

GAS GENERATOR SET

GS200-6S

200 kWe / 60 Hz / Standby
208 - 600V

(Reference GP175N6S for Prime Rating Technical Data)



SYSTEM RATINGS

Standby (NG) (LP)	GS200N6SGA GS200L6SGA	GS200N6SDA GS200L6SDA	GS200N6SPA GS200L6SPA	GS200N6SJA GS200L6SJA	GS200N6SRA GS200L6SRA	GS200N6SNA GS200L6SNA
Voltage (L-L)	240V**	240V**	208V**	240V**	480V**	600V**
Phase	1	1	3	3	3	3
PF	1.0	1.0	0.8	0.8	0.8	0.8
Hz	60	60	60	60	60	60
Natural Gas						
Ratings: Amps	750	750	694	601	300	240
Natural Gas						
Ratings: kW/kVA	180/180	180/180	200/250	200/250	200/250	200/250
LP Gas						
Ratings: Amps	541	541	451	390	195	156
LP Gas						
Ratings: kW/kVA	130/130	130/130	130/162	130/162	130/162	130/162
skVA@30%						
Voltage Dip	425	370	608	608	809	720
Generator Model*	433CSL6216	432PSL6228	432CSL6210	432CSL6210	432CSL6210	432PSL6246
Temp Rise	130 °C/40 °C	130 °C/40 °C	130 °C/40 °C	130 °C/40 °C	130 °C/40 °C	130 °C/40 °C
Connection	12 LEAD ZIG-ZAG	4 LEAD	12 LEAD LOW WYE	12 LEAD HI DELTA	12 LEAD HI WYE	4 LEAD WYE

* Consult the factory for alternate configuration.

** UL 2200 Offered

CERTIFICATIONS AND STANDARDS

// **Generator set is designed and manufactured in facilities certified to standards ISO 9001:2008 and ISO 14001:2004**

// **Power Rating**
- Accepts Rated Load in One Step Per NFPA 110

// **UL 2200 / CSA – Optional**

- UL 2200 Listed
- CSA Certified

// **Performance Assurance Certification (PAC)**

- Generator Set Tested to ISO 8528-5 for Transient Response
- Verified product design, quality and performance integrity
- All engine systems are prototype and factory tested

STANDARD FEATURES*

- // MTU Onsite Energy is a single source supplier
 - // Global Product Support
 - // 2 Year Standard Warranty
 - // 11.1 L Turbo Engine Charge Air Cooling
 - 11.1 Liter Displacement
 - 4-Cycle
 - // 3-Way Catalyst
 - // Optional Fuels: LP Liquid and Dual Fuel
 - // Engine-generator resilient mounted
 - // Complete Range of Accessories
- // Generator
 - Brushless, Rotating Field Generator
 - 2/3 Pitch Windings
 - 300% Short Circuit Capability with Optional PMG
 - // Digital Control Panel(s)
 - UL Recognized, CSA Certified, NFPA 110
 - Complete System Metering
 - LCD Display
 - // Cooling System
 - Integral Set-Mounted
 - Engine Driven Fan

STANDARD EQUIPMENT*

// Engine

Air Cleaner
 Oil Pump
 Oil Drain Extension & S/O Valve
 Full Flow Oil Filter
 Jacket Water Pump
 Thermostats
 Blower Fan & Fan Drive
 Radiator - Unit Mounted
 Electric Starting Motor - 24V
 Governor - Electronic Isochronous
 Base - Formed Steel
 SAE Flywheel & Bell Housing
 Charging Alternator - 24V
 Battery Box & Cables
 Flexible Fuel Connectors
 Flexible Exhaust Connection
 EPA Certified Engine

// Generator

NEMA MG1, IEEE and ANSI standards compliance for temperature rise and motor starting
 Self Ventilated and Drip-proof
 Superior Voltage Waveform
 Solid State, Volts-per-hertz Regulator
 ±1% Voltage Regulation No load to full load

Brushless Alternator with Brushless Pilot Exciter
 4 pole, Rotating Field
 130 °C Maximum Standby Temperature Rise
 1 Bearing, Sealed
 Flexible Coupling
 Full Amortisseur Windings
 125% Rotor Balancing
 3-phase Voltage Sensing
 100% of Rated Load - One Step
 5% Maximum Total Harmonic Distortion

// Digital Control Panel(s)

Digital Metering
 Engine Parameters
 Generator Protection Functions
 Engine Protection
 SAE J1939 Engine ECU Communications
 Windows®-Based Software
 Multilingual Capability
 Remote Communications to RDP-110 Remote Annunciator
 16 Programmable Contact Inputs
 Up to 11 Contact Outputs
 UL Recognized, CSA Certified, CE Approved
 Event Recording
 IP 54 Front Panel Rating with Integrated Gasket
 NFPA110 Compatible

* Represents standard product only. Consult Factory/MTU Onsite Energy Distributor for additional configurations.

