

208-600 Volt

GM100-03 60 Hz / 1800 RPM

90 kWe Standby

### Ratings

	240 <b>V</b>	208V	240V	480 <b>V</b>	600V
Phase	1	3	3	3	3
PF	1	0.8	0.8	0.8	0.8
Hz	60	60	60	60	60
Generator Model	363CSL1607	362CSL1606	362CSL1606	362CSL1604	362PSL1635
Connection	12 LEAD ZIG-ZAG	12 LEAD WYE	12 LEAD DELTA	12 LEAD WYE	4 LEAD WYE
kWe Nat (LP)	90 (80)	90 (80)	90 (80)	90 (80)	90 (80)
AMPS Nat (LP)	375 (333)	313 (278)	271 (241)	135 (120)	108 (96)
Temp Rise	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C	130°C / 27°C

### Standard Equipment

#### **Engine**

- ▶ Radiator Cooled Unit Mounted (50°C)
- ▶ Blower Fan & Fan Drive
- ▶ Starter & Alternator
- ▶ Oil Pump & Filter
- ▶ Oil Drain Extension w/Valve
- ▶ Governor Electronic Isochronous
- ▶ 12V Battery System & Cables
- ▶ SAE Flywheel & Housing
- ▶ Air Cleaner (Dry Single Stage)
- ▶ Flexible Fuel Connector
- ▶ EPA Certified

#### Generator

- ▶ Brushless Single Bearing
- ▶ Automatic Voltage Regulator
- ▶ ± 1% Voltage Regulation
- ▶ 4 Pole, Rotating Field
- ▶ 130°C Standby Temperature Rise
- ▶ 100% of Rated Load One Step
- ▶ 5% Maximum Harmonic Content
- NEMA MG 1, IEEE and ANSI standards compliance for temperature rise

#### **Additional**

- ▶ UL 2200 Certified
- ▶ cUL Certified



- ▶ Microprocessor Based Digital Control
- ▶ Base Formed Steel
- ▶ Main Line Circuit Breaker Mounted & Wired
- ▶ Critical Grade Silencer Mounted
- ▶ Battery Charger 12V 6 Amp
- ▶ Jacket Water Heater -20°F 1000W 120V w/Isolation Valves
- ▶ Vibration Isolation Mounts
- ► Radiator Duct Flange (OPU Only)
- ▶ Single Source Supplier
- ▶ 2YR / 2000HR Standby Warranty
- ▶ Standard Colors White / Tan / Gray

GM100-03

### 90 kWe



## Application Data

Engine			
Manufacturer:	General Motors	Displacement - Cu. In. (lit):	350 (5.70)
Model:	GM 5.7LTCAC	Bore - in. (cm) x Stroke - in. (cm):	4.0 (10.2) x 3.5 (8.8)
Type:	4-Cycle	Compression Ratio:	9.4 : 1
Aspiration:	Turbo Charged, CAC	Rated RPM:	1800
Cylinder Arrangement:	8 Cylinder Vee	Max HP Stby (kWm):	155 (116)

Exhaust System		
Gas Temp. (Stack): °F (°C)		1,350 (732)
Gas Volume at Stack Temp: CFM (m³/min)		846 (23.9)
Maximum Allowable Exhaust Restriction: in. H2O (kPa)		40.8 (10.2)
Cooling System		
Ambient Capacity of Radiator: °F (°C)		122 (50)
Maximum Allowable Static Pressure on Rad. Exhaust: in. H20 (kPa)		0.5 (0.12)
Water Pump Flow Rate: Gpm (lit/min)		40.0 (147.6)
Heat Rejection to Coolant: BTUM (kW)		6,300 (110)
Heat Rejection to CAC: BTUM (kW)		711 (12.4)
Heat Radiated to Ambient: BTUM (kW)		1,536 (26.9)
Air Requirements		
Aspirating: CFM (m³/min)		263 (7.44)
Air Flow Required for Rad. Cooled Unit: CFM (m³/min)		16,500 (467)
Air Flow Required for Heat Exchanger/Rem. Rad. CFM (m³/min)	Consult Factory For Ren	mote Cooled Applications
Fuel Consumption	Natural Gas	LP
At 100% of Power Rating: ft3/hr (m3/hr)	1,360 (38.5)	509 (14.4)
At 75% of Power Rating: ft3/hr (m3/hr)	1,110 (31.4)	411 (11.6)
At 50% of Power Rating: ft3/hr (m3/hr)	770 (21.8)	290 (8.22)
Fuel Inlet Size: NPT	1.25"	1.25"
Fluids Capacity		
Total Oil System: gal (lit)		1.5 (5.70)
Engine Jacket Water Capacity: gal (lit)		2.7 (10.3)
System Coolant Capacity: gal (lit)		10.8 (41.0)

All calculations based on natural gas fuel.

