

# 31.8L



# ENERGY

[Stoic.]  
56100023 Rev: 2

General Engine Data <sup>5</sup>																
Type	V-Series				Flywheel housing				SAE No.0							
Number of cylinders	12				Flywheel				SAE No.18							
Aspiration	Charged Cooled Forced Induction				Dry Weight (Fan to Flywheel)				lb	kg	6888	3124				
Firing Order	1 - 8 - 5 - 10 - 3 - 7 - 6 - 11 - 2 - 9 - 4 - 12				Wet Weight (Fan to Flywheel)				lb	kg	7384	3349				
Rotation Viewed from Flywheel	Counter Clockwise				CG From Rear Face of Block				in	mm	37.0	941				
Bore	in	mm	5.906	150	CG Above Crank Centerline				in	mm	0	0				
Stroke	in	mm	5.906	150	Oil Specification				SAE 15W-40 Low Ash Gas engine oil (.25-.5% by wt), API CD/CF or higher							
Displacement	in <sup>3</sup>	L	1941	31.8	Engine Oil Capacity <sup>8</sup>				Min	qts	L	95	90			
Compression Ratio	10.5 : 1				Max				qts	L	129	122				
Exhaust Manifold Type	Water Cooled				ECU Oil Pressure Warning <sup>6</sup>				psi	kPa	57	393				
Turbo Exhaust Outlet Pipe Size	in	mm	3.5	89	ECU Oil Pressure Shut Down <sup>6</sup>				psi	kPa	47	324				
Catalyst Inlet Size	in	mm	5	127	Oil Pressure at 1000 rpm (Idle)				Min	psi	kPa	74	510			
Catalyst Dp	in-H <sub>2</sub> O	kPa	20.5	5.1	Max				psi	kPa	82	565				
Maximum Allowable Exhaust Back Pressure	in-Hg	kPa	3.0	10.2	Max Allowable Oil Temperature				°F	°C	250	121				
Maximum EPR Rated Pressure	psi	kPa	1.0	6.9	Coolant Capacity (Engine only)				gal	L	29.1	110.0				
Maximum Operating pressure to EPR	in-H <sub>2</sub> O	kPa	11.0	2.7	Coolant Capacity (Radiator only)				gal	L	39.0	147.6				
Minimum Operating pressure to EPR	in-H <sub>2</sub> O	kPa	7.0	1.7	Radiator Weight (Dry)				lb	kg	1275	578				
Minimum Gas Supply Pipe Size <sup>5</sup>	in	mm	3	76	Standard Thermostat Range				Normal Operation Temperature <sup>9</sup>			°F	°C	176	80	
Maximum Pressure Drop Across CAC	psi	kPa	1	6.9	50°C Ambient Capable <sup>11</sup>				Pass							
Max Allowable Intake Restriction	Clean Air Filter				in-H <sub>2</sub> O	kPa	5	1.24	Full Open Temperature <sup>9</sup>				°F	°C	198	92
	Dirty Air Filter				in-H <sub>2</sub> O	kPa	15	3.73	ECU Coolant Temp Warning				°F	°C	203	95
Spark Plug Part Number	Denso GK3-5				ECU Coolant Temp Shutdown				°F	°C	208	98				
Standard Spark Plug Gap <sup>10</sup>	in	mm	0.012	0.3	Max External Coolant Friction Head				psi	kPa	7.25	50				
Spark Plug Coil - Primary Resistance	Ohms				CAC Rise Above Ambient Specified				F	C	15	9				
Battery Voltage	Volts				24											
Starter Motor Power	HP	kW	15.7	11.7												

Performance Data 60Hz <sup>3,5</sup>																
Nominal Engine Speed	RPM				1800				Water Pump Speed			RPM		3705		
Mean Piston Speed	ft/min	m/s	1772	9.0	Engine Coolant Flow				gal/min	L/min	361	1368				
RPM Range (Min-Max) ISO 8528-5 G1	RPM				1778 - 1823				Cooling Fan Power <sup>11</sup>				HP	kW	62.8	47
Charging Alternator Voltage	Volts				28				Cooling Fan Speed				RPM		1050	
Charging Alternator Current	Amps				55				Cooling Fan Air Flow <sup>11</sup>				SCFM	m <sup>3</sup> /min	65100	1843

