

5.7CAC

	Units		5.7L CAC			
	Std	Metric	1500		1800	
General Engine Data						
Type	N/A		V-Type 4 cycle			
Number of cylinders	N/A		8			
Aspiration	N/A		Forced Induction			
Charge Air Cooler	N/A		Yes			
Bore	in	mm	4	101.6	4	101.6
Stroke	in	mm	3.48	88.4	3.48	88.4
Displacement	in ³	L	350	5.7	350	5.7
Compression Ratio	N/A		9.4:1			
Mean Piston Speed	ft/min	m/s	870	4.42	870	4.42
Gross Standby Power Rating ^{1,2,3} Per ISO 3046 at the Flywheel						
NG	Hp	kW	129	96.2	155	115.4
LP	Hp	kW	121	90.2	145	108.2
MEP (@ rated Load on NG)	psi	kPa	195	13	234	16
MEP (@ rated Load on LP)	psi	kPa	182	13	219	15
Gross Prime Power Rating ^{1,2,3} Per ISO 3046 at the Flywheel						
NG	Hp	kW	N/A			
LP	Hp	kW				
MEP (@ rated Load on NG)	psi	kPa				
MEP (@ rated Load on LP)	psi	kPa				
RPM Range (Min-Max)	RPM		1500-2000			
Rotation Viewed from Flywheel	N/A		Counter Clockwise			
Firing Order	N/A		1-8-4-3-6-5-7-2			
Dry Weight						
Fan to Flywheel	lb	kg				
Rad to Flywheel	lb	kg				
Wet Weight						
Fan to Flywheel	lb	kg				
Rad to Flywheel	lb	kg				
CG						
Distance from FW housing	in	mm				
Distance above center of crankshaft	in	mm				
Engine Mounting						
Maximum Allowable Bending Moment at Rear of Block	lb ft	N m				
Moment of Inertia About Roll Axis	lb ft ²	kg m ²				
Flywheel housing	N/A		SAE No 3			
Flywheel	N/A		No 11 1/2			
Number of Flywheel Teeth	N/A		168			
Exhaust System						
Type						
Maximum allowable Back pressure	in HG	kPa	3	10.2	3	10.2
Standard Catalyst Back pressure	in HG	kPa	1.3	4.4	1.3	4.4
Exhaust Outlet Pipe Size						
Maximum Turbine Inlet Temperature	F	C	1427	775	1427	775
NG Exhaust Flow at Rated Power	lb/hr	kg/hr	915	415	1098	498
NG Exhaust Flow at Rated Power @1350F	cfm	m ³ /min	705	20	846	24
Air Induction System						
Maximum allowable Intake Air Restriction with Air Cleaner						
Clean	inH2O	kPa	3	1.49	3	1.49
Dirty	inH2O	kPa	13	3.24	13	3.24
Combustion Air required	lb/hr	kg/hr	864	392	1037	470
Combustion Air required	cfm	m ³ /min	219	6	263	7
Minimum Dirt Holding Capacity of Air Cleaner						
Electrical System						
Minimum Recommended Battery Capacity	AH		150			
Cold Cranking Current						
Engine only	CCA		600			
Engine with Drive train	CCA		600			
Maximum Allowable Resistance of Starting Circuit	Ohms		0.002			
Starting Motor Power	HP	kW	2.3	1.7	2.3	1.7
Battery Charging Alternator						
Voltage	Volts		12			
Current	Amps		70			

