

Brackett Memorial UMC
25 Church Avenue
Peaks Island, ME 01581

June 18, 2014

City of Portland
Zoning Administration
389 Congress Street
Portland, ME 04101

**Re: Authorization of Bell Atlantic Mobile of Massachusetts Corporation, Ltd
d/b/a Verizon Wireless (VzW)**

Ladies and Gentlemen:

The undersigned, owner of premises located in Peaks Island, Maine, located at 25 Church Avenue, identified as parcel 87-M-9 (CBL 087 M009001) in the tax records for the City of Portland (the "Property"), hereby authorizes VzW, and its employees, agents and consultants, to seek approval from the Portland Zoning, Planning, Building and Code Administration Departments in connection with its application for administrative review and related permits in connection with the installation of wireless telecommunications equipment on the Property.

Very truly yours,

Brackett Memorial UMC

By: Gerald E. Harmon

CHAIRMAN BNMUMC
TRUSTEES

GAS ENGINE-GENERATOR SET

30-GC6NLT1

30 kWe / 60 Hz / Standby
208 - 600V



SYSTEM RATINGS

Standby

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	117	117	104	90	45	36
Natural Gas						
Ratings: kW/kVA	28/28	28/28	30/37.5	30/37.5	30/37.5	30/37.5
LP Gas						
Ratings: Amps	125	125	104	90	45	36
LP Gas						
Ratings: kW/kVA	30/30	30/30	30/37.5	30/37.5	30/37.5	30/37.5
skVA@30%						
Voltage Dip	48	85	92	92	123	122
Generator Model*	284PSL1708	283PSL1718	283PSL1707	283PSL1707	283PSL1707	284PSL1752
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**
- // **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
- // **Power Rating**
 - Accepts Rated Load in One Step Per NFPA 110

STANDARD FEATURES*

- // MTU Onsite Energy is a single source supplier
- // Global Product Support
- // 2 Year Standard Warranty
- // 3.0 L Engine
 - 3.0 Liter Displacement
 - 4-Cycle
- // 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
 Thermostat
 Blower Fan & Fan Drive
 Radiator - Unit Mounted
 Electric Starting Motor - 12V
 Governor - Electronic Isochronous
 Base - Formed Steel
 SAE Flywheel & Bell Housing
 Charging Alternator - 12V
 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
 $\pm 1\%$ 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	GM
Model	3.0L
Type	4-Cycle
Arrangement	4-Inline
Displacement: L (in ³)	3 (181)
Bore: cm (in)	10.2 (4)
Stroke: cm (in)	9.1 (3.6)
Compression Ratio	9.25:1
Rated RPM	1,800
Engine Governor	Bosch
Maximum Power (NG): kWm (bhp)	37.9 (50.8)
Maximum Power (LP): kWm (bhp)	38.4 (51.5)
Speed Regulation	C/F
Air Cleaner	Dry

// Liquid Capacity (Lubrication)

Total Oil System: L (gal)	4.9 (1.3)
Engine Jacket Water Capacity: L (gal)	3.8 (1)
System Coolant Capacity: L (gal)	14.8 (3.9)

// Electrical

Electric Volts DC	12
Cold Cranking Amps Under -17.8 °C (0 °F)	925

// Fuel Inlet

Fuel Supply Connection Size	3/4" 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)	10.2 (361)	4.5 (159)
At 75% of Power Rating: m ³ /hr (ft ³ /hr)	7.7 (270)	3.4 (120)
At 50% of Power Rating: m ³ /hr (ft ³ /hr)	5.4 (189)	2.4 (84)

// 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)	64.4 (17)
Heat Rejection to Coolant: kW (BTUM)	25.3 (1,436)
Heat Radiated to Ambient: kW (BTUM)	15.6 (886)

// Air Requirements

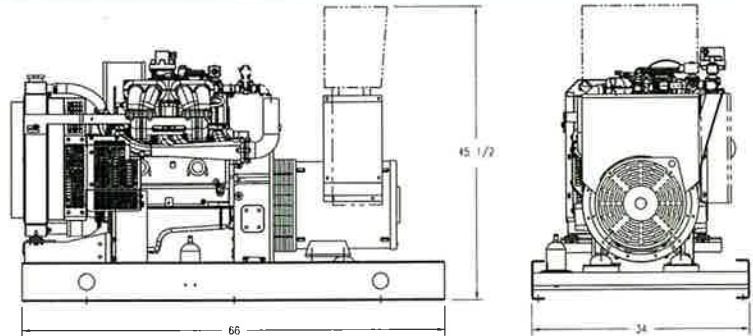
Aspirating: *m ³ /min (SCFM)	2.7 (94.3)
Air Flow Required for Rad.	
Cooled Unit: *m ³ /min (SCFM)	81.6 (2,882.39)
Remote Cooled Applications; Air Flow Required for Dissipation of Radiated Gen-set Heat For a Max of 25 °F Rise: *m ³ /min (SCFM)	56.6 (1,998)

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

// Exhaust System

Gas Temp. (Stack): °C (°F)	704.4 (1,300)
Gas Volume at Stack Temp: m ³ /min (CFM)	8.6 (304.53)
Maximum Allowable Back Pressure: kPa (in. H ₂ O)	10 (40)

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)
OPU	1,676 x 864 x 1,156 mm (66 x 34 x 45.5 in)	458 kg (1,010 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
Level 0: Open Power Unit (dBA)	C/F
WPE - No Sound Attenuation (dBA)	C/F
CQE (dBA)	C/F

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	5.38	21.98
Liquid Propane	7.4	24.35

All units are in g/hp-hr.

Engine meets EPA 40 CFR Part 60/90 specifications.

RATING DEFINITIONS AND CONDITIONS

- 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:
 - Altitude:** Consult your local MTU Onsite Energy Power Generation Distributor for altitude derations.
 - Temperature:** Consult your local MTU Onsite Energy Power Generation Distributor for temperature derations.

Materials and specifications subject to change without notice.

C/F = Consult Factory/MTU Onsite Energy Distributor

// **Tognum Group Companies:** Europe / Middle East / Africa / MTU Onsite Energy / 88040 Friedrichshafen / Germany / Phone + 49 7541 90 7060 / Fax +49 7541 90 7084 / powergenregion1@mtu-online.com // Asia / Australia / Pacific / MTU Onsite Energy / 1, Benoi Place / Singapore 629923 / Republic of Singapore / Phone + 65 6861 5922 / Fax + 65 6861 3615 / powergenregion2@mtu-online.com // USA / Canada / Latin America / Mexico / MTU Onsite Energy Corporation / 100 Power Drive / Mankato, Minnesota 56001 / USA / Phone + 1 507 625 7973 / Fax + 1 507 625 2968 / powergenregion3@mtu-online.com