G3406

GAS ENGINE TECHNICAL DATA



ENGINE SPEED (rpm): STANDARD 1800 RATING STRATEGY: COMPRESSION RATIO: 9.4 APPLICATION: GAS COMPRESSION SCAC AFTERCOOLER TYPE: RATING LEVEL: CONTINUOUS AFTERCOOLER WATER INLET (°F): 130 FUEL: NATURAL GAS JACKET WATER OUTLET (°F): 210 LPG IMPCO FUEL SYSTEM: ASPIRATION: WITH CUSTOMER SUPPLIED AIR FUEL RATIO CONTROL TA FUEL PRESSURE RANGE(psig): COOLING SYSTEM: JW+OC, AC 1.5-5.0 FUEL METHANE NUMBER: CONTROL SYSTEM: CDIS 80 EXHAUST MANIFOLD: FUEL LHV (Btu/scf): WC: 904 COMBUSTION: ALTITUDE CAPABILITY AT 77°F INLET AIR TEMP. (ft): CATALYST SETTING 4921 EXHAUST OXYGEN (% O2): 0.3

RATING		NOTES	LOAD	100%	75%	50%
ENGINE POWER	(WITHOUT FAN)	1	bhp	276	207	138
ENGINE EFFICIENCY	(ISO 3046/1)	2	%	34.3	31.5	26.9
ENGINE EFFICIENCY	(NOMINAL)	2	%	34.3	31.5	26.9
ENGINE DATA						
FUEL CONSUMPTION	(ISO 3046/1)	3	Btu/bhp-hr	7418	8082	9445
FUEL CONSUMPTION	(NOMINAL)	3	Btu/bhp-hr	7418	8082	9445
AIR FLOW (77°F, 14.7 psia)	(WET)	4, 5	ft3/min	383	308	236
AIR FLOW	(WET)	4, 5	lb/hr	1698	1365	1048
FUEL FLOW (60°F, 14.7 psia)			scfm	38	31	24
COMPRESSOR OUT PRESSURE			in Hg(abs)	48.4	45.2	40.8
COMPRESSOR OUT TEMPERATURE			°F	181	167	147
AFTERCOOLER AIR OUT TEMPERATURE			°F	133	132	131
INLET MAN. PRESSURE		6	in Hg(abs)	44.0	35.6	27.1
NLET MAN. TEMPERATURE	(MEASURED IN PLENUM)	7	°F	133	132	132
TIMING		8	°BTDC	29	29	29
EXHAUST TEMPERATURE - ENGINE OUTLET		9	°F	1004	942	877
EXHAUST GAS FLOW (@engine outlet temp, 14.5 psia)	(WET)	10, 5	ft3/min	1169	901	661
EXHAUST GAS MASS FLOW	(WET)	10, 5	lb/hr	1801	1449	1114
EMISSIONS DATA - ENGINE OUT						
NOx (as NO2)		11,12	g/bhp-hr	15.41	15.37	13.84
CO		11,13	g/bhp-hr	15.41	15.37	13.84
THC (mol. wt. of 15.84)		11,13	g/bhp-hr	1.85	2.16	3.06
NMHC (mol. wt. of 15.84)		11,13	g/bhp-hr	0.28	0.32	0.46
NMNEHC (VOCs) (mol. wt. of 15.84)		11,13,14	g/bhp-hr	0.18	0.22	0.31
HCHO (Formaldehyde)		11,13	g/bhp-hr	0.27	0.27	0.27
CO2		11,13	g/bhp-hr	505	528	561
EXHAUST OXYGEN		11,15	% DRY	0.3	0.3	0.3
LAMBDA		11,15		1.03	1.02	1.00
ENERGY BALANCE DATA						
LHV INPUT		16	Btu/min	34154	27908	21743
HEAT REJECTION TO JACKET WATER (JW)		17,23	Btu/min	10920	10107	9114
HEAT REJECTION TO ATMOSPHERE		18	Btu/min	1366	1116	870
HEAT REJECTION TO LUBE OIL (OC)		19,23	Btu/min	1786	1653	1491
HEAT REJECTION TO EXHAUST (LHV TO 77°F)		20,21	Btu/min	7994	6025	4335
HEAT REJECTION TO EXHAUST (LHV TO 248°F)		20	Btu/min	6353	4680	3252
HEAT REJECTION TO AFTERCOOLER (AC)		22,24	Btu/min	372	220	77