Cooling System						
Coolant Capacity						
Engine only	gal	L	2.28	10.34	2.28	10.34
Engine with Radiator and Hoses	gal	L	9.01	40.96	9.01	40.96
Engine Coolant Flow	gal/min	L/min	32.0	121.1	39.0	147.6
Water Pump Speed	RPM		2400.00		2880.00	
Heat rejected to Cooling water at rated Load	btu/min	kcal/sec	5247	32	6300	39
Maximum Intake Air Temperature (IAT)						
ECU IAT Warning	F	C	160	71	160	71
ECU IAT Shutdown	F	C	175	79	175	79
Maximum Coolant Friction Head External to the engine	psi	bar	3.50	0.24	3.50	0.24
Maximum Air Restriction Across a Radiator	inH2O	mmH2O	2.00	50.80	2.00	50.80
Standard Thermostat Range						
Cracking Temperature	F	C	165	74	165	74
Full Open Temperature	F	C	180.00	85.00	180.00	85.00
Maximum Output Pressure of Engine Water Pump						
Pressure Cap Rating	psi	bar	14.70	1.00	14.70	1.00
Ambient Clearance Open Genset (50% EG/water)						
Specified	F	C	122	50	122	50
Acutal	F	C				
Ambient Clearance (Oil)						
Specified	F	C	122	50	122	50
Acutal	F	C				
Maximum Allowable Top Tank Temperature	F	C	230	110	230	110
ECU Warning	F	C	220	104	220	104
ECU Shutdown	F	C	230	110	230	110
Fan Power	HP	kW	12.0	8.9	20.0	14.9
Fan Diameter, including blades	in	mm	26.0	660.4	26.0	660.4
Fan Speed	RPM		2400		2880	
Cooling Fan Air Flow @ 2" Static H2O Pressure and 125F @ radiator	CFM	m ³ /min	12000	340	16500	467
Charge Air Cooler						
Compressor Outlet Temperature @ 77F	F	C	279	137	279	137
Compressor Flow Rate	CFM	m ³ /min	302	8.56	363	10.27
Heat Rejection per CAC	btu/min	kcal/sec	575.00	3.00	711.00	4.00
Lubrication System						
Oil Specification			SAE 15W-40 Low Ash Gas engine oil			
Oil Pressure						
Idle						
Min	Psi	Bar	20	20	20	20
Max	Psi	Bar	25	25	25	25
Rated Speed						
Min	Psi	Bar	20.3	1.4	20.3	1.4
Max	Psi	Bar	95	6.6	95	6.6
Maximum Allowable Oil Temperature	F	C	250	121	250	121
Engine Oil Capacity						
Min	Qts	L	5	5	5	5
Max	Qts	L	6	6	6	6
Oil Filter Capacity	Qts	L	0.375	0.355	0.375	0.355
ECU Oil Pressure Warning	psi		15			
ECU Oil Pressure Shut Down	psi		8			
Fuel System						
Fuel Consumption						
NG	lb/hr	kg/hr	50.75	22.50	60.90	27.00
LP	lb/hr	kg/hr	49.2	22.3	59.0	26.8
Low Pressure Dry Processed Natural Gas (Spec)						
Fuel Composition						
Maximum EPR Rated Pressure	psi	kPa	1.0	6.9	1.0	6.9
Maximum Running pressure to Electronic Pressure Regulator (EPR)	inH2O	kPa	11.0	2.7	11.0	2.7
Minimum Running pressure to EPR	inH2O	kPa	7.0	1.7	7.0	1.7
Minimum Gas Supply Pipe Size			1-1/4" NPT			
Low Pressure Vapor Propane (HD5)						
Fuel Composition						
Maximum EPR Rated Pressure	psi	kPa				
Maximum Running Pressure to EPR	inH2O	kPa				
Minimum Running Pressure to EPR	inH2O	kPa				
Minimum LPG Supply Pipe Size ⁴						

The preceding pipe sizes are only suggestions and piping sizes may vary with temperature.

¹Standby and overload ratings based on ISO3046.

²All ratings are gross flywheel horsepower corrected to 77°F at an altitude of 328feet with no cooling fan or alternator losses using heating value for NG of 1015 BTU/SCF.

³ Production tolerances in engines and installed components can account for power variations of +/- 5%. Altitude, temperature and excessive exhaust and intake restrictions should be applied to power calculations.

⁴ The preceding pipe sizes are only suggestions and piping sizes may vary with temperature, pressure, distance from supply and application of local codes. Gas must be available at adequate volume and pressure for engine at the EPR.