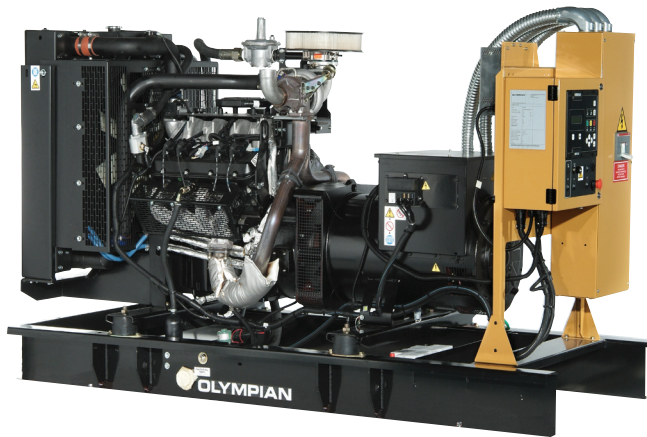


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## STANDBY 150 kW 60 Hz

Model	Standby— kW (kVA)
	Natural
G150G1	150.0 (187.5)

### FEATURES

#### GENERATING SET

- Complete system designed and built at ISO 9001 certified facilities
- Factory tested to design specifications at full load conditions

#### ENGINE

- Governor, Isochronous electronic
- Electrical system, 12 VDC
- Cartridge type filters
- Battery, rack, and cables
- Coolant and lube oil drains piped to edge of base

#### GENERATOR

- Insulation system, class H
- Drip proof generator air intake (NEMA 2, IP23)
- Electrical design in accordance with BS5000 Part 99, IEC60034-1, EN61000-6, NEMA MG-1.33

#### AUTOMATIC VOLTAGE REGULATOR

- Voltage within  $\pm 0.5\%$  3 Phase at steady state from no load to full load
- Provides fast recovery from transient load changes

#### COOLING SYSTEM

- Radiator and cooling fan complete with protective guards
- Standard ambient temperatures up to 131° F (55° C)

#### MOUNTING ARRANGEMENT

- Heavy-duty fabricated steel base with lifting points
- Anti-vibration pads to ensure vibration isolation
- Complete OSHA guarding
- Stub-up pipe ready for connection to silencer pipework
- Sound attenuated enclosures are available
- Flexible fuel lines to base with NPT connections

#### CIRCUIT BREAKER

- UL/CSA listed
- 3-pole with solid neutral
- NEMA 1 steel enclosure, vibration isolated
- Electrical stub-up area directly below circuit breaker

#### CONTROL SYSTEM

- EMCP3.1 Control Panel
- Vibration isolated NEMA 1 enclosure with lockable hinged door
- AC and DC wiring harnesses

#### EQUIPMENT FINISH

- All electroplated hardware
- Anticorrosive protection prior to painting
- High gloss polyurethane paint for durability and scuff resistance

#### QUALITY STANDARDS

- BS4999, BS5000, BS5514, EN61000-6, NEMA MG-1.33, NFPA 110 (with optional equipment)

#### DOCUMENTATION

- Operation and maintenance manuals provided
- Wiring diagrams included

#### WARRANTY

- All equipment carries full manufacturer's warranty

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**OPTIONAL EQUIPMENT\***

**ENCLOSURE**

- SA enclosure (includes internal silencer system)
- CAWB enclosure
- Panel viewing window
- External emergency stop pushbutton

**SILENCER SYSTEM — OPEN UNIT**

- Level 1 silencer
- Level 2 silencer
- Level 3 silencer
- Mounting kit
- Through-wall installation kits

**ENGINE**

- Battery heater
- Lube oil drain pump
- Lube oil sump heater

**CIRCUIT BREAKER**

- Auxiliary voltfree contacts
- Shunt trip (100+ amp breakers)

**GENERATOR**

- Anti-condensation heater
- AREP excitation system
- Generator upgrade 1 size
- Permanent magnet generator

**COOLING SYSTEM**

- Coolant heater
- Low coolant temperature alarm
- Low coolant level shutdown
- Radiator transition flange

**MOUNTING ACCESSORIES**

- Seismic (Zone 4) vibration isolators

\*Some options may not be available on all models. Not all options are listed.