CONDITIONS AND DEFINITIONS

Engine rating obtained and presented in accordance with ISO 3046/1. (Standard reference conditions of 77°F, 29.60 in Hg barometric pressure.) No overload permitted at rating shown. Consult the altitude deration factor chart for applications that exceed the rated altitude or temperature.

Emission levels are at engine exhaust flange prior to any after treatment. Values are based on engine operating at steady state conditions. Tolerances specified are dependent upon fuel quality. Fuel methane number cannot vary more than ± 3. Part Load data requires customer supplied air fuel ratio control.

For notes information consult page three.



FUEL USAGE GUIDE

CAT METHANE NUMBER	<15	15	20	25	30	35	40	45	50	<55	55	60	65	70	75	80	100
SET POINT TIMING	-	15	15	15	15	17	19	21	23	23	23	24	25	27	28	29	29
DERATION FACTOR	0	0.50	0.63	0.75	0.88	0.88	0.88	0.88	0.88	0.88	1	1	1	1	1	1	1

ALTITUDE DERATION FACTORS AT RATED SPEED

INLET AIR TEMP °F

130 1 1 1 0.97 0.94 0.90 0.87 0.83 0.80 0.77 0.74 0.71 0.68 120 1 1 1 0.99 0.96 0.92 0.88 0.85 0.82 0.78 0.75 0.72 0.69 110 1 1 1 1 0.97 0.94 0.90 0.87 0.83 0.80 0.77 0.74 0.71 100 1 1 1 1 0.99 0.96 0.92 0.88 0.85 0.81 0.78 0.75 0.72 90 1 1 1 1 0.97 0.94 0.90 0.87 0.83 0.80 0.77 0.73 80 1 1 1 1 0.99 0.96 0.92 0.88 0.85 0.81 0.78 0.75 70 1 1 1 1 1 1 0.98 0.94 0		0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000
120 1 1 1 0.99 0.96 0.92 0.88 0.85 0.82 0.78 0.75 0.72 0.69 110 1 1 1 1 0.97 0.94 0.90 0.87 0.83 0.80 0.77 0.74 0.71 100 1 1 1 1 0.99 0.96 0.92 0.88 0.85 0.81 0.78 0.75 0.72 90 1 1 1 1 0.97 0.94 0.90 0.87 0.83 0.80 0.77 0.73 80 1 1 1 1 0.99 0.96 0.92 0.88 0.85 0.81 0.78 0.75 70 1 1 1 1 1 0.99 0.96 0.92 0.88 0.85 0.81 0.78 0.75 70 1 1 1 1 1 0.98 0.94 0.90 0.87<	50	1	1	1	1	1	1	1	0.98	0.94	0.90	0.87	0.83	0.80
120 1 1 1 0.99 0.96 0.92 0.88 0.85 0.82 0.78 0.75 0.72 0.69 110 1 1 1 1 0.97 0.94 0.90 0.87 0.83 0.80 0.77 0.74 0.71 100 1 1 1 1 0.99 0.96 0.92 0.88 0.85 0.81 0.78 0.75 0.72 90 1 1 1 1 0.97 0.94 0.90 0.87 0.83 0.80 0.77 0.73 80 1 1 1 1 0.99 0.96 0.92 0.88 0.85 0.81 0.78 0.75	60	1	1	1	1	1	1	1	0.96	0.92	0.88	0.85	0.81	0.78
120 1 1 1 0.99 0.96 0.92 0.88 0.85 0.82 0.78 0.75 0.72 0.69 110 1 1 1 1 0.97 0.94 0.90 0.87 0.83 0.80 0.77 0.74 0.71 100 1 1 1 1 0.99 0.96 0.92 0.88 0.85 0.81 0.78 0.75 0.72 90 1 1 1 1 0.97 0.94 0.90 0.87 0.83 0.80 0.77 0.73	70	1	1	1	1	1	1	0.98	0.94	0.90	0.87	0.83	0.80	0.77
120 1 1 1 0.99 0.96 0.92 0.88 0.85 0.82 0.78 0.75 0.72 0.69 110 1 1 1 0.97 0.94 0.90 0.87 0.83 0.80 0.77 0.74 0.71 100 1 1 1 0.99 0.96 0.92 0.88 0.85 0.81 0.78 0.75 0.72	80	1	1	1	1	1	0.99	0.96	0.92	0.88	0.85	0.81	0.78	0.75
120 1 1 1 0.99 0.96 0.92 0.88 0.85 0.82 0.78 0.75 0.72 0.69 110 1 1 1 0.97 0.94 0.90 0.87 0.83 0.80 0.77 0.74 0.71	90	1	1	1	1	1	0.97	0.94	0.90	0.87	0.83	0.80	0.77	0.73
120 1 1 1 0.99 0.96 0.92 0.88 0.85 0.82 0.78 0.75 0.72 0.69	100	1	1	1	1	0.99	0.96	0.92	0.88	0.85	0.81	0.78	0.75	0.72
	110	1	1	1	1	0.97	0.94	0.90	0.87	0.83	0.80	0.77	0.74	0.71
130 1 1 1 0.97 0.94 0.90 0.87 0.83 0.80 0.77 0.74 0.71 0.68	120	1	1	1	0.99	0.96	0.92	0.88	0.85	0.82	0.78	0.75	0.72	0.69
	130	1	1	1	0.97	0.94	0.90	0.87	0.83	0.80	0.77	0.74	0.71	0.68

