

# 40L



# ENERGY

[Stoic.]
Rev: 1

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	7432 3371	
Firing Order	1 - 8 - 5 - 10 - 3 - 7 - 6 - 11 - 2 - 9 - 4 - 12				Wet Weight (Fan to Flywheel)			lb	kg	7894 3581	
Rotation Viewed from Flywheel	Counter Clockwise				CG From Rear Face of Block			in	mm	37.5 952	
Bore	in	mm	5.906	150	CG Above Crank Centerline			in	mm	8 211	
Stroke	in	mm	7.283	185	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	2392	39.2	Engine Oil Capacity <sup>8</sup>						
Compression Ratio	10.5 : 1				Min			qts	L	127 120	
Exhaust Manifold Type	Water Cooled				Max			qts	L	154 146	
Turbo Exhaust Outlet Pipe Size	in	mm	3.5	89	ECU Oil Pressure Warning <sup>6</sup>			psi	kPa	57 393	
Catalyst Inlet Size	in	mm	5	124	ECU Oil Pressure Shut Down <sup>6</sup>			psi	kPa	47 324	
Catalyst Dp	in-H <sub>2</sub> O	kPa	33.4	8.3	Oil Pressure at 1000 rpm (Idle)						
Maximum Allowable Exhaust Back Pressure	in-Hg	kPa	3.8	13	Min			psi	kPa	60 414	
Maximum Fuel System Pressure	psi	kPag	29.0	200.0	Max			psi	kPa	82 565	
Maximum Operating pressure to MFG	in-H <sub>2</sub> O	kPa	11.0	2.7	Max Allowable Oil Temperature			°F	°C	250 121	
Minimum Operating pressure to MFG	in-H <sub>2</sub> O	kPa	7.0	1.7	Coolant Capacity (Engine only)			gal	L	20.1 76.0	
Minimum Gas Supply Pipe Size <sup>5</sup>	in	mm	3	76	Coolant Capacity (Radiator only)			gal	L	23.3 88.1	
Maximum Pressure Drop Across CAC	psi	kPa	2.2	15.0	Standard Thermostat Range						
Max Allowable Intake Restriction					Normal Operation Temperature <sup>9</sup>			°F	°C	176 80	
Clean Air Filter	in-H <sub>2</sub> O	kPa	5.2	1.3	Full Open Temperature <sup>9</sup>			°F	°C	198 92	
Dirty Air Filter	in-H <sub>2</sub> O	kPa	15.0	3.7	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	50°C Ambient Capable <sup>11</sup>			Pass			
Spark Plug Coil - Primary Resistance	Ohms		0.59Ω ± 10%		Max External Coolant Friction Head			psi	kPa	8.70 60	
Battery Voltage	Volts 24				CAC Rise Above Ambient Specified			F	C	27 15	
Starter Motor Power	HP	kW	13.4	10.0							
Performance Data 60Hz <sup>3,5</sup>											
Nominal Engine Speed	RPM		1800		Water Pump Speed			RPM		3499	
Mean Piston Speed	ft/min	m/s	2185	11.1	Engine Coolant Flow			gal/min	L/min	458 1736	
RPM Range (Min-Max) ISO 8528-5 G1	RPM		1778 - 1823		Cooling Fan Power <sup>11</sup>			HP	kW	107.3 80	
Charging Alternator Voltage	Volts		28		Cooling Fan Speed			RPM		1206	
Charging Alternator Current	Amps		55		Cooling Fan Air Flow <sup>11</sup>			SCFM	m <sup>3</sup> /min	67300 1905	
NG 60Hz Standby Load		Load		100%		75%		50%		25%	
Stand-By Power Rating <sup>1,2,3,4</sup> Per ISO 3046	HP	kWm	1234	920	925	690	617	460	310	231	
MEP (@ rated Load on NG)	psi	bar	227	15.6	170	11.7	113	7.8	57	3.9	
Fuel Consumption <sup>3,4,7</sup>	lb/hr	kg/hr	452	205	336	152	242	110	156	71	
BSFC	lb/(hp-hr)	g/(kW-hr)	0.367	223	0.363	221	0.393	239	0.502	305	
Turbine Outlet Temperature	°F	°C	1238	670	1185	640	1131	611	1078	581	
Exhaust Mass Flow (entire engine)	lb/hr	kg/hr	7755	3518	5916	2684	4203	1907	2608	1183	
Exhaust Flow at Turbine Outlet Conditions	ACFM	m <sup>3</sup> /min	3658	104	2680	76	1853	52	1181	33	
Air Induction System <sup>5</sup>											
Combustion Air required (entire engine)	lb/hr	kg/hr	7302	3312	5580	2531	3961	1797	2452	1112	
Combustion Air Volume Required (entire engine)	ACFM	m <sup>3</sup> /min	1591	45	1216	34	863	24	534	15	
Compressor Outlet Temperature <sup>2</sup>	°F	°C	277	136	247	119	225	107	154	68	
Thermal Balance <sup>5</sup>											
Total Fuel	BTU/min	kW	154098	2710	115643	2034	82411	1449	54546	959	
Mechanical Power	BTU/min	kW	52319	920	39240	690	26160	460	13155	231	
Heat Rejected to Cooling Water at Rated Load	BTU/min	kW	43684	768	36018	633	28352	499	20730	365	
Heat Rejection CAC at Rated Power	BTU/min	kW	5977	105	3992	70	2242	39	736	13	
Heat Rejection to Exhaust (LHV to 150C)	BTU/min	kW	42017	739	29184	513	19192	337	12074	212	
Engine Radiated Heat	BTU/min	kW	10101	178	7210	127	6465	114	7851	138	