NG 60hz Standby Load	Load		100%		75%		50%		25%	
	HP	kWm	966	720	724	540	483	360	243	181
Power Rating <sup>1,2,3,4</sup> Per ISO 3046	psi	bar	219	15.1	164	11.3	109	7.5	55	3.8
MEP (@ rated Load on NG)	lb/hr	kg/hr	357	162	278	126	200	91	123	56
Fuel Consumption <sup>3,4,7</sup>	lb/(hp-hr)	g/(kW-hr)	0.370	225	0.383	233	0.415	253	0.508	309
BSFC	°F	°C	1183	639	1111	600	1055	568	1006	541
Turbine Outlet Temperature	lb/hr	kg/hr	6412	2908	4921	2232	3586	1627	2227	1010
Exhaust Mass Flow (entire engine)	ACFM	m <sup>3</sup> /min	3844	109	2828	80	1930	55	1154	33
Exhaust Flow at Turbine Outlet Conditions										

Air Induction System <sup>5</sup>										
Combustion Air required (entire engine)	lb/hr	kg/hr	6055	2746	4644	2106	3385	1536	2104	954
Combustion Air Volume Required (entire engine)	ACFM	m <sup>3</sup> /min	1320	37	1012	29	738	21	458	13
Compressor Outlet Temperature <sup>2</sup>	°F	°C	269	132	252	122	207	97	140	60

Thermal Balance <sup>5</sup>										
Total Fuel	BTU/min	kW	123393	2170	95872	1686	69190	1217	43019	756
Mechanical Power	BTU/min	kW	40946	720	30709	540	20473	360	10295	181
Heat Rejected to Cooling Water at Rated Load	BTU/min	kW	34074	599	26768	471	21379	376	15114	266
Heat Rejection CAC at Rated Power	BTU/min	kW	4169	73	2661	47	1435	25	475	8
Heat Rejection to Exhaust (LHV to 150C)	BTU/min	kW	27496	483	19649	346	13115	231	7370	130
Engine Radiated Heat	BTU/min	kW	16710	294	16085	283	12788	225	9765	172

<sup>1</sup> Standby and overload ratings based on ISO 3046 gross flywheel power.

<sup>2</sup> Technical data based on ISO 3046-1 standards of 77°F(25°C), absolute pressure 14.5Psi(100kPa) and 30% relative humidity.

<sup>3</sup> 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.

<sup>4</sup> All fuel and thermal calculations unless otherwise noted are done at ISO 3046 rated load using LHV for NG of 48.17 MJ/kg.

<sup>5</sup> All values in the following section are provided for informational purpose only and are non-binding.

<sup>6</sup> >1400RPM.

<sup>7</sup> See PSI Energy Technical Spec. 56300019 - Fuel Standard.

<sup>8</sup> Standard Sump Capacity.

<sup>9</sup> ± 2 degrees Celsius.

<sup>10</sup> ± 0.002" or 0.05mm.

<sup>11</sup> At 0.5 in-H<sub>2</sub>O of Package Restriction at STP.

