GAS ENGINE-GENERATOR SET
40-GC6NLT1

40 ekW / 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	146	146	139	120	60	48
Natural Gas Ratings: kW/kVA	35/35	35/35	40/50	40/50	40/50	40/50
LP Gas Ratings: Amps	167	167	139	120	60	48
LP Gas Ratings: kW/kVA	40/40	40/40	40/50	40/50	40/50	40/50
skVA@30% Voltage Dip	128	102	93	93	133	92
Generator Model*	362CSL1604	284CSL1550	284CSL1542	284CSL1542	284CSL1542	361PSL1632
Temp Rise	130°C/27°C	125°C/40°C	130°C/27°C	130°C/27°C	130°C/27°C	125°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.

** UL2200 Offered

FACTS

// Engine-Generator Set Tested to ISO 8528-5 for Transient Response
// UL2200, CSA Listing Offered
// Accepts Rated Load in One Step Per NFPA 110, Level 1
// All engine-generator sets are prototype and factory tested
// MTU Onsite Energy is a single source supplier
// Global Product Support
// 2 Year Standard Warranty
// Custom Design for Any Application
// 4.3 L Engine
- 4.3 Liter Displacement
- 4-Cycle
// Integral Vibration Isolators
// Complete Range of Accessories
// Permanent Magnet Generator (PMG) - Optional
- Brushless, Rotating Field
- 300% Short Circuit Capability
- 2/3 Pitch Windings
// Digital Control Panel(s)
- UL Recognized, c UL us, NFPA 110
- Complete System Metering
- LCD Display
// Cooling System
- Integral Set-Mounted
- Engine Driven Fan

STANDARD EQUIPMENT

// Engine

- Air Cleaner
- Oil Pump
- Full Flow Oil Filter
- Jacket Water Pump
- Thermostat
- Exhaust Manifold – Dry
- Blower Fan & Fan Drive
- Radiator - Unit Mounted
- Electric Starting Motor - 12V
- Governor – Electric 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
- Sustained short circuit current of up to 300% of the rated current for up to 10 seconds
- Self-Ventilated and Drip-Proof
- Superior Voltage Waveform
- Digital, Solid State, Volts-per-Hertz Regulator
- No Load to Full Load Regulation
- Brushless Alternator with Brushless Pilot Exciter
- 4 Pole, Rotating Field
- 130°C Standby Temperature Rise
- 1 Bearing, Sealed
- Flexible Coupling
- Full Amortisseur Windings
- 125% Rotor Balancing
- 3-Phase Voltage Sensing
- ±1% Voltage Regulation
- 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 our RDP-110 Remote Annunciator
- 16 Programmable Contact Inputs
- 7 Contact Outputs
- UL Recognized, c UL us, CE Approved
- Event Recording
- IP 54 Front Panel Rating with Integrated Gasket
- NFPA110 Level Compatible

APPLICATION DATA

// Engine

Manufacturer	GM
Model	4.3L
Type	4-Cycle
Arrangement	6-V
Displacement: Cu In (lit)	262 (4.3)
Bore: in (cm)	4 (10.2)
Stroke: in (cm)	3.5 (8.8)
Compression Ratio	9.4:1
Rated RPM	1,800
Engine Governor	Bosch
Max Power: Standby: bhp (kWm)	71.4 (53.3)
Speed Regulation	±1%
Frequency	60 Hz
Air Cleaner	Dry

// Liquid Capacity (Lubrication)

Total Oil System: gal (lit)	1.1 (4.2)
Engine Jacket Water Capacity: gal (lit)	1.9 (7.2)
System Coolant Capacity: gal (lit)	5.7 (21.6)

// Electrical

Electric Volts DC	12
Cold Cranking Amps Under 0°F (-17.8°C)	600

// Fuel Inlet

Fuel Supply Connection Size	3/4" NPT
Fuel Supply Pressure: in. H_20 (mm H_20)	7–11 (178–279)