<u>Deration Factors</u>: Temperature: Derate 1% Per 10°F Over 77°F Air Inlet Temperature | Altitude: Derate 3% Per 1000ft Over 328ft

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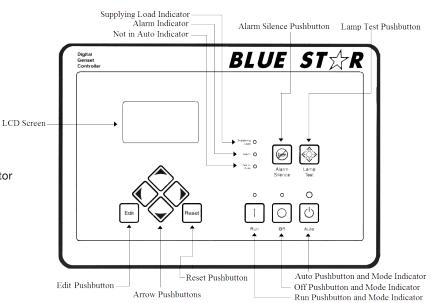
#### 90 kWe



### DGC-2020 Control Panel

#### **Standard Features**

- ▶ Digital Metering
- ▶ Engine Parameters
- ▶ Generator Protection Functions
- ▶ Engine Protection
- ▶ CAN Bus ECU Communications
- ▶ Windows-Based Software
- ▶ Multilingual Capability
- ▶ Remote Communications to RDP-110 Remote Annunciator
- ▶ 16 Programmable Contact Inputs
- ▶ Up to 15 Contact Outputs (7 standard)
- ▶ UL Recognized, CSA Certified, CE Approved
- ▶ Event Recording
- ▶ IP 54 Front Panel Rating with Integrated Gasket
- ▶ NFPA 110 Level 1 Compatible

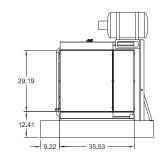


### Weights / Dimensions / Sound Data

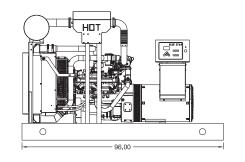
	LxWxH	Weight lbs
OPU	96 x 54 x 65 in	2847
Level 1	96 x 54 x 76 in	3364
Level 2	96 x 54 x 104 in	3856
Level 3	136 x 54 x 96 in	4146

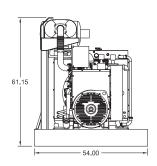
 $\label{thm:equivalence} \mbox{Height measured from bottom of base to exhaust stack.}$ 

F	FUEL STUB-UP AREA 8X8	26.91 – 18.0 2.00	3
			2.00 12.03 17.53
		25.00	



	No Load	Full Load
OPU	84 dBA	87 dBA
Level 1	82 dBA	85 dBA
Level 2	77 dBA	79 dBA
Level 3	72 dBA	75 dBA





Drawings based on standard open power 480 volt standby generator. Lengths may vary with other voltages. Subject to change without notice. Sound data as measured at 23 feet (7 meters) in accordance with ISO 8528-10 at standby rating.

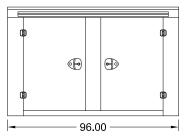
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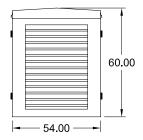
#### 90 kWe



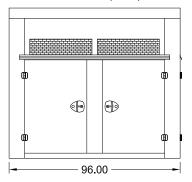
## Optional Enclosures

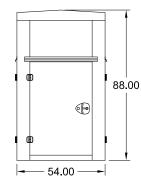
#### Level 1 Enclosure (WPE)



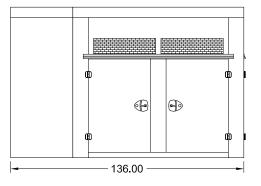


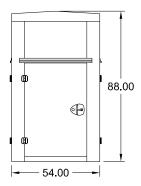
#### Level 2 Enclosure (WPF)





#### Level 3 Enclosure (SAE)





<sup>\*</sup>Level 1 enclosures are 100 MPH Wind Rated as standard (up to 150 MPH available).

Materials and specifications subject to change without notice.

Distributed By:



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<sup>\*\*</sup>Level 2 & 3 enclosures are 150 MPH Wind Rated as standard.

<sup>\*\*\*</sup>Enclosure height does not include unit base or exhaust stack.

<sup>\*</sup>All specification sheet dimensions are represented in inches.

<sup>\*\*</sup>All enclosures are based on the standard standby unit configuration. Any deviation can change dimensions.

<sup>\*\*\*</sup>Level 1 enclosure not UL listed.