

Cat® DG275 GC

SPARK-IGNITED GENERATOR SETS



Image shown may not reflect actual configuration.

Standby/Demand Response

275 ekW

344 kVA – 60 Hz

UL2200: Evaluated by ETL to UL Standard for Safety UL2200

CSA: Designed in accordance to CSA22.2 standards

NFPA: Facilitates compliance with NFPA110

Type 10: Product was tested to NFPA110 Type 10

SPECIFICATIONS

Engine

Engine Model	14.2 L, In-line 6, 4-cycle
Bore x Stroke	135 mm x 165 mm (5.31 in x 6.50 in)
Displacement	14.17 L (864.71 in ³)
Compression Ratio	9.5:1
Aspiration	Turbocharged-Aftercooled
Fuel System	Carburetor, Down Draft
Governor	Electronic
Fuel Type	Natural Gas
Emission Certifications	U.S. EPA Certified for Non-Emergency
Rated Engine Speed	1800 rpm

General

Cylinder No.	6
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Engine Governing

Frequency Regulation (Steady State)	+/- 0.25%
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Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-flow Cartridge
Crankcase Capacity – L (qts)	34.3 (36.2)

Cooling System

Cooling System Type	Pressurized Closed Recovery
Coolant Heater Standard Voltage/Wattage	120 V/1500 W

Fuel System

Fuel Type	Natural Gas
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard (Dual)
Operating Fuel Pressure (Standard)	7" – 11" H ₂ O

Engine Electrical System

System Voltage	24 VDC
Battery Charger Alternator	Standard
Battery Voltage	(2) 12 VDC

ENGINEERED OPTIONS

Engine System	Coolant Heater Ball Valves
	Fluid Containment Pans
Alternator System	3rd Breaker Systems
Generator Set	Special Testing
	Battery Box

Enclosure	Motorized Dampers
	Enclosure Ambient Heaters
Control System	EMCP 4.2B
	Battery Disconnect Switch

POWER RATINGS – NATURAL GAS

Natural Gas		
Three-Phase 120/208 VAC @0.8pf	275 kW	Amps: 954
Three-Phase 120/240 VAC @0.8pf	275 kW	Amps: 827
Three-Phase 277/480 VAC @0.8pf	275 kW	Amps: 413
Three-Phase 346/600 VAC @0.8pf	275 kW	Amps: 331

STARTING CAPABILITIES (sKVA)

		sKVA vs. Voltage Dip											
		480 VAC						208/240 VAC					
Alternator	kW	10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	275	303	454	605	757	908	1059	227	341	454	568	681	794

FUEL CONSUMPTION RATES*

Natural Gas – ft ³ /hr (m ³ /hr)	
Percent Load	Standby/Demand Response
25%	971.1 (27.5)
50%	1704.2 (48.3)
75%	2403.2 (68.1)
100%	3160.9 (89.5)

*Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby/Demand Response
Air Flow (inlet air combustion and radiator)	ft ³ /min (m ³ /min)	16,712 (473.2)
Coolant Flow per Minute	gpm (lpm)	110 (416)
Coolant System Capacity	gal (Liters)	14.5 (54.9)
Heat Rejection to Coolant	BTU/hr	872,408
Max. Operating Air Temp on Radiator	°F (°C)	110 (43)
Maximum Radiator Backpressure	in H ₂ O	0.5

COMBUSTION AIR REQUIREMENTS

		Standby/Demand Response
Flow at Rated Power	cfm (m ³ /min)	765.6 (21.7)

ENGINE

		Standby/Demand Response
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	415
BMEP	PSI	211.3

**Refer to "Emissions Data Sheet" for maximum bhp for EPA and SCAQMD permitting purposes.

EXHAUST

		Standby/Demand Response
Exhaust Flow (Rated Output)	cfm (m ³ /min)	2677 (75.8)
Maximum Recommended Backpressure	inHg	0.75
Exhaust Temp (Rated Output)	°F (°C)	1350 (732)
Exhaust Outlet Size (Open Set)	in	3.5" ID Flex (no muffler)

Deration – For power deration rates reference, please consult Cat LEHE1699-00.

LET'S DO THE WORK.™

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