# 31.8L



# ENERGY

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56100023 Rev: 2

General Engine Data <sup>5</sup>																					
Type	V-Series				Flywheel housing				SAE No.0												
Number of cylinders	12				Flywheel				SAE No.18												
Aspiration	Charged Cooled Forced Induction				Dry Weight (Fan to Flywheel)				lb	kg	6888	3124									
Firing Order	1 - 8 - 5 - 10 - 3 - 7 - 6 - 11 - 2 - 9 - 4 - 12				Wet Weight (Fan to Flywheel)				lb	kg	7384	3349									
Rotation Viewed from Flywheel	Counter Clockwise				CG From Rear Face of Block				in	mm	37.0	941									
Bore	in	mm	5.906	150	CG Above Crank Centerline				in	mm	0	0									
Stroke	in	mm	5.906	150	Oil Specification				SAE 15W-40 Low Ash Gas engine oil (.25-.5% by wt), API CD/CF or higher												
Displacement	in <sup>3</sup>	L	1941	31.8	Engine Oil Capacity <sup>8</sup>				Min	qts	L	95	90								
Compression Ratio	10.5 : 1				Max				qts	L	129	122									
Exhaust Manifold Type	Water Cooled				ECU Oil Pressure Warning <sup>6</sup>				psi	kPa	57	393									
Turbo Exhaust Outlet Pipe Size	in	mm	3.5	89	ECU Oil Pressure Shut Down <sup>6</sup>				psi	kPa	47	324									
Catalyst Inlet Size	in	mm	5	127	Oil Pressure at 1000 rpm (Idle)				Min	psi	kPa	74	510								
Catalyst Dp	in-H <sub>2</sub> O	kPa	20.5	5.1	Max				psi	kPa	82	565									
Maximum Allowable Exhaust Back Pressure	in-Hg	kPa	3.0	10.2	Max Allowable Oil Temperature				°F	°C	250	121									
Maximum EPR Rated Pressure	psi	kPa	1.0	6.9	Coolant Capacity (Engine only)				gal	L	29.1	110.0									
Maximum Operating pressure to EPR	in-H <sub>2</sub> O	kPa	11.0	2.7	Coolant Capacity (Radiator only)				gal	L	39.0	147.6									
Minimum Operating pressure to EPR	in-H <sub>2</sub> O	kPa	7.0	1.7	Radiator Weight (Dry)				lb	kg	1275	578									
Minimum Gas Supply Pipe Size <sup>5</sup>	in	mm	3	76	Standard Thermostat Range				Normal Operation Temperature <sup>9</sup>			°F	°C	176	80						
Maximum Pressure Drop Across CAC	psi	kPa	1	6.9	Clean Air Filter				in-H <sub>2</sub> O	kPa	5	1.24	Full Open Temperature <sup>9</sup>			°F	°C	198	92		
Max Allowable Intake Restriction	Dirty Air Filter				in-H <sub>2</sub> O	kPa	15	3.73	ECU Coolant Temp Warning				°F	°C	203	95					
Spark Plug Part Number	Denso GK3-5				Spark Plug Coil - Primary Resistance				Ohms			0.59Ω ± 10%			ECU Coolant Temp Shutdown			°F	°C	208	98
Standard Spark Plug Gap <sup>10</sup>	in	mm	0.012	0.3	Battery Voltage				Volts			24			50°C Ambient Capable <sup>11</sup>			Pass			
Battery Voltage	24				Starter Motor Power				HP	kW	15.7	11.7	Max External Coolant Friction Head				psi	kPa	7.25	50	
Starter Motor Power	HP	kW	15.7	11.7	CAC Rise Above Ambient Specified				F	C	15	9									

Performance Data 50Hz <sup>3,5</sup>																
Nominal Engine Speed	RPM				1500				Water Pump Speed		RPM		3088			
Mean Piston Speed	ft/min	m/s	1476	7.5	Engine Coolant Flow				gal/min	L/min	297	1126				
RPM Range (Min-Max) ISO 8528-5 G1	RPM				1477 - 1519				Cooling Fan Power <sup>11</sup>				HP	kW	36.4	27
Charging Alternator Voltage	Volts				28				Cooling Fan Speed				RPM		875	
Charging Alternator Current	Amps				53				Cooling Fan Air Flow <sup>11</sup>				SCFM	m <sup>3</sup> /min	54200	1535

NG 50hz Standby Load	Load		100%		75%		50%		25%	
	HP	kWm	805	600	603	450	402	300	202	151
Power Rating <sup>1,2,3,4</sup> Per ISO 3046	psi	bar	219	15.1	164	11.3	109	7.5	55	3.8
MEP (@ rated Load on NG)	lb/hr	kg/hr	292	133	225	102	164	74	102	46
Fuel Consumption <sup>3,4,7</sup>	lb/(hp-hr)	g/(kW-hr)	0.363	221	0.373	227	0.408	248	0.502	306
BSFC	°F	°C	1078	581	1032	556	990	532	915	491
Turbine Outlet Temperature	lb/hr	kg/hr	4863	2206	3814	1730	2771	1257	1733	786
Exhaust Mass Flow (entire engine)	ACFM	m <sup>3</sup> /min	2852	81	2161	61	1515	43	917	26
Exhaust Flow at Turbine Outlet Conditions										

