rpm	1800 rpm

Design and equipment (extract)

- Electric starter 24V
- Gas supply with electronically controlled gas metering valve with annular gap
- Electronic high-voltage capacitor ignition system with one ignition coil per cylinder, microprocessor-controlled
- High-turbulence combustion concept for highest dynamics and efficiency
- Advanced MMC-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.