ALTITUDE (FEET ABOVE SEA LEVEL)

AFTERCOOLER HEAT REJECTION FACTORS (ACHRF)

INLET AIR TEMP °F

	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000
50	1	1	1	1	1	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
60	1	1	1	1	1.16	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
70	1	1	1.07	1.24	1.42	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58
80	1	1.16	1.33	1.50	1.68	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
90	1.24	1.41	1.58	1.76	1.94	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
100	1.49	1.66	1.83	2.01	2.20	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37
110	1.73	1.91	2.09	2.27	2.45	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63
120	1.98	2.16	2.34	2.53	2.71	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
130	2.23	2.41	2.59	2.78	2.97	3.15	3.15	3.15	3.15	3.15	3.15	3.15	3.15

ALTITUDE (FEET ABOVE SEA LEVEL)

MINIMUM SPEED CAPABILITY AT THE RATED SPEED'S SITE TORQUE (RPM)

INLET AIR TEMP °F

50	1400 1400	1400 1400	1400 1400	1430 1400	1500 1460	1580 1540	1700 1630	1700 1700	1700 1700	1700 1700	1700 1700	1700 1700	1700 1700
- 00	1400	1400	1400	1430	1500	1580	1700	1700	1700	1700	1700	1700	1700
60													
70	1400	1400	1400	1470	1550	1640	1700	1700	1700	1700	1700	1700	1700
80	1400	1400	1430	1510	1590	1700	1700	1700	1700	1700	1700	1700	1700
90	1400	1400	1470	1550	1650	1700	1700	1700	1700	1700	1700	1700	1700
100	1400	1440	1510	1590	1700	1700	1700	1700	1700	1700	1700	1700	1700
110	1400	1480	1550	1650	1700	1700	1700	1700	1700	1700	1700	1700	1700
120	1440	1510	1590	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
130	1480	1550	1650	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700

ALTITUDE (FEET ABOVE SEA LEVEL)

GAS ENGINE TECHNICAL DATA



FUEL USAGE GUIDE:

This table shows the derate factor and full load set point timing required for a given fuel. Note that deration and set point timing adjustment may be required as the methane number decreases. Methane number is a scale to measure detonation characteristics of various fuels. The methane number of a fuel is determined by using the Cateroillar methane number calculation

ALTITUDE DERATION FACTORS:

This table shows the deration required for various air inlet temperatures and altitudes. Use this information along with the fuel usage guide chart to help determine actual engine power for your site. The derate factors shown do not account for the external cooling system capacity. The derate factors provided assume the external cooling system can maintain the specified cooling water temperatures at site conditions.