Air Induction System <sup>5</sup>										
Combustion Air required (entire engine)	lb/hr	kg/hr	4571	2073	3589	1628	2607	1183	1631	740
Combustion Air Volume Required (entire engine)	ACFM	m <sup>3</sup> /min	996	28	782	22	568	16	355	10
Compressor Outlet Temperature <sup>2</sup>	°F	°C	254	124	223	106	172	78	124	51

Thermal Balance <sup>5</sup>										
Total Fuel	BTU/min	kW	99707	1753	78048	1372	56389	992	34855	613
Mechanical Power	BTU/min	kW	34121	600	25591	450	17061	300	8580	151
Heat Rejected to Cooling Water at Rated Load	BTU/min	kW	27127	477	23202	408	18642	328	13478	237
Heat Rejection CAC at Rated Power	BTU/min	kW	3151	55	2041	36	902	16	247	4
Heat Rejection to Exhaust (LHV to 150C)	BTU/min	kW	18671	328	13756	242	9269	163	5094	90
Engine Radiated Heat	BTU/min	kW	16637	293	13458	237	10516	185	7456	131

<sup>1</sup> Standby and overload ratings based on ISO 3046 gross flywheel power.

<sup>2</sup> Technical data based on ISO 3046-1 standards of 77°F(25°C), absolute pressure 14.5Psi(100kPa) and 30% relative humidity.

<sup>3</sup> 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.

<sup>4</sup> All fuel and thermal calculations unless otherwise noted are done at ISO 3046 rated load using LHV for NG of 48.17 MJ/kg.

<sup>5</sup> All values in the following section are provided for informational purpose only and are non-binding.

<sup>6</sup> >1400RPM.

<sup>7</sup> See PSI Energy Technical Spec. 56300019 - Fuel Standard.

<sup>8</sup> Standard Sump Capacity.

<sup>9</sup> ± 2 degrees Celsius.

<sup>10</sup> ± 0.002" or 0.05mm.

<sup>11</sup> At 0.5 in-H<sub>2</sub>O of Package Restriction at STP.

# 31.8L



# ENERGY

[Stoic.]
56100023 Rev: 2

General Engine Data <sup>5</sup>													
Type	V-Series				Flywheel housing				SAE No.0				
Number of cylinders	12				Flywheel				SAE No.18				
Aspiration	Charged Cooled Forced Induction				Dry Weight (Fan to Flywheel)				lb	kg	6888	3124	
Firing Order	1 - 8 - 5 - 10 - 3 - 7 - 6 - 11 - 2 - 9 - 4 - 12				Wet Weight (Fan to Flywheel)				lb	kg	7384	3349	
Rotation Viewed from Flywheel	Counter Clockwise				CG From Rear Face of Block				in	mm	37.0	941	
Bore	in	mm	5.906	150	CG Above Crank Centerline				in	mm	0	0	
Stroke	in	mm	5.906	150	Oil Specification				SAE 15W-40 Low Ash Gas engine oil (.25-.5% by wt), API CD/CF or higher				
Displacement	in <sup>3</sup>	L	1941	31.8	Engine Oil Capacity <sup>8</sup>				Min	qts	L	95	90
Compression Ratio	10.5 : 1				Max				qts	L	129	122	
Exhaust Manifold Type	Water Cooled				ECU Oil Pressure Warning <sup>6</sup>				psi	kPa	57	393	
Turbo Exhaust Outlet Pipe Size	in	mm	3.5	89	ECU Oil Pressure Shut Down <sup>6</sup>				psi	kPa	47	324	
Catalyst Inlet Size	in	mm	5	127	Oil Pressure at 1000 rpm (Idle)				Min	psi	kPa	74	510
Catalyst Dp	in-H <sub>2</sub> O	kPa	20.5	5.1	Max				psi	kPa	82	565	
Maximum Allowable Exhaust Back Pressure	in-Hg	kPa	3.0	10.2	Max Allowable Oil Temperature				°F	°C	250	121	
Maximum EPR Rated Pressure	psi	kPa	1.0	6.9	Coolant Capacity (Engine only)				gal	L	29.1	110.0	
Maximum Operating pressure to EPR	in-H <sub>2</sub> O	kPa	11.0	2.7	Coolant Capacity (Radiator only)				gal	L	39.0	147.6	
Minimum Operating pressure to EPR	in-H <sub>2</sub> O	kPa	7.0	1.7	Radiator Weight (Dry)				lb	kg	1275	578	
Minimum Gas Supply Pipe Size <sup>5</sup>	in	mm	3	76	Standard Thermostat Range								
Maximum Pressure Drop Across CAC	psi	kPa	1	6.9	Normal Operation Temperature <sup>9</sup>				°F	°C	176	80	
Max Allowable Intake Restriction					Full Open Temperature <sup>9</sup>				°F	°C	198	92	
Clean Air Filter	in-H <sub>2</sub> O	kPa	5	1.24	ECU Coolant Temp Warning				°F	°C	203	95	
Dirty Air Filter	in-H <sub>2</sub> O	kPa	15	3.73	ECU Coolant Temp Shutdown				°F	°C	208	98	
Spark Plug Part Number	Denso GK3-5				50°C Ambient Capable <sup>11</sup>				Pass				
Standard Spark Plug Gap <sup>10</sup>	in	mm	0.012	0.3	Max External Coolant Friction Head				psi	kPa	7.25	50	
Spark Plug Coil - Primary Resistance	Ohms				CAC Rise Above Ambient Specified				F	C	15	9	
Battery Voltage	Volts												
Starter Motor Power	HP	kW	15.7	11.7									

