Cat® DG275 GC SPARK-IGNITED GENERATOR SETS





Image shown may not reflect actual configuration

Standby 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

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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		
Rated Engine Speed	1800 rpm		
General			
Cylinder No.	6		
Engine Governing			
Frequency Regulation (Steady State)	+/- 0.25%		
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 0
Engine Electrical System	
System Voltage	24 VDC
Battery Charger Alternator	Standard
Battery Voltage	(2) 12 VDC

ENGINEERED OPTIONS

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

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

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POWER RATINGS – NATURAL GAS

	Natui	al 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						208/24	0 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 — ft³/hr (m³/hr)			
Percent Load	Standby		
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
Air Flow (inlet air combustion and radiator)	ft³/min (m³/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 0	0.5

COMBUSTION AIR REQUIREMENTS

		Standby
Flow at Rated Power	cfm (m³/min)	765.6 (21.7)

ENGINE

		Standby
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
Exhaust Flow (Rated Output)	cfm (m³/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
Extraust outlet Size (Open Set)	ın	(no muffler)

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