ACTUAL ENGINE RATING:

To determine the actual rating of the engine at site conditions, one must consider separately, limitations due to fuel characteristics and air system limitations. The Fuel Usage Guide deration establishes fuel limitations. The Altitude/Temperature deration factors and RPC (reference the Caterpillar Methane Program) establish air system limitations. RPC comes into play when the Altitude/Temperature deration is less than 1.0 (100%). Under this condition, add the two factors together. When the site conditions do not require an Altitude/Temperature derate (factor is 1.0), it is assumed the turbocharger has sufficient capability to overcome the low fuel relative power, and RPC is ignored. To determine the actual power available, take the lowest rating between 1) and 2).

- 1) Fuel Usage Guide Deration
- 2) 1-((1-Altitude/Temperature Deration) + (1-RPC))

AFTERCOOLER HEAT REJECTION FACTORS(ACHRF):

To maintain a constant air inlet manifold temperature, as the inlet air temperature goes up, so must the heat rejection. As altitude increases, the turbocharger must work harder to overcome the lower atmospheric pressure. This increases the amount of heat that must be removed from the inlet air by the aftercooler. Use the aftercooler heat rejection factor (ACHRF) to adjust for inlet air temp and altitude conditions. See note 24 for application of this factor in calculating the heat exchanger sizing criteria. Failure to properly account for these factors could result in detonation and cause the engine to shutdown or fail.

MINIMUM SPEED CAPABILITY AT THE RATED SPEED'S SITE TORQUE (RPM):

This table shows the minimum allowable engine turndown speed where the engine will maintain the Rated Speed's Torque for the given ambient conditions.

- 1. Engine rating is with two engine driven water pumps. Tolerance is $\pm 3\%$ of full load.
- 2. ISO 3046/1 engine efficiency tolerance is (+)0, (-)5% of full load % efficiency value. Nominal engine efficiency tolerance is ± 5.0% of full load % efficiency value. 3. ISO 3046/1 fuel consumption tolerance is (+)5, (-)0% of full load data. Nominal fuel consumption tolerance is ± 5.0% of full load data.
- 4. Air flow value is on a 'wet' basis. Flow is a nominal value with a tolerance of ± 5 %.
- 5. Inlet and Exhaust Restrictions must not exceed A&I limits based on full load flow rates from the standard technical data sheet.
- 6. Inlet manifold pressure is a nominal value with a tolerance of ± 5 %.
- 7. Inlet manifold temperature is a nominal value with a tolerance of $\pm 9^{\circ}F$.
- 8. Timing indicated is for use with the minimum fuel methane number specified. Consult the appropriate fuel usage guide for timing at other methane numbers.
- 9. Exhaust temperature is a nominal value with a tolerance of (+)63°F, (-)54°F.
- 10. Exhaust flow value is on a 'wet' basis. Flow is a nominal value with a tolerance of ± 6 %.
- 11. Emissions data is at engine exhaust flange prior to any after treatment.
- 12. NOx values are the maximum values expected under steady state conditions.
- 13. CO, CO2, THC, NMHC, NMNEHC, and HCHO values are "Not to Exceed" levels. THC, NMHC, and NMNEHC do not include aldehydes.
- 14. VOCs Volatile organic compounds as defined in US EPA 40 CFR 60, subpart JJJJ
- 15. Exhaust Oxygen tolerance is ± 0.2.
- 16. LHV rate tolerance is ± 5.0%.
- 17. Heat rejection to jacket water value displayed includes heat to jacket water alone. Value is based on treated water. Tolerance is ± 10% of full load data.
- 18. Heat rejection to atmosphere based on treated water. Tolerance is ± 50% of full load data.
- 19. Lube oil heat rate based on treated water. Tolerance is \pm 20% of full load data.
- 20. Exhaust heat rate based on treated water. Tolerance is ± 10% of full load data.
- 21. Heat rejection to exhaust (LHV to 77°F) value shown includes unburned fuel and is not intended to be used for sizing or recovery calculations.
- 22. Heat rejection to aftercooler based on treated water. Tolerance is ±5% of full load data.
- 23. Total Jacket Water Circuit heat rejection is calculated as: (JW x 1.1) + (OC x 1.2). Heat exchanger sizing criterion is maximum circuit heat rejection at site conditions, with applied tolerances. A cooling system safety factor may be multiplied by the total circuit heat rejection to provide additional margin.
- 24. Total Aftercooler Circuit heat rejection is calculated as: AC x ACHRF x 1.05. Heat exchanger sizing criterion is maximum circuit heat rejection at site conditions, with applied tolerances. A cooling system safety factor may be multiplied by the total circuit heat rejection to provide additional margin.