<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 14.5Psia(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.

# 40L



# ENERGY

[Staic.]
Rev: 1

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	7432	3371	
Firing Order	1 - 8 - 5 - 10 - 3 - 7 - 6 - 11 - 2 - 9 - 4 - 12				Wet Weight (Fan to Flywheel)		lb	kg	7894	3581	
Rotation Viewed from Flywheel	Counter Clockwise				CG From Rear Face of Block		in	mm	37.5	952	
Bore	in	mm	5.906	150	CG Above Crank Centerline		in	mm	8	211	
Stroke	in	mm	7.283	185	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	2392	39.2	Engine Oil Capacity <sup>8</sup>						
Compression Ratio	10.5 : 1				Min		qts	L	127	120	
Exhaust Manifold Type	Water Cooled				Max		qts	L	154	146	
Turbo Exhaust Outlet Pipe Size	in	mm	3.5	89	ECU Oil Pressure Warning <sup>6</sup>		psi	kPa	57	393	
Catalyst Inlet Size	in	mm	5	124	ECU Oil Pressure Shut Down <sup>6</sup>		psi	kPa	47	324	
Catalyst Dp	in-H <sub>2</sub> O	kPa	33.4	8.3	Oil Pressure at 1000 rpm (Idle)						
Maximum Allowable Exhaust Back Pressure	in-Hg	kPa	3.8	13	Min		psi	kPa	60	414	
Maximum Fuel System Pressure	psi	kPag	29.0	200.0	Max		psi	kPa	82	565	
Maximum Operating pressure to MFG	in-H <sub>2</sub> O	kPa	11.0	2.7	Max Allowable Oil Temperature		°F	°C	250	121	
Minimum Operating pressure to MFG	in-H <sub>2</sub> O	kPa	7.0	1.7	Coolant Capacity (Engine only)		gal	L	20.1	76.0	
Minimum Gas Supply Pipe Size <sup>5</sup>	in	mm	3	76	Coolant Capacity (Radiator only)		gal	L	23.3	88.1	
Maximum Pressure Drop Across CAC	psi	kPa	2.2	15.0	Standard Thermostat Range						
Max Allowable Intake Restriction					Normal Operation Temperature <sup>9</sup>		°F	°C	176	80	
Clean Air Filter	in-H <sub>2</sub> O	kPa	5.2	1.3	Full Open Temperature <sup>9</sup>		°F	°C	198	92	
Dirty Air Filter	in-H <sub>2</sub> O	kPa	15.0	3.7	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	50°C Ambient Capable <sup>11</sup>		Pass				
Spark Plug Coil - Primary Resistance	Ohms		0.59Ω ± 10%		Max External Coolant Friction Head		psi	kPa	8.70	60	
Battery Voltage	Volts				CAC Rise Above Ambient Specified		F	C	27	15	
Starter Motor Power	HP	kW	13.4	10.0							
Performance Data 50Hz <sup>3,5</sup>											
Nominal Engine Speed	RPM		1500		Water Pump Speed		RPM		2916		
Mean Piston Speed	ft/min	m/s	1821	9.3	Engine Coolant Flow		gal/min	L/min	379	1436	
RPM Range (Min-Max) ISO 8528-5 G1	RPM		1477 - 1519		Cooling Fan Power <sup>11</sup>		HP	kW	56.0	42	
Charging Alternator Voltage	Volts		28		Cooling Fan Speed		RPM		1005		
Charging Alternator Current	Amps		53		Cooling Fan Air Flow <sup>11</sup>		SCFM	m <sup>3</sup> /min	58481	1656	
NG 50hz Standby Load		Load		100%		75%		50%		25%	
Stand-By Power Rating <sup>1,2,3,4</sup> Per ISO 3046	HP	kWm	992	740	744	555	496	370	250	186	
MEP (@ rated Load on NG)	psi	bar	219	15.1	164	11.3	110	7.6	55	3.8	
Fuel Consumption <sup>3,4,7</sup>	lb/hr	kg/hr	347	158	262	119	192	87	122	55	
BSFC	lb/(hp-hr)	g/(kW-hr)	0.350	213	0.352	214	0.388	236	0.487	296	
Turbine Outlet Temperature	°F	°C	1183	639	1106	597	1082	583	1065	574	
Exhaust Mass Flow (entire engine)	lb/hr	kg/hr	6043	2741	4630	2100	3320	1506	2103	954	
Exhaust Flow at Turbine Outlet Conditions	ACFM	m <sup>3</sup> /min	3939	112	2974	84	2100	59	1320	37	
Air Induction System <sup>5</sup>											
Combustion Air required (entire engine)	lb/hr	kg/hr	5695	2583	4368	1981	3128	1419	1982	899	
Combustion Air Volume Required (entire engine)	ACFM	m <sup>3</sup> /min	1241	35	952	27	682	19	432	12	
Compressor Outlet Temperature <sup>2</sup>	°F	°C	250	121	242	117	182	83	127	53	
Thermal Balance <sup>5</sup>											
Total Fuel	BTU/min	kW	118722	2088	90439	1590	64622	1136	41397	728	
Mechanical Power	BTU/min	kW	42083	740	31562	555	21042	370	10581	186	
Heat Rejected to Cooling Water at Rated Load	BTU/min	kW	35132	618	28966	509	22799	401	16669	293	
Heat Rejection CAC at Rated Power	BTU/min	kW	4054	71	2866	50	1388	24	332	6	
Heat Rejection to Exhaust (LHV to 150C)	BTU/min	kW	30027	528	21583	380	14515	255	8853	156	
Engine Radiated Heat	BTU/min	kW	7426	131	5462	96	4877	86	4961	87	