Performance Data 60Hz <sup>3,5</sup>																
Nominal Engine Speed	RPM				1800				Water Pump Speed		RPM		3705			
Mean Piston Speed	ft/min	m/s	1772	9.0	Engine Coolant Flow				gal/min	L/min	361	1368				
RPM Range (Min-Max) ISO 8528-5 G1	RPM				1778 - 1823				Cooling Fan Power <sup>11</sup>				HP	kW	62.8	47
Charging Alternator Voltage	Volts				28				Cooling Fan Speed				RPM		1050	
Charging Alternator Current	Amps				55				Cooling Fan Air Flow <sup>11</sup>				SCFM	m <sup>3</sup> /min	65100	1843

LPG 60Hz Standby Load	Load		100%		75%		50%		25%	
	HP	kWm	637	475	478	356	318	238	160	119
Power Rating <sup>1,2,3,4</sup> Per ISO 3046	psi	bar	144	10.0	108	7.5	72	5.0	36	2.5
MEP (@ rated Load on NG)	lb/hr	kg/hr	300	136	222	101	153	69	107	49
Fuel Consumption <sup>3,4,7</sup>	lb/(hp-hr)	g/(kW-hr)	0.471	287	0.465	283	0.479	291	0.669	407
BSFC	°F	°C	1208	653	1117	603	1057	569	973	523
Turbine Outlet Temperature	lb/hr	kg/hr	4851	2201	3601	1633	2556	1160	1737	788
Exhaust Mass Flow (entire engine)	ACFM	m <sup>3</sup> /min	3043	86	2182	62	1471	42	915	26
Exhaust Flow at Turbine Outlet Conditions										

Air Induction System <sup>5</sup>										
Combustion Air required (entire engine)	lb/hr	kg/hr	4551	2064	3379	1533	2404	1090	1630	739
Combustion Air Volume Required (entire engine)	ACFM	m <sup>3</sup> /min	992	28	736	21	524	15	355	10
Compressor Outlet Temperature <sup>2</sup>	°F	°C	255	124	220	104	164	73	123	50

Thermal Balance <sup>5</sup>										
Total Fuel	BTU/min	kW	97288	1711	72203	1270	51298	902	34824	612
Mechanical Power	BTU/min	kW	27013	475	20260	356	13506	238	6792	119
Heat Rejected to Cooling Water at Rated Load	BTU/min	kW	30994	545	25757	453	20306	357	14388	253
Heat Rejection CAC at Rated Power	BTU/min	kW	3127	55	1868	33	770	14	240	4
Heat Rejection to Exhaust (LHV to 150C)	BTU/min	kW	22299	392	14605	257	9642	170	5609	99
Engine Radiated Heat	BTU/min	kW	13855	244	9713	171	7073	124	7796	137