FREE FIELD MECHANICAL & EXHAUST NOISE

SOUND PRESSUR	SOUND PRESSURE LEVEL (dB)										
	Octave Band Center Frequency (C										
100	% Load Data		dB(A)	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Mechanical Sound	Distance from the	3.3	94	73.8	79.3	82.8	88.8	89.8	87.3	84.3	81.3
	Engine (ft)	23.0	84	68.5	72.5	76.5	77.5	80.5	77.5	73.5	68.9
		49.2	78	66.4	77.4	71.4	66.9	74.4	71.9	67.9	62.4
Exhaust Sound	Distance from the	4.9	109.4	106.5	108.5	<105.8	107.8	102.5	102.8	97.8	87.5
Engine (ft)		23.0	96	91.7	94.1	89.4	96.1	88.1	88.4	82.7	75.4
		49.2	89.4	85.1	87.5	82.8	89.5	81.5	81.8	76.1	68.8

SOUND PARAMETER DEFINITION:

Data Variability Statement:
Sound data presented by Caterpillar has been measured in accordance with ISO 6798 in a Grade 3 test environment. Measurements made in accordance with ISO 6798 will result in some amount of uncertainty. The uncertainties depend not only on the accuracies with which sound pressure levels and measurement surface areas are determined, but also on the 'near-field error' which increases for smaller measurement distances and lower frequencies. The uncertainty for a Grade 3 test environment, that has a source that produces sounds that are uniformly distributed in frequency over the frequency range of interest, is equal to 4 dB (A-weighted). This uncertainty is expressed as the largest value of the standard deviation.



FEATURES

FULL RANGE OF ATTACHMENTS

• Wide range of bolt-on system expansion attachments, factory designed and tested

SINGLE-SOURCE SUPPLIER

• Fully Prototype Tested with certified torsional vibration analysis available

WORLDWIDE PRODUCT SUPPORT

- Worldwide parts availability through the Caterpillar dealer network
- With over 1,200 dealer outlets operating in 166 countries, you're never far from the Caterpillar part you need.
- 99.5% of parts orders filled within 48 hours. The best product support record in the industry.
- Caterpillar dealer service technicians are trained to service every aspect of your electric power generation system.
- Preventive maintenance agreements
- The Cat Scheduled Oil Sampling (S•O•SSM) program cost effectively detects internal engine component condition, even the presence of unwanted fluids and combustion by-products

STANDBY 240 ekW **CONTINUOUS** 190 ekW

60 Hz

Caterpillar is leading the power generation marketplace with Power Solutions engineered to deliver unmatched flexibility, expandability, reliability, and cost-effectiveness.