<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 14.5Psia(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.

# 40L



# ENERGY

[Staic.]
Rev: 1

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	7432	3371
Firing Order	1 - 8 - 5 - 10 - 3 - 7 - 6 - 11 - 2 - 9 - 4 - 12				Wet Weight (Fan to Flywheel)		lb	kg	7894	3581
Rotation Viewed from Flywheel	Counter Clockwise				CG From Rear Face of Block		in	mm	37.5	952
Bore	in	mm	5.906	150	CG Above Crank Centerline		in	mm	8	211
Stroke	in	mm	7.283	185	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	2392	39.2	Engine Oil Capacity <sup>8</sup>					
Compression Ratio	10.5 : 1				Min		qts	L	127	120
Exhaust Manifold Type	Water Cooled				Max		qts	L	154	146
Turbo Exhaust Outlet Pipe Size	in	mm	3.5	89	ECU Oil Pressure Warning <sup>6</sup>		psi	kPa	57	393
Catalyst Inlet Size	in	mm	5	124	ECU Oil Pressure Shut Down <sup>6</sup>		psi	kPa	47	324
Catalyst Dp	in-H <sub>2</sub> O	kPa	33.4	8.3	Oil Pressure at 1000 rpm (Idle)					
Maximum Allowable Exhaust Back Pressure	in-Hg	kPa	3.8	13	Min		psi	kPa	60	414
Maximum Fuel System Pressure	psi	kPag	29.0	200.0	Max		psi	kPa	82	565
Maximum Operating pressure to MFG	in-H <sub>2</sub> O	kPa	11.0	2.7	Max Allowable Oil Temperature		°F	°C	250	121
Minimum Operating pressure to MFG	in-H <sub>2</sub> O	kPa	7.0	1.7	Coolant Capacity (Engine only)		gal	L	20.1	76.0
Minimum Gas Supply Pipe Size <sup>5</sup>	in	mm	3	76	Coolant Capacity (Radiator only)		gal	L	23.3	88.1
Maximum Pressure Drop Across CAC	psi	kPa	2.2	15.0	Standard Thermostat Range					
Max Allowable Intake Restriction					Normal Operation Temperature <sup>9</sup>		°F	°C	176	80
Clean Air Filter	in-H <sub>2</sub> O	kPa	5.2	1.3	Full Open Temperature <sup>9</sup>		°F	°C	198	92
Dirty Air Filter	in-H <sub>2</sub> O	kPa	15.0	3.7	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	50°C Ambient Capable <sup>11</sup>		Pass			
Spark Plug Coil - Primary Resistance	Ohms		0.59Ω ± 10%		Max External Coolant Friction Head		psi	kPa	8.70	60
Battery Voltage	Volts				CAC Rise Above Ambient Specified		F	C	27	15
Starter Motor Power	HP	kW	13.4	10.0						