<sup>1</sup> Standby and overload ratings based on ISO 3046 gross flywheel power.  
<sup>2</sup> Technical data based on ISO 3046-1 standards of 77°F(25°C), absolute pressure 14.5Psi(100kPa) and 30% relative humidity.  
<sup>3</sup> 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.  
<sup>4</sup> All fuel and thermal calculations unless otherwise noted are done at ISO 3046 rated load using LHV for LPG 46.38 MJ/kg.  
<sup>5</sup> All values in the following section are provided for informational purpose only and are non-binding.  
<sup>6</sup> >1400RPM.  
<sup>7</sup> See PSI Energy Technical Spec. 56300019 - Fuel Standard.  
<sup>8</sup> Standard Sump Capacity.  
<sup>9</sup> ± 2 degrees Celsius.  
<sup>10</sup> ± 0.002" or 0.05mm.  
<sup>11</sup> At 0.5 in-H<sub>2</sub>O of Package Restriction at STP.

# 31.8L



# ENERGY

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56100023 Rev: 2

General Engine Data <sup>5</sup>													
Type	V-Series				Flywheel housing				SAE No.0				
Number of cylinders	12				Flywheel				SAE No.18				
Aspiration	Charged Cooled Forced Induction				Dry Weight (Fan to Flywheel)				lb	kg	6888	3124	
Firing Order	1 - 8 - 5 - 10 - 3 - 7 - 6 - 11 - 2 - 9 - 4 - 12				Wet Weight (Fan to Flywheel)				lb	kg	7384	3349	
Rotation Viewed from Flywheel	Counter Clockwise				CG From Rear Face of Block				in	mm	37.0	941	
Bore	in	mm	5.906	150	CG Above Crank Centerline				in	mm	0	0	
Stroke	in	mm	5.906	150	Oil Specification				SAE 15W-40 Low Ash Gas engine oil (.25-.5% by wt), API CD/CF or higher				
Displacement	in <sup>3</sup>	L	1941	31.8	Engine Oil Capacity <sup>8</sup>				Min	qts	L	95	90
Compression Ratio	10.5 : 1				Max				qts	L	129	122	
Exhaust Manifold Type	Water Cooled				ECU Oil Pressure Warning <sup>6</sup>				psi	kPa	57	393	
Turbo Exhaust Outlet Pipe Size	in	mm	3.5	89	ECU Oil Pressure Shut Down <sup>6</sup>				psi	kPa	47	324	
Catalyst Inlet Size	in	mm	5	127	Oil Pressure at 1000 rpm (Idle)				Min	psi	kPa	74	510
Catalyst Dp	in-H <sub>2</sub> O	kPa	20.5	5.1	Max				psi	kPa	82	565	
Maximum Allowable Exhaust Back Pressure	in-Hg	kPa	3.0	10.2	Max Allowable Oil Temperature				°F	°C	250	121	
Maximum EPR Rated Pressure	psi	kPa	1.0	6.9	Coolant Capacity (Engine only)				gal	L	29.1	110.0	
Maximum Operating pressure to EPR	in-H <sub>2</sub> O	kPa	11.0	2.7	Coolant Capacity (Radiator only)				gal	L	39.0	147.6	
Minimum Operating pressure to EPR	in-H <sub>2</sub> O	kPa	7.0	1.7	Radiator Weight (Dry)				lb	kg	1275	578	
Minimum Gas Supply Pipe Size <sup>5</sup>	in	mm	3	76	Standard Thermostat Range				Normal Operation Temperature <sup>9</sup>				
Maximum Pressure Drop Across CAC	psi	kPa	1	6.9	50°C Ambient Capable <sup>11</sup>				Pass				
Max Allowable Intake Restriction					Full Open Temperature <sup>9</sup>				°F	°C	198	92	
Clean Air Filter	in-H <sub>2</sub> O	kPa	5	1.24	ECU Coolant Temp Warning				°F	°C	203	95	
Dirty Air Filter	in-H <sub>2</sub> O	kPa	15	3.73	ECU Coolant Temp Shutdown				°F	°C	208	98	
Spark Plug Part Number	Denso GK3-5				Max External Coolant Friction Head				psi	kPa	7.25	50	
Standard Spark Plug Gap <sup>10</sup>	in	mm	0.012	0.3	CAC Rise Above Ambient Specified				F	C	15	9	
Spark Plug Coil - Primary Resistance	Ohms				0.59Ω ± 10%								
Battery Voltage	Volts				24								
Starter Motor Power	HP	kW	15.7	11.7									

