

MGS-EU 2500-B - RADIATOR

MITSUBISHI GENERATOR SET

EU MADE (France)

Quality, reliability, performance, and partnership - Mitsubishi Heavy Industries Group.

RATING	
Generating set model	MGS-EU 2500-B
Generator voltage	400 V
Frequency	50 Hz
Generator output LTP	1800 kWe 2250 KVA
Power factor - min	0.8
Duty	500 h/year
Rating	LTP – Stand-by
Average load factor for 24h	80% or lower
Average load factor per year	60% or lower
Overload	Not available
Installation location	Indoor



DESIGN CONDITIONS	
Ambient temp - avg/max	25/40°C
Ambient temp – min	o°C
Altitude (maxi)	1000 m a.s.l
Relative humidity (maxi)	85%
Fuel oil LHV	42700kJ/kg
Fuel oil	Diesel
Fuel oil gravity at 15°C	o.83 to o.87
Fuel oil sulfur content max	o.2% by weight
Fuel oil viscosity min(60°C)/max(50°C)	2.0/8.0 cSt
Fuel oil cetane number – min	45
Lube oil capacity - max	230 liters
Emissions–other version available	unregulated

ALTERNATOR DATA	
Enclosed, self ventilated, self-regulated	d, brushless
Bearing configuration	Single
Insulation class	Н
Temperature rise class	Н
Cooling method	Air ICo1
Protection	IP23
Excitation system	Digital
PT100 for bearing and stator winding	
AVR for single and parallel operation	
Space heater	
Set of CT's for measure or protection	

ENGINE DATA	
Engine model	S16R PTAA2
Engine speed	1500 Rpm
Engine brake output	1728 kWm
Cylinder configuration	16 V
Total displacement	65.37 liters
Bore x Stroke	170 x 180 mm
Compression ratio	14.0:1
Turbocharged	4 cycles
Governor	Electric
Cooling method (engine driven pump)	Air + Water
Starting method	Electrical 24 V DC

CE COMPLIANCE

I.S. 2006/42/EC : machinery

LANGUAGE – UNITS

Drawings, documents, nameplates in English

SI metric system

ENCINE DATA



PERFORMANCES @ LTP (LV : 400V)	
Generator output	1800 kWe
Specific consumption – ISO3046/1 : 0/+5%	210 g/kWh
Fuel oil consumption @ 100%	457 L / h
Fuel oil consumption @ 75% (PRP)	308 L / h
Exhaust gas temperature	550° C
Exhaust gas flow rate	453 m3/min
Air intake flow rate	171 m3/min
Noise level@ 1m (open skid)	110.5 dB (A)

RADIATOR DATA	
Heat rejection	698/642 kW
Air on temperature by 1000m a.s.l	45°C
Coolant	MEG 30%
Max external pressure drop	250Pa
Max outlet temperature (air)	87.7 °C
Air flow	31.5 m3/s
Coolant capacity incl. engine	306 liters

TOLERANCES AND CONDITIONS

Efficiency data for average conditions (avg) – derating above 1000 m asl or 40°C intake air temperature

Fuel input: o/+5% (ISO3046/1). Submitted to fuel oil specification confirmation

Heat rejection data: +/- 12%. Add 17% margin for remote dry air cooler design

Exhaust gas flow / temperature: +/- 6% - +/- 8%

Pictures are not contractual and may include optional accessories

These data are not contractual. They can be modified by MTEE without prior notice

STANDARDS

I.S.O.: International Standard Organization

C.E.N.: European Standard Committee

I.E.C: International Electric Commission

J.I.S: Japanese Industrial Standards (for engine)

J.E.C: Japan. Electrotechnical committee (engine)

J.E.M: Japan Elec. Manufacturers Association (Eng.)

