

32L



ENERGY

[Stoic.]
56100023 Rev: 5

| General Engine Data ³ | | | | | | | | | | | | | | | | |
|---|--|---------------------|--------|------|---|---------------------------|-------|------|--|------|-------|-------|---------|---------------------|-------|------|
| 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 Ash content 0.25 - 0.5% by weight | | | | | | | |
| Displacement | in ³ | L | 1941 | 31.8 | Engine Oil Capacity ⁸ | | | | Min | qts | L | 95.1 | 90.0 | | | |
| Compression Ratio | 10.5 : 1 | | | | Max | | | | qts | L | 129.0 | 122.1 | | | | |
| Exhaust Manifold Type | Water Cooled | | | | ECU Oil Pressure Warning ⁶ | | | | psi | kPa | 57 | 393 | | | | |
| Turbo Exhaust Outlet Pipe Size | in | mm | 3.50 | 88.9 | ECU Oil Pressure Shut Down ⁶ | | | | psi | kPa | 47 | 324.1 | | | | |
| Catalyst Inlet Size | in | mm | 5.00 | 127 | Oil Pressure at 1000 RPM (Idle) | | | | Min | psi | kPa | 74 | 510.2 | | | |
| Catalyst Dp | in-H ₂ O | kPa | 20 | 5.1 | Max | | | | psi | kPa | 82 | 565.4 | | | | |
| 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 | 7 | Coolant Capacity (Engine only) | | | | gal | L | 29.1 | 110 | | | | |
| Maximum Operating pressure to EPR | in-H ₂ O | kPa | 11 | 2.7 | Coolant Capacity (Radiator only) | | | | gal | L | 25.3 | 96 | | | | |
| Minimum Operating pressure to EPR | in-H ₂ O | kPa | 7 | 1.7 | Radiator Weight (Dry) | | | | lb | kg | 1289 | 586 | | | | |
| Minimum Gas Supply Pipe Size ⁵ | in | mm | 3 | 76 | Thermostat Operating | | | | Cracking | °F | °C | 176 | 80 | | | |
| Maximum Pressure Drop Across CAC | psi | kPa | 1.0 | 6.9 | Temperature Range ⁹ | | | | Full Open | °F | °C | 198 | 92 | | | |
| Maximum Allowable Intake Restriction | Clean Air Filter | in-H ₂ O | kPa | 5.0 | 1.2 | ECU Coolant Temp Warning | | | | °F | °C | 220 | 104 | | | |
| | Dirty Air Filter | in-H ₂ O | kPa | 15.0 | 3.7 | ECU Coolant Temp Shutdown | | | | °F | °C | 230 | 110 | | | |
| Spark Plug Part Number | Denso GK3-5 | | | | 50°C Ambient Capable ¹¹ | | | | Pass | | | | | | | |
| Standard Spark Plug Gap ¹⁰ | in | mm | 0.012 | 0.3 | Max External Coolant Friction Head | | | | psi | kPa | 7 | 50 | | | | |
| Spark Plug Coil - Primary Resistance | Ohms | | | | 0.59Ω ± 10% | | | | CAC Rise Above Ambient Specified | | | | F | C | 15 | 9 |
| Battery Voltage | Volts | | | | 24 | | | | | | | | | | | |
| Starter Motor Power | HP | kW | 15.7 | 12 | | | | | | | | | | | | |
| Performance Data 60Hz ^{3,5} | | | | | | | | | | | | | | | | |
| Nominal Engine Speed | RPM | | | | 1800 | | | | Engine Coolant Flow | | | | gal/min | L/min | 361 | 1368 |
| Mean Piston Speed | ft/min | m/s | 1772 | 9.0 | Cooling Fan Power ¹¹ | | | | HP | kW | 32.0 | 24 | | | | |
| RPM Range (Min-Max) ISO 8528-5 G1 | RPM | | | | 1778 - 1823 | | | | Cooling Fan Speed | | | | RPM | | 1050 | |
| Charging Alternator Voltage | Volts | | | | 28 | | | | Cooling Fan Air Flow ¹¹ | | | | SCFM | m ³ /min | 41200 | 1167 |
| Charging Alternator Current | Amps | | | | 55 | | | | | | | | | | | |
| NG 60hz Standby | Load | | 100% | | 75% | | 50% | | 25% | | | | | | | |
| Power Rating ^{1,2,3,4} Per ISO 3046 | HP | kWm | 966 | 720 | 724 | 540 | 483 | 360 | 243 | 181 | | | | | | |
| MEP (@ rated Load on NG) | psi | bar | 219 | 15.1 | 164 | 11.3 | 109 | 7.5 | 55 | 3.8 | | | | | | |
| Fuel Consumption ^{3,4,7,12} | lb/hr | kg/hr | 357 | 162 | 278 | 126 | 200 | 91 | 123 | 56 | | | | | | |
| | ft ³ /hr | m ³ /hr | 7983 | 226 | 6202 | 176 | 4478 | 127 | 2756 | 78 | | | | | | |
| BSFC | lb/(hp-hr) | g/(kW-hr) | 0.370 | 225 | 0.383 | 233 | 0.415 | 253 | 0.508 | 309 | | | | | | |
| Turbine Outlet Temperature | °F | °C | 1183 | 639 | 1111 | 600 | 1055 | 568 | 1006 | 541 | | | | | | |
| Exhaust Flow at Turbine Outlet Conditions (entire engine) | lb/hr | kg/hr | 6412 | 2908 | 4921 | 2232 | 3586 | 1627 | 2227 | 1010 | | | | | | |
| | ACFM | m ³ /min | 4354 | 123 | 3218 | 91 | 2274 | 64 | 1374 | 39 | | | | | | |
| Air Induction System ⁵ | | | | | | | | | | | | | | | | |
| Combustion Air required (entire engine) | lb/hr | kg/hr | 6055 | 2746 | 4644 | 2106 | 3385 | 1536 | 2104 | 954 | | | | | | |
| | ACFM | m ³ /min | 1320 | 37 | 1012 | 29 | 738 | 21 | 458 | 13 | | | | | | |
| Compressor Outlet Temperature ² | °F | °C | 269 | 132 | 252 | 122 | 207 | 97 | 140 | 60 | | | | | | |
| Thermal Balance ⁵ | | | | | | | | | | | | | | | | |
| 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 | BTU/min | kW | 34074 | 599 | 26768 | 471 | 21379 | 376 | 15114 | 266 | | | | | | |
| Heat Rejected to CAC | BTU/min | kW | 4169 | 73 | 2661 | 47 | 1435 | 25 | 475 | 8 | | | | | | |
| Heat Rejected 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 | | | | | | |