CAT® G3406 TA GAS ENGINE

- Reliable, rugged, durable design
- Field-proven in thousands of applications worldwide
- Low pressure gas



CAT SR4B GENERATOR

- Designed to match performance and output characteristics of Caterpillar engines
- Optimum winding pitch for minimum total harmonic distortion and maximum efficiency
- Segregated AC/DC, low voltage accessory box provides single point access to accessory connections

CAT CONTROL PANELS

• Two levels of controls, designed to meet individual customer needs:

EMCP II provides digital monitoring, metering, and protection

EMCP II+ provides EMCP II features along with full-featured power metering and protective relaying

LEHE1430-02

FACTORY INSTALLED STANDARD & OPTIONAL EQUIPMENT

System	Standard	Optional
Air Inlet	Single element canister type air cleaner Service indicator	
Cooling	Radiator with guard Coolant drain lines with valves Fan and belt guards Caterpillar Coolant Low coolant level sensors	Jacket water coolant heater with shutoff valves Radiator removal
Exhaust	Stainless steel exhaust flex with weld outlet flange	15 dBA muffler
Fuel	Gas pressure regulator Low pressure fuel system Energize To Run (ETR) gas shutoff valve	
Generator	Self excited Class H insulation Class F temperature rise (105° C continuous/130° C standby) VR6 Voltage Regulator, 3-phase sensing, with reactive droop 2:1 Volts/Hz or 1:1 Volts/Hz Bus bar termination Extension box	Permanent magnet excited Digital Voltage Regulator Digital Voltage Regulator with KVAR/PF control Anti-condensation space heater Oversize & premium generators Circuit breakers, UL, 3 pole with shunt trip Multiple breaker capability
Governor	Flo-Tech 68 speed control	Electronic load sharing
Ignition	Digital ignition system	
Control Panels	EMCP II	EMCP II+ Customer Communication Module Local alarm & remote annunciator modules
Lube	Lubricating oil and filter Oil drain line with valve Fumes disposal	Manual sump pump
Mounting	Narrow base Linear vibration isolators between base and engine-generator	
Starting/Charging	35 amp charging alternator 24 volt starting motor Batteries with rack and cables Battery disconnect switch	Battery chargers, 5 & 10 amp Oversize batteries
General		Automatic Transfer Switches (ATS) Floor standing circuit breakers

SPECIFICATIONS



CAT SR4B GENERATOR

Frame
Type Self excited, static regulated, brushless
ConstructionSingle bearing, close coupled
Three phase12 lead reconnectable
Insulation Class H with tropicalization and antiabrasion
IP rating Drip proof 22
AlignmentPilot shaft
Overspeed capability
Prototype tested
Production tested
Wave formLess than 5% deviation
Paralleling capabilityStandard
Voltage regulator 3-phasing sensing with Volts-per-Hertz
Voltage regulation Less than ± 1/2% (steady state)
Less than ± 1% (no load to full load)
Voltage gain Automatic
Telephone Influence Factor (TIF)Less than 50
Harmonic Distortion (THD)Less than 5%



CAT ENGINE

G3406 TA, 4-stroke-cycle	
Bore - mm (in)	
Stroke – mm (in)	164 (6.5)
Displacement – L (cu in)	14.6 (891)
Compression ratio	10.3:1
Aspiration	. Turbocharged-Aftercooled
Ignition system	Digital ignition
Governor type	Woodward Flo-Tech



CAT CONTROL PANEL

24 Volt DC Control

NEMA 1, IP22 enclosure Electrically dead front Lockable hinged door Generator instruments meet ANSI C-39-1 Terminal box mounted

Single location customer connector point

Consult your Caterpillar dealer for available voltages.