Performance Data 60Hz <sup>3,5</sup>										
Nominal Engine Speed	RPM		1800		Water Pump Speed		RPM		3499	
Mean Piston Speed	ft/min	m/s	2185	11.1	Engine Coolant Flow		gal/min	L/min	458	1736
RPM Range (Min-Max) ISO 8528-5 G1	RPM		1778 - 1823		Cooling Fan Power <sup>11</sup>		HP	kW	107.3	80
Charging Alternator Voltage	Volts		28		Cooling Fan Speed		RPM		1206	
Charging Alternator Current	Amps		55		Cooling Fan Air Flow <sup>11</sup>		SCFM	m <sup>3</sup> /min	67300	1905

LPG 60hz Standby Load	Load		100%		75%		50%		25%	
	HP	kWm	783	584	587	438	392	292	197	147
Stand-By Power Rating <sup>1,2,3,4</sup> Per ISO 3046	psi	bar	144	9.9	108	7.4	72	5.0	36	2.5
MEP (@ rated Load on NG)	lb/hr	kg/hr	352	160	266	121	185	84	123	56
Fuel Consumption <sup>3,4,7</sup>	lb/(hp-hr)	g/(kW-hr)	0.449	273	0.453	275	0.473	288	0.625	380
BSFC	°F	°C	1292	700	1199	648	1118	603	1050	565
Turbine Outlet Temperature	lb/hr	kg/hr	5786	2625	4363	1979	3112	1412	2051	930
Exhaust Mass Flow (entire engine)	ACFM	m <sup>3</sup> /min	4034	114	2938	83	2021	57	1286	36
Exhaust Flow at Turbine Outlet Conditions										

Air Induction System <sup>5</sup>										
Combustion Air required (entire engine)	lb/hr	kg/hr	5434	2465	4098	1859	2927	1328	1928	875
Combustion Air Volume Required (entire engine)	ACFM	m <sup>3</sup> /min	1184	34	893	25	638	18	420	12
Compressor Outlet Temperature <sup>2</sup>	°F	°C	255	124	243	117	174	79	124	51

Thermal Balance <sup>5</sup>										
Total Fuel	BTU/min	kW	119825	2107	89725	1578	63603	1118	41574	731
Mechanical Power	BTU/min	kW	33211	584	24909	438	16606	292	8351	147
Heat Rejected to Cooling Water at Rated Load	BTU/min	kW	27735	488	22869	402	18002	317	13164	231
Heat Rejection CAC at Rated Power	BTU/min	kW	4076	72	2700	47	1450	26	334	6
Heat Rejection to Exhaust (LHV to 150C)	BTU/min	kW	32842	578	22321	392	14238	250	8618	152
Engine Radiated Heat	BTU/min	kW	21960	386	16927	298	13307	234	11107	195

<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 14.5Psia(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.