¹ Standby and overload ratings based on ISO 3046 gross flywheel power.

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

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

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

⁶ >1400RPM.

⁷ See PSI Energy Technical Spec. 56300019 - Fuel Standard.

⁸ Standard Sump Capacity.

⁹ ± 2 degrees Celsius.

¹⁰ ± 0.002" or 0.05mm.

¹¹ At 0.5 in-H₂O of Package Restriction at 50C Ambient Air Temperature.

¹² Volume calculated using density of 0.717 kg/m³ for NG, 0.51 kg/L for LPG

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| General Engine Data ³ | | | | | | | | | | | | | | |
|---|--|---------------------|-------|------|---|---------------------------|--|------|------------------------------------|-----------|---------|---------------------|-------|------|
| 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 Ash content 0.25 - 0.5% by weight | | | | | | | |
| Displacement | in ³ | L | 1941 | 31.8 | Engine Oil Capacity ⁸ | | Min | qts | L | 95.1 90.0 | | | | |
| Compression Ratio | 10.5 : 1 | | | | Max | | qts | L | 129.0 | 122.1 | | | | |
| Exhaust Manifold Type | Water Cooled | | | | ECU Oil Pressure Warning ⁶ | | psi | kPa | 57 | 393 | | | | |
| Turbo Exhaust Outlet Pipe Size | in | mm | 3.50 | 88.9 | ECU Oil Pressure Shut Down ⁶ | | psi | kPa | 47 | 324.1 | | | | |
| Catalyst Inlet Size | in | mm | 5.00 | 127 | Oil Pressure at 1000 RPM (Idle) | | Min | psi | kPa | 74 510.2 | | | | |
| Catalyst Dp | in-H ₂ O | kPa | 20 | 5.1 | Max | | psi | kPa | 82 | 565.4 | | | | |
| 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 | 7 | Coolant Capacity (Engine only) | | gal | L | 29.1 | 110 | | | | |
| Maximum Operating pressure to EPR | in-H ₂ O | kPa | 11 | 2.7 | Coolant Capacity (Radiator only) | | gal | L | 25.3 | 96 | | | | |
| Minimum Operating pressure to EPR | in-H ₂ O | kPa | 7 | 1.7 | Radiator Weight (Dry) | | lb | kg | 1289 | 586 | | | | |
| Minimum Gas Supply Pipe Size ⁵ | in | mm | 3 | 76 | Thermostat Operating | | Cracking | °F | °C | 176 80 | | | | |
| Maximum Pressure Drop Across CAC | psi | kPa | 1.0 | 6.9 | Temperature Range ⁹ | | Full Open | °F | °C | 198 92 | | | | |
| Maximum Allowable Intake Restriction | Clean Air Filter | in-H ₂ O | kPa | 5.0 | 1.2 | ECU Coolant Temp Warning | | °F | °C | 220 104 | | | | |
| | Dirty Air Filter | in-H ₂ O | kPa | 15.0 | 3.7 | ECU Coolant Temp Shutdown | | °F | °C | 230 110 | | | | |
| Spark Plug Part Number | Denso GK3-5 | | | | 50°C Ambient Capable ¹¹ | | Pass | | | | | | | |
| Standard Spark Plug Gap ¹⁰ | in | mm | 0.012 | 0.3 | Max External Coolant Friction Head | | psi | kPa | 7 | 50 | | | | |
| Spark Plug Coil - Primary Resistance | Ohms | | | | 0.59Ω ± 10% | | CAC Rise Above Ambient Specified | | F | C | 15 9 | | | |
| Battery Voltage | Volts | | | | 24 | | | | | | | | | |
| Starter Motor Power | HP | kW | 15.7 | 12 | | | | | | | | | | |
| Performance Data 50Hz ^{3,5} | | | | | | | | | | | | | | |
| Nominal Engine Speed | RPM | | | | 1500 | | | | Engine Coolant Flow | | gal/min | L/min | 297 | 1126 |
| Mean Piston Speed | ft/min | m/s | 1476 | 7.5 | Cooling Fan Power ¹¹ | | HP | kW | 18.5 | 14 | | | | |
| RPM Range (Min-Max) ISO 8528-5 G1 | RPM | | | | 1477 - 1519 | | | | Cooling Fan Speed | | RPM | | 875 | |