TECHNICAL DATA

Open Generator Set — 1800 rpm/60 Hz/480 Volts				ndby 5439		inuous 5440
Package Performance Power rating Power rating @ 0.8 PF Aftercooler temperature	ek kV Deg C			40 00 130		90 38 130
Fuel Consumption 100% load with fan 75% load with fan 50% load with fan	N•m³/hr N•m³/hr N•m³/hr	scf/hr scf/hr scf/hr	77 61 45	2894 2291 1682	64 51 37	2398 1912 1418
Cooling System Ambient air temperature* Air flow restriction (system) Air flow (maximum @ rated speed for	Deg C kPa	Deg F in water	40 0.12	105 0.5	40 0.12	105 0.5
standard radiator arrangement) Engine coolant capacity with radiator Jacket water outlet temperature	m³/min L Deg C	cfm Gal Deg F	679 57 99	23,983 15 210	836 57 99	29,524 15 210
Exhaust System Combustion air inlet flow rate Exhaust gas stack temperature Exhaust gas flow rate Exhaust flange size (internal diameter) Exhaust system backpressure (maximum allowable)	N•m³/min Deg C N•m³/min mm kPa	scfm Deg F cfm in	16 536 16 127 6.7	572 997 1749 5	12 525 13 127 6.7	466 977 1424 5
Heat Rejection Low Heat Value (LHV) fuel input Heat rejection to jacket water (includes oil cooler) Total heat rejection to exhaust (LHV to 25° C) Heat rejection to exhaust (LHV to 120° C) Heat rejection to A/C Heat rejection to atmosphere from engine Heat rejection to atmosphere from generator	kW kW kW kW kW	Btu/min Btu/min Btu/min Btu/min Btu/min Btu/min Btu/min	780 234 217 167 25 31 20	44,358 13,305 12,319 8180 1395 1774 1162	647 210 174 132 12 26 16	36,767 11,946 9892 6460 694 1471 897
Generator Motor starting capability @ 30% voltage dip** Frame Temperature rise	kV De:		4	49 47 30	4	49 47 05
© Emissions*** NOx CO HC (total) HC (non-methane) Exhaust O ₂ (dry)	g/bh g/bh g/bh g/bh °	p-hr p-hr p-hr	1 3 0.	7.8 .1 .9 59 .0	0	9.7 1 1.2 .63

^{*}Ambient capability at 200 m (660 ft) above sea level. For ambient capability at other altitudes, consult your Caterpillar dealer.

RATING DEFINITIONS AND CONDITIONS

Standby — Output available with varying load for the duration of the interruption of the normal source power.

Continuous — Output available without varying load for an unlimited time.

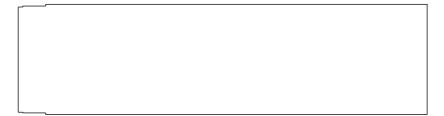
Ratings are based on ISO3046/1 standard reference conditions of 25° C (77° F) and 100 kPa (29.61 in Hg).

Ratings are based on pipeline natural gas having a LHV (low heat value) of 36.2 mJ/N•m³ (920 Btu/cu ft). Variations in altitude, temperature, and gas composition from standard conditions or the use of a three way catalyst may require a reduction in engine horsepower.

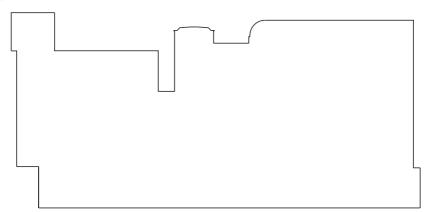
^{**}Assumes synchronous driver

^{***}Emissions data measurement is consistent with those described in EPA CFR 40 PART 89 SUBPART D and ISO 8178-1 for measuring HC, CO, CO₂ and NOx. Data shown is based on steady state engine operating conditions of 77° F, 28.43 inches HG and fuel having a LHV of 920 BTU per cubic foot at 30.00 inches HG absolute and 32° F. Not to exceed emission data shown is subject to instrumentation, measurement, facility and engine fuel system adjustments.

STANDBY/CONTINUOUS POWER GENERATOR SET PACKAGE — TOP VIEW



STANDBY/CONTINUOUS POWER GENERATOR SET PACKAGE — SIDE VIEW



Package Dimensions									
Length 4074 mm 160.39 in									
Width	1398.4 mm	55.05 in							
Height 2138.6 mm 84.20 in									
Shipping Weight 4318 kg 9500 lb									

Note: Do not use for installation design. See general dimension drawings for detail (Drawing #207-4501).

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