**CONTROL SYSTEM**

- Control Panel Removal, AC and DC wiring harnesses terminated in sockets
- EMCP3.2 Control Panel

**FUEL SYSTEM**

- Low gas pressure alarm

**REMOTE ANNUNCIATORS**

- 16-channel remote annunciator panel (supplied loose)

**MISCELLANEOUS ACCESSORIES**

- Toolkit
- Additional operator's manual pack
- Special enclosure color
- UL listing / CSA certification
- French or Spanish Language labels

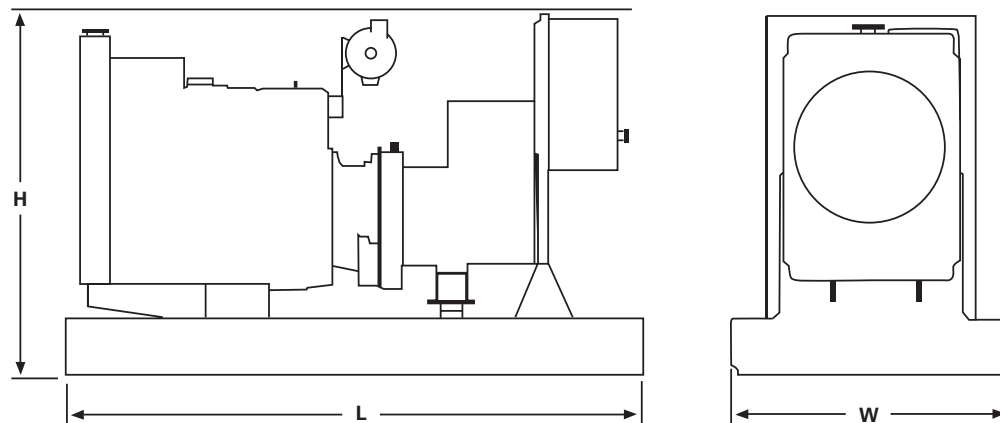
**EXTENDED SERVICE CONTRACTS**

- Extended Service Coverage available

**TESTING**

- Factory witness test (restricted to 6 hours — full load, 1.0 pf)

**GENERATING SET DIMENSIONS AND WEIGHTS**



Model	Length in (mm)	Width in (mm)	Height in (mm)	Weight lbs (kg)**
G150G1	102.5 (2600)	43.6 (1100)	59.8 (1519)	3395 (1540)

**NOTE:** General configuration not to be used for installation. See specific dimensional drawings for detail.

\*\*Includes oil and coolant

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**SPECIFICATIONS**



**GENERATOR**

Voltage Regulation	±0.5%
	at steady state from no load to full load
Frequency	±0.25% for constant load, no load to full load
Waveform Distortion	THD less than 4%,
Radio Interference	Compliance with EN61000-6
Telephone Influence Factor	TIF <50
Telephone Harmonic Factor	THF <2%
Stator Winding	2/3 pitch
Type	Brushless, self excited, 12 reconnectable leads
Insulation	Class H
Temperature Rise	Within Class H limits
Overspeed Capability	125%
Available Voltages	277/480, 266/460, 120/240, 127/220, 120/208
Deration	Please consult factory for available outputs
Ratings	At 77° F (25°C), 500 ft. (152.4 m), 60% humidity, 0.8 pf



**ENGINE**

Manufacturer	General Motors
Model	GM 8.1L TAC
Type	4 Cycle
Aspiration	Turbocharged, AA Charge Cooled
Cylinder Configuration	V8
Displacement — cu in (L)	494.3 (8.1)
Bore — in (mm)	4.3 (108.0)
Stroke — in (mm)	4.4 (111.0)
Compression Ratio	9.1:1
Governor	Type..... Electronic Class..... A1
Piston Speed — ft/sec (m/sec)	22.0 (6.7)
Air Cleaner Type	Replaceable Element
<b>Natural Gas</b>	
Engine Speed — rpm	1800
Max Power at Rated rpm — hp (kW)	
Standby	237.0 (177.0)
Prime	213.0 (159.0)
BMEP — psi (kPa)	
Standby	252.5 (1741.0)
Prime	226.8 (1564.0)



**CONTROL PANEL**

NEMA 1 steel enclosure with lockable hinged door  
Vibration isolated mounted Autostart control panel  
Single location customer connector point  
Electrical stub-up area directly below control panel

**RATING DEFINITIONS**

**Standby** — Applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The generator is peak rated (as defined in ISO8528-3).