| Charging Alternator Voltage | Volts | | | | 28 | | | | Cooling Fan Air Flow ¹¹ | | SCFM | m ³ /min | 34300 | 971 |
| Charging Alternator Current | Amps | | | | 53 | | | | | | | | | |
| NG 50Hz Standby | | Load | | 100% | | 75% | | 50% | | 25% | | | | |
| Power Rating ^{1,2,3,4} Per ISO 3046 | HP | kWm | 805 | 600 | 603 | 450 | 402 | 300 | 202 | 151 | | | | |
| MEP (@ rated Load on NG) | psi | bar | 219 | 15.1 | 164 | 11.3 | 109 | 7.5 | 55 | 3.8 | | | | |
| Fuel Consumption ^{3,4,7,12} | lb/hr | kg/hr | 292 | 133 | 225 | 102 | 164 | 74 | 102 | 46 | | | | |
| | ft ³ /hr | m ³ /hr | 6530 | 185 | 5031 | 142 | 3669 | 104 | 2270 | 64 | | | | |
| BSFC | lb/(hp-hr) | g/(kW-hr) | 0.363 | 221 | 0.373 | 227 | 0.408 | 248 | 0.502 | 306 | | | | |
| Turbine Outlet Temperature | °F | °C | 1078 | 581 | 1032 | 556 | 990 | 532 | 915 | 491 | | | | |
| Exhaust Flow at Turbine Outlet Conditions (entire engine) | lb/hr | kg/hr | 4863 | 2206 | 3814 | 1730 | 2771 | 1257 | 1733 | 786 | | | | |
| | ACFM | m ³ /min | 3123 | 88 | 2388 | 68 | 1693 | 48 | 1011 | 29 | | | | |
| Air Induction System ⁵ | | | | | | | | | | | | | | |
| Combustion Air required (entire engine) | lb/hr | kg/hr | 4571 | 2073 | 3589 | 1628 | 2607 | 1183 | 1631 | 740 | | | | |
| | ACFM | m ³ /min | 996 | 28 | 782 | 22 | 568 | 16 | 355 | 10 | | | | |
| Compressor Outlet Temperature ² | °F | °C | 254 | 124 | 223 | 106 | 172 | 78 | 124 | 51 | | | | |
| Thermal Balance ⁵ | | | | | | | | | | | | | | |
| 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 | BTU/min | kW | 27127 | 477 | 23202 | 408 | 18642 | 328 | 13478 | 237 | | | | |
| Heat Rejected to CAC | BTU/min | kW | 3151 | 55 | 2041 | 36 | 902 | 16 | 247 | 4 | | | | |
| Heat Rejected 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 | | | | |

¹ Standby and overload ratings based on ISO 3046 gross flywheel power.

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

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

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

⁶ >1400RPM.

⁷ See PSI Energy Technical Spec. 56300019 - Fuel Standard.

⁸ Standard Sump Capacity.

⁹ ± 2 degrees Celsius.

¹⁰ ± 0.002" or 0.05mm.

¹¹ At 0.5 in-H₂O of Package Restriction at 50C Ambient Air Temperature.

¹² Volume calculated using density of 0.717 kg/m³ for NG, 0.51 kg/L for LPG

| General Engine Data ³ | | | | | | | | | | | | |
|---|--|---------------------|-------------|------|---|--------------------------|------------------------------------|-----------|-----------------------------------|---------------------|-------|------|
| 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 | | | |
| Displacement | in ³ | L | 1941 | 31.8 | | | | | Ash content 0.25 - 0.5% by weight | | | |
| Compression Ratio | 10.5 : 1 | | | | Engine Oil Capacity ⁸ | | Min | qts | L | 95.1 | 90.0 | |
| Exhaust Manifold Type | Water Cooled | | | | | | Max | qts | L | 129.0 | 122.1 | |
| Turbo Exhaust Outlet Pipe Size | in | mm | 3.50 | 88.9 | ECU Oil Pressure Warning ⁶ | | psi | kPa | 57 | 393 | | |
| Catalyst Inlet Size | in | mm | 5.00 | 127 | ECU Oil Pressure Shut Down ⁶ | | psi | kPa | 47 | 324.1 | | |
| Catalyst Dp | in-H ₂ O | kPa | 20 | 5.1 | Oil Pressure at 1000 RPM (Idle) | | Min | psi | kPa | 74 | 510.2 | |
| Maximum Allowable Exhaust Back Pressure | in-