# 40L



# ENERGY

[Staic.]
Rev: 1

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	7432	3371	
Firing Order	1 - 8 - 5 - 10 - 3 - 7 - 6 - 11 - 2 - 9 - 4 - 12				Wet Weight (Fan to Flywheel)		lb	kg	7894	3581	
Rotation Viewed from Flywheel	Counter Clockwise				CG From Rear Face of Block		in	mm	37.5	952	
Bore	in	mm	5.906	150	CG Above Crank Centerline		in	mm	8	211	
Stroke	in	mm	7.283	185	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	2392	39.2	Engine Oil Capacity <sup>8</sup>						
Compression Ratio	10.5 : 1				Min		qts	L	127	120	
Exhaust Manifold Type	Water Cooled				Max		qts	L	154	146	
Turbo Exhaust Outlet Pipe Size	in	mm	3.5	89	ECU Oil Pressure Warning <sup>6</sup>		psi	kPa	57	393	
Catalyst Inlet Size	in	mm	5	124	ECU Oil Pressure Shut Down <sup>6</sup>		psi	kPa	47	324	
Catalyst Dp	in-H <sub>2</sub> O	kPa	33.4	8.3	Oil Pressure at 1000 rpm (Idle)						
Maximum Allowable Exhaust Back Pressure	in-Hg	kPa	3.8	13	Min		psi	kPa	60	414	
Maximum Fuel System Pressure	psi	kPag	29.0	200.0	Max		psi	kPa	82	565	
Maximum Operating pressure to MFG	in-H <sub>2</sub> O	kPa	11.0	2.7	Max Allowable Oil Temperature		°F	°C	250	121	
Minimum Operating pressure to MFG	in-H <sub>2</sub> O	kPa	7.0	1.7	Coolant Capacity (Engine only)		gal	L	20.1	76.0	
Minimum Gas Supply Pipe Size <sup>5</sup>	in	mm	3	76	Coolant Capacity (Radiator only)		gal	L	23.3	88.1	
Maximum Pressure Drop Across CAC	psi	kPa	2.2	15.0	Standard Thermostat Range						
Max Allowable Intake Restriction					Normal Operation Temperature <sup>9</sup>		°F	°C	176	80	
Clean Air Filter	in-H <sub>2</sub> O	kPa	5.2	1.3	Full Open Temperature <sup>9</sup>		°F	°C	198	92	
Dirty Air Filter	in-H <sub>2</sub> O	kPa	15.0	3.7	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	50°C Ambient Capable <sup>11</sup>				Pass		
Spark Plug Coil - Primary Resistance	Ohms		0.59Ω ± 10%		Max External Coolant Friction Head		psi	kPa	8.70	60	
Battery Voltage	Volts				CAC Rise Above Ambient Specified		F	C	27	15	
Starter Motor Power	HP	kW	13.4	10.0							
Performance Data 50Hz <sup>3,5</sup>											
Nominal Engine Speed	RPM		1500		Water Pump Speed		RPM		2916		
Mean Piston Speed	ft/min	m/s	1821	9.3	Engine Coolant Flow		gal/min	L/min	379	1436	
RPM Range (Min-Max) ISO 8528-5 G1	RPM		1477 - 1519		Cooling Fan Power <sup>11</sup>		HP	kW	56.0	42	
Charging Alternator Voltage	Volts		28		Cooling Fan Speed		RPM		1005		
Charging Alternator Current	Amps		53		Cooling Fan Air Flow <sup>11</sup>		SCFM	m <sup>3</sup> /min	58481	1656	
LPG 50hz Standby Load		Load		100%		75%		50%		25%	
Stand-By Power Rating <sup>1,2,3,4</sup> Per ISO 3046	HP	kWm	653	487	490	365	327	244	164	122	
MEP (@ rated Load on NG)	psi	bar	144	9.9	108	7.5	72	5.0	36	2.5	
Fuel Consumption <sup>3,4,7</sup>	lb/hr	kg/hr	265	120	203	92	147	67	98	44	
BSFC	lb/(hp-hr)	g/(kW-hr)	0.405	246	0.415	252	0.450	274	0.595	362	
Turbine Outlet Temperature	°F	°C	1172	633	1134	612	1080	582	1009	543	
Exhaust Mass Flow (entire engine)	lb/hr	kg/hr	4366	1980	3374	1531	2459	1115	1625	737	
Exhaust Flow at Turbine Outlet Conditions	ACFM	m <sup>3</sup> /min	2811	80	2163	61	1555	44	990	28	
Air Induction System <sup>5</sup>											
Combustion Air required (entire engine)	lb/hr	kg/hr	4102	1860	3171	1438	2312	1049	1527	693	
Combustion Air Volume Required (entire engine)	ACFM	m <sup>3</sup> /min	894	25	691	20	504	14	333	9	
Compressor Outlet Temperature <sup>2</sup>	°F	°C	240	115	190	88	142	61	109	43	
Thermal Balance <sup>5</sup>											
Total Fuel	BTU/min	kW	89959	1582	69000	1213	50048	880	33194	584	
Mechanical Power	BTU/min	kW	27695	487	20771	365	13848	244	6964	122	
Heat Rejected to Cooling Water at Rated Load	BTU/min	kW	23125	407	19068	335	15010	264	10975	193	
Heat Rejection CAC at Rated Power	BTU/min	kW	2796	49	1510	27	651	11	219	4	
Heat Rejection to Exhaust (LHV to 150C)	BTU/min	kW	21662	381	16762	295	11755	207	6673	117	
Engine Radiated Heat	BTU/min	kW	14681	258	10889	191	8785	154	8364	147	

<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 14.5Psia(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.