

GAS ENGINE-GENERATOR SET

AIR CHARGE-AIR COOLING

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	520	520	690	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

* The Generator Model Number identified in the table is for standard C Series Configuration. Consult the factory for alternate configuration.

** UL 2200 Offered

CERTIFICATIONS AND STANDARDS

// **Engine-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)**

- Engine-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



For More Information:
(866) 787-3271
Sales@PTSdcs.com

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
 3% Maximum Harmonic Content

// 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)	900

// 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)

* 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)

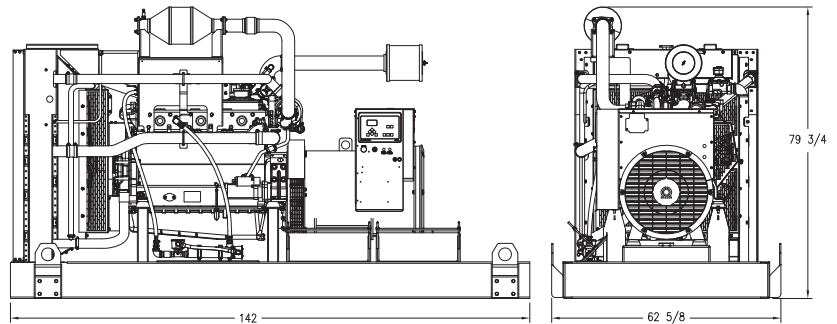
* Air density = 1.184 kg/m³ (0.0739 lbm/ft³)

** 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 engine-generator set. Lengths may vary with other voltages. Do not use for installation design. See website for unit specific template drawings.

System	Dimensions (L x W x H)	Weight (dry)
Open Power Unit (OPU)	3,607 x 1,435 x 2,026 mm (142 x 156.5 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 engine-generator set.

SOUND DATA

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

Sound data is provided at 7 m (23 ft). Engine-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 $\pm 5\%$. 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.



For More Information:
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Materials and specifications subject to change without notice.

C/F = Consult Factory/MTU Onsite Energy Distributor