Cat® DG400 GC SPARK-IGNITED GENERATOR SETS

Image shown may not reflect actual configuration

Standby 400 ekW
500 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	21.9 L, V12, 4-cycle
Bore x Stroke	128 mm x 142 mm (5.03 in x 5.6 in)
Displacement	21.9 L (1336.42 in^3)
Compression Ratio	10.0:1
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.	12
Engine Governing	
Frequency Regulation (Steady State)	+/- 0.25%
Lubrication System	
Oil Pump Type	Gear
Oil Filter Type	Twin Full-flow with Intercooler
Crankcase Capacity – L (qts)	30 (31.7)

Cooling System	
Cooling System Type	Pressurized Closed Recovery
Water Pump Flow – gpm (lpm)	94 (356)
Coolant Heater Standard Voltage/Wattage	120 V/2500 W
Fuel System	
Fuel Type	Natural Gas
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard (Dual)
Operating Fuel Pressure	7" - 11" H_2O
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

Control System	EMCP 4.2B
	Battery Disconnect Switch
Generator Set	Special Testing
	Battery Box

POWER RATINGS – NATURAL GAS

	Natural Gas	
Three-Phase 120/208 VAC @0.8pf	400 kW	Amps: 1389
Three-Phase 120/240 VAC @0.8pf	400 kW	Amps: 1204
Three-Phase 277/480 VAC @0.8pf	400 kW	Amps: 602
Three-Phase 346/600 VAC @0.8pf	400 kW	Amps: 481

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STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip														
	277/480 VAC							208/240 VAC						
Alternator	kW	10%	15%	20%	25%	30%	35%	kW	10%	15%	20%	25%	30%	35%
Standard	400	387	581	775	968	1162	1356	400	345	570	835	1100	1450	1710
Upsize 1	555	457	686	914	1143	1371	1600	559	429	643	857	1071	1286	1500
Upsize 2	642	471	707	943	1179	1414	1650	–	–	–	–	–	–	–

FUEL CONSUMPTION RATES*

Natural Gas – ft³/hr (m³/hr)	
Percent Load	Standby
25%	1856 (52.6)
50%	2845 (80.5)
75%	3833 (108.5)
100%	4823 (136.6)

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

COOLING

		Standby
Air Flow (inlet air combustion and radiator)	ft³/min (m³/min)	25,100 (711)
Coolant Flow per Minute	gpm (lpm)	211 (800)
Coolant System Capacity	gal (Liters)	23 (87)
Heat Rejection to Coolant	BTU/hr	1,102,122
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (before derate)	See Bulletin No 0199270SSD	
Maximum Radiator Backpressure	in H_2O	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

		Standby
Flow at Rated Power	cfm (m³/min)	750 (21)

ENGINE

		Standby
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	620
BMEP	psi	209.1

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

EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m³/min)	2720 (77)
Maximum Exhaust Backpressure	inHg (kPa)	0.75 (2.54)
Exhaust Temp (Rated Output)	°F (°C)	1350 (732)

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

LET'S DO THE WORK.™

LEHE1604-06 (06/20)