APPLICATION DATA

// Engine

Manufacturer	Doosan
Model	11.1L CAC
Type	4-Cycle
Arrangement	6-Inline
Displacement: L (in ³)	11.1 (673)
Bore: cm (in)	12.3 (4.84)
Stroke: cm (in)	15.5 (6.1)
Compression Ratio	10.5:1
Rated RPM	1,800
Engine Governor	Bosch
Maximum Power (NG): kWm (bhp)	225 (302)
Maximum Power (LP): kWm (bhp)	155 (208)
Speed Regulation	±0.5%
Air Cleaner	Dry

// Liquid Capacity (Lubrication)

Total Oil System: L (gal)	28.5 (8)
Engine Jacket Water Capacity: L (gal)	25 (5.5)
System Coolant Capacity: L (gal)	149 (32.8)

// Electrical

Electric Volts DC	24
Cold Cranking Amps Under -17.8 °C (0 °F)	1,050

// Fuel Inlet

Fuel Supply Connection Size	2" NPT
Fuel Supply Pressure: mm H ₂ O (in. H ₂ O)	178-279 (7-11)

// Fuel Consumption (NG-1000 BTU/ft³ / LP-2500 BTU/ft³)

	NG	LPG
At 100% of Power Rating: m ³ /hr (ft ³ /hr)	59.9 (2,115)	19.9 (704)
At 75% of Power Rating: m ³ /hr (ft ³ /hr)	46.7 (1,648)	17 (600)
At 50% of Power Rating: m ³ /hr (ft ³ /hr)	32.8 (1,157)	11.5 (404)

// Cooling - Radiator System

Ambient Capacity of Radiator: °C (°F)	50 (122)*
Maximum Restriction of Cooling Air, Intake, and Discharge Side of Rad.: kPa (in. H ₂ O)	0.12 (0.5)
Water Pump Capacity: L/min (gpm)	310 (82)
Heat Rejection to Coolant: kW (BTUM)	194.6 (11,071)
Heat Radiated to Ambient: kW (BTUM)	40.4 (2,295)
Fan Power: kW (hp)	10.4 (13.9) 10.4 (13.9)

* Installation of enclosures reduces the ambient capacity of the cooling system by 1 °C (1.8 °F). Gravity exhaust louvers reduce ambient capacity of the cooling system by an additional 3 °C (5.5 °F).

// Air Requirements

Aspirating: *m ³ /min (SCFM)	11.7 (400)
Air Flow Required for Rad.	
Cooled Unit: **m ³ /min (SCFM)	631 (22,300)
Remote Cooled Applications;	
Air Flow Required for Dissipation of Radiated Gen-set Heat for a Max of 25 °F Rise: *m ³ /min (SCFM)	237 (8,365)

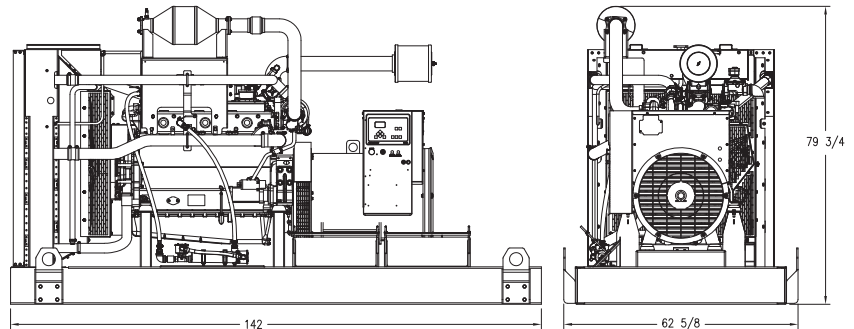
* Air density = 1.184 kg/m³ (0.0739 lbm/ft³)

** At 0.25 kPa (1 in. H₂O) static pressure and 52 °C (125 °F) at radiator

// Exhaust System

Gas Temp. (Stack): °C (°F)	694 (1,281)
Gas Volume at Stack	
Temp: m ³ /min (CFM)	38.8 (1,371)
Maximum Allowable	
Back Pressure: kPa (in. H ₂ O)	2.5 (10.25)

WEIGHTS AND DIMENSIONS



Drawing above for illustration purposes only, based on standard open power 480 volt generator set. Lengths may vary with other voltages. Do not use for installation design. See website for unit specific template drawings.

System	Dimensions (LxWxH)	Weight (dry)
Open Power Unit (OPU)	3,607 x 1,591 x 2,026 mm (142 x 62.6 x 79.75 in)	3,096 kg (6,258 lb)

Weights and dimensions are based on open power units and are estimates only. Consult the factory for accurate weights and dimensions for your specific generator set.

SOUND DATA

Unit Type	Standby Full Load (NG)	Standby Full Load (LP)
Level 0: Open Power Unit dB(A)	86.3	86.1

Sound data is provided at 7 m (23 ft). Generator set tested in accordance with ISO 8528-10 and with infinite exhaust.

EMISSIONS DATA

Fuel Type	THC + NO _x	CO
Natural Gas	2.24	0.26
Liquid Propane	0.08	0.25

All units are in g/hp-hr and are EPA D2 cycle values.

RATING DEFINITIONS AND CONDITIONS

- // Ambient capability factor at 984 ft (300 m). Consult your local MTU Onsite Energy Power Generation Distributor for other altitudes.
- // Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. No overload capability for this rating. Ratings are in accordance with ISO 3046-1, BS 5514, AS 2789, and DIN 6271.
- // Deration Factor:
Production tolerances in engines and installed components can account for power variations of ±5%. Altitude, temperature and excessive exhaust and intake restrictions should be applied to power calculations. Consult your local MTU Onsite Energy Power Generation Distributor for derations.

Materials and specifications subject to change without notice.

C/F = Consult Factory/MTU Onsite Energy Distributor