**Prime** — Applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and the generator set can supply 10

**G150G1 (3-Phase)**

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Materials and specifications are subject to change without notice.

Generating Set Technical Data - 1800 rpm/60 Hz		Natural Gas	
		Standby	
<b>Power Rating</b>	<b>kW (kVA)</b>	150.0 (187.5)	
<b>Lubricating System</b> Type: Full Pressure Oil Filter: Spin-On, Full Flow Oil Type Required: API CF4 Total Oil Capacity Oil Pan	U.S. gal (L) U.S. gal (L)	2.1 (8.1) 1.6 (6.1)	
<b>Fuel System</b> Generating Set Fuel Consumption 100% Load 75% Load 50% Load	Cfh (m³/hr) Cfh (m³/hr) Cfh (m³/hr)	1910.5 (54.1) 1458.5 (41.3) 1017.1 (28.8)	
<b>Engine Electrical System</b> Ignition System: Electronic, Distributorless Voltage/Ground: 12Vdc/Negative Battery Charging Generator Ampere Rating	Amps	70	
<b>Cooling System</b> Water Pump Type: Centrifugal Radiator System Capacity Incl. Engine Maximum Coolant Static Head Coolant Flow Rate Minimum Temperature to Engine Temperature Rise Across Engine Heat Rejected to Coolant at Rated Power Total Heat Radiated to Room at Rated Power Radiator Fan Load	U.S. gal (L) Ft H <sub>2</sub> O (m H <sub>2</sub> O) U.S. gal/min (L/min) °F (°C) °F (°C) Btu/min (kW) Btu/min (kW) Hp (kW)	8.1 (30.7) 17.0 (5.2) 2045.0 (129.0) 158.0 (70.0) 10.8 (6.0) - - 6.84 (5.1)	
<b>Air Requirements</b> Combustion Air Flow Maximum Air Cleaner Restriction Radiator Cooling Air (zero restriction) Generator Cooling Air Allowable Air Flow Restriction (After radiator) Cooling Airflow (@ rated speed) Rate with restriction	Cfm (m³/min) In H <sub>2</sub> O (kPa) Cfm (m³/min) Cfm (m³/min) In H <sub>2</sub> O (kPa) Cfm (m³/min)	268.0 (7.6) - 16033.0 (454.0) 932.0 (26.4) 0.5 (0.125) 12124.0 (343.3)	
<b>Exhaust System</b> Maximum Allowable Backpressure Exhaust Flow at Rated kW Exhaust Temperature at Rated kW — Dry Exhaust	In Hg (kPa) Cfm (m³/min) °F (°C)	- - -	
<b>Generating Set Noise Rating*</b> (Without Attenuation) at 3.28 ft (1 m)	dBA	100.8	
<b>Mains Gas Pressure</b> with gas train	mBAR (In H <sub>2</sub> O)	<b>Min</b>	<b>Max</b>
		40 (16)	60 (24)

Generating Set Data	480/277V	220/127V	240/120V	208/120V	460/266V
<b>Motor Starting Capability:</b> (kVA) Self Excited PMG/AREP Excited	420 548	363 476	330 433	330 433	39.1 51.1
<b>Full Load Efficiencies:</b> Standby Prime	92.9 93.0	92.8 93.0	92.4 92.7	92.4 92.7	92.9 93.1
<b>Reactances (per unit):</b> X <sub>d</sub> X' <sub>d</sub> X'' <sub>d</sub> X <sub>q</sub> X'' <sub>q</sub> X <sub>2</sub> X <sub>0</sub>	2.90 0.10 0.058 1.74 0.069 0.063 0.005	3.45 0.12 0.069 2.07 0.082 0.075 0.006	3.86 0.13 0.078 2.32 0.092 0.084 0.007	3.86 0.13 0.078 2.32 0.094 0.084 0.007	3.19 0.11 0.064 1.91 0.074 0.064 0.005
<b>Time Constants:</b> t' <sub>d</sub> t'' <sub>d</sub> t' <sub>do</sub> t <sub>a</sub>	100 ms	10 ms	2966 ms	15 ms	

\* dB(A) levels are for guidance only

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Market: N. America

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Materials and specifications are subject to change without notice.

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