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

	NG	LPG
At 100% of Power Rating: ft³/hr (m³/hr)	489 (13.9)	216 (6.1)
At 75% of Power Rating: ft³/hr (m³/hr)	368 (10.4)	163 (4.6)
At 50% of Power Rating: ft³/hr (m³/hr)	256 (7.3)	113 (3.2)

// Cooling - Radiator System

Ambient Capacity of Radiator: °F (°C)	122 (50)
Max. Restriction of Cooling Air, Intake, and Discharge Side of Rad.: in. H_20 (kPa)	0.5 (0.12)
Water Pump Capacity: gpm (lit/min)	31 (117.3)
Heat Rejection to Coolant: BTUM (kW)	2,220 (39)
Heat Radiated to Ambient: BTUM (kW)	938 (16.5)

// Air Requirements

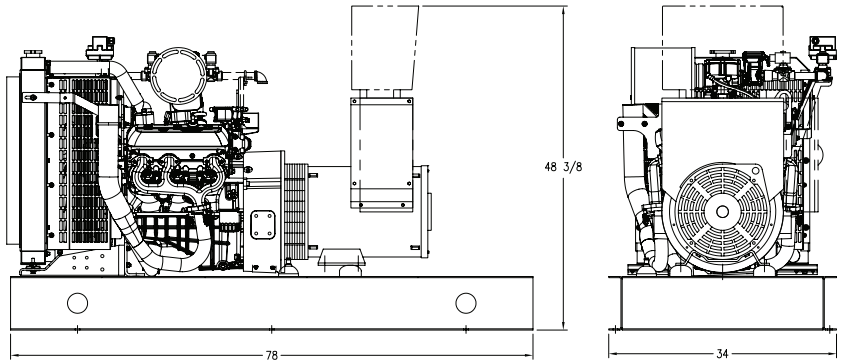
Aspirating: *SCFM (m³/min)	136.5 (3.9)
Air Flow Required for Rad. Cooled Unit: *SCFM (m³/min)	7,464 (211.4)
Air Flow Required for Heat Exchanger/Remote Rad. based on 25°F Rise: *SCFM (m³/min)	2,114 (59.9)

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

// Exhaust System

Gas Temp. (Stack): °F (°C)	1,300 (704.4)
Gas Volume at Stack Temp: CFM (m³/min)	440.8 (12.5)
Maximum Allowable Back Pressure: in. H_20 (kPa)	40 (10)

WEIGHTS AND DIMENSIONS



Drawing above for illustration purposes only, based on standard open power 480 volt generator. Lengths may vary with other voltages. Do not use for installation design.

System	Dimensions (L x W x H)	Weight (dry)
OPU	78 x 34 x 48.38 in (1,981 x 864 x 1,229 mm)	1,260 lb (572 kg)

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	Standby No Load
OPU (dBA)	C/F	C/F
WPE - No Sound Attenuation (dBA)	C/F	C/F
CQE (dBA)	C/F	C/F

Measurements for sound data are taken at 23 ft (7m).

EMISSIONS DATA

Fuel Type	THC + NO_x	CO
Natural Gas	9.42	29.43
Liquid Propane	10.95	42.91

All units are in g/hp-hr.
Engine meets 40 CFR Part 60/90 specifications.

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:
Altitude: 3% per 1,000 ft (305 m) above 328 ft (100 m).
Temperature: 1% per 10°F (5.5°C) above 77°F (25°C).

© MTU Onsite Energy. Subject to alteration due to technological advances. 2009-05

Materials and specifications subject to change without notice.

// **Tognum Group Companies: Europe / Middle East / Africa / Latin America /** 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 / Mexico /** MTU Onsite Energy / 100 Power Drive / Mankato, Minnesota 56001 / USA / Phone + 1 507 625 7973 / Fax + 1 507 625 2968 / powergenregion3@mtu-online.com // **Worldwide for HotModule /** MTU Onsite Energy / 81663 Munich / Germany / Phone + 49 89 203042 800 / Fax +49 89 203042 900 / info@cfc-solutions.com //www.mtu-online.com