Manufacturers standards

GENERATOR SET EMBEDDED CONTROL PANEL

 $\label{thm:made} \mbox{Manual start and stop by push buttons on the (CGC) Compact Genset Controller (DEIF made)}$

Automatic start and stop sequence (AMF)

Automatic engine and alternator protection

Automatic control of engine auxiliaries and power supply:

- Jacket water heater (if applicable)
- Alternator space heater

Lube oil priming pump (if applicable)

24 V DC energy block to supply control system and panel equipment

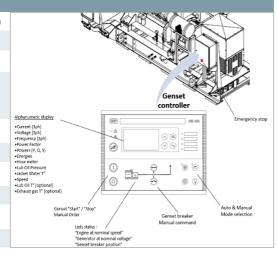
24 V DC charger to supply engine starting batteries

Display and monitoring of operating data, alarms and history logs

Optional functions for parallel operation with other genset or grid

Optional functions for power management, peak shaving, etc...

Modbus RS485 - Optional ethernet TCP/IP com port for internet remote access



GENERATOR SET EMBEDDED CIRCUIT BREAKER PANEL (OPTION FOR CE MARKING)

Air circuit breaker (ACB)

Motorized - 3 poles - 3200 amp - 400 VAC (4 poles on request)

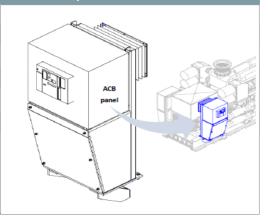
Electric protection relay

Command coil 24 V DC

Auxiliary contacts

Key lock, On/Off button lock, Safety labels

Downstream side protected by cover case for easy cable connection with no free access to live parts

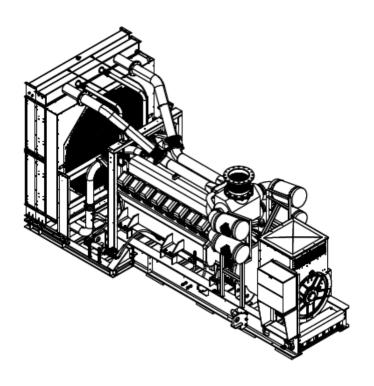


MOVE THE WORLD FORW→RD MITSUBISHI

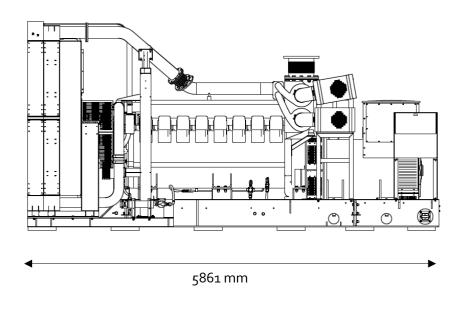


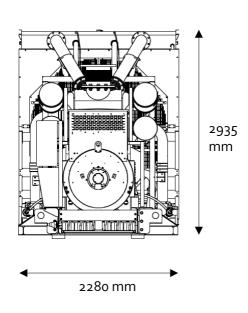


MGS-EU 2500 GENSET (S16R PTAA2 / ECO46 1L/4 SAE 00 21) LAYOUT



Dry Weight = 14630 Kg









SCOPE OF SUPPLY

- Standard item
- o Option

LV	- Not included or not applicable	Open skid set		Containerized set	
Elastic suspensions of the generating set Starting batteries and cables High voltage (HV) alternator 3 to 1 kV with 100V VTS Jacket water heating Jacket water pump (illing and draining Jacket water pump (illing and draining Jacket water pump (mounted on engine) Jacket water water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water (with by-pass, mounted on engine) Jacket water of lacket water of la		LV	HV	LV	HV
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Starting batteries and cables High voltage (HV) alternator 3 to 11 kV with 100V VTS	Elastic suspensions of the generating set	•	•	•	•
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Alternator according to specific country grid code O O O O	Alternator according to specific country grid code	0	0	0	0

CONTACTS DETAILS

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More information

Contact your local dealer for more information regarding Mitsubishi Generator Sets and optional equipment or, visit engine-qenset.mhi.com