Performance Data 50Hz <sup>3,5</sup>														
Nominal Engine Speed	RPM				1500				Water Pump Speed		RPM		3088	
Mean Piston Speed	ft/min	m/s	1476	7.5	Engine Coolant Flow				gal/min	L/min	297	1126		
RPM Range (Min-Max) ISO 8528-5 G1	RPM				1477 - 1519				Cooling Fan Power <sup>11</sup>					
Charging Alternator Voltage	Volts				28				Cooling Fan Speed		RPM		875	
Charging Alternator Current	Amps				53				Cooling Fan Air Flow <sup>11</sup>					
	SCFM	m <sup>3</sup> /min	54200	1535										

LPG 50hz Standby Load	Load		100%		75%		50%		25%	
	HP	kWm	543	405	407	304	272	203	137	102
Power Rating <sup>1,2,3,4</sup> Per ISO 3046	psi	bar	148	10.2	111	7.6	74	5.1	37	2.6
MEP (@ rated Load on NG)	lb/hr	kg/hr	249	113	179	81	129	58	87	40
Fuel Consumption <sup>3,4,7</sup>	lb/(hp-hr)	g/(kW-hr)	0.459	279	0.439	267	0.474	288	0.640	389
BSFC	°F	°C	1168	631	1077	581	1022	550	947	508
Turbine Outlet Temperature	lb/hr	kg/hr	4051	1838	2895	1313	2097	951	1440	653
Exhaust Mass Flow (entire engine)	ACFM	m <sup>3</sup> /min	2445	69	1738	49	1164	33	726	21
Exhaust Flow at Turbine Outlet Conditions										

Air Induction System <sup>5</sup>										
Combustion Air required (entire engine)	lb/hr	kg/hr	3802	1725	2716	1232	1969	893	1352	613
Combustion Air Volume Required (entire engine)	ACFM	m <sup>3</sup> /min	829	23	592	17	429	12	295	8
Compressor Outlet Temperature <sup>2</sup>	°F	°C	246	119	185	85	144	62	113	45

Thermal Balance <sup>5</sup>										
Total Fuel	BTU/min	kW	81417	1432	58071	1021	42143	741	28738	505
Mechanical Power	BTU/min	kW	23032	405	17274	304	11516	203	5791	102
Heat Rejected to Cooling Water at Rated Load	BTU/min	kW	26302	462	20356	358	16728	294	12536	220
Heat Rejection CAC at Rated Power	BTU/min	kW	2486	44	1115	20	486	9	145	3
Heat Rejection to Exhaust (LHV to 150C)	BTU/min	kW	17788	313	11078	195	7540	133	4416	78
Engine Radiated Heat	BTU/min	kW	11809	208	8248	145	5873	103	5850	103

<sup>1</sup> Standby and overload ratings based on ISO 3046 gross flywheel power.

<sup>2</sup> Technical data based on ISO 3046-1 standards of 77°F(25°C), absolute pressure 14.5Psi(100kPa) and 30% relative humidity.

<sup>3</sup> 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.

<sup>4</sup> All fuel and thermal calculations unless otherwise noted are done at ISO 3046 rated load using LHV for LPG 46.38 MJ/kg.

<sup>5</sup> All values in the following section are provided for informational purpose only and are non-binding.

<sup>6</sup> >1400RPM.

<sup>7</sup> See PSI Energy Technical Spec. 56300019 - Fuel Standard.

<sup>8</sup> Standard Sump Capacity.

<sup>9</sup> ± 2 degrees Celsius.

<sup>10</sup> ± 0.002" or 0.05mm.

<sup>11</sup> At 0.5 in-H<sub>2</sub>O of Package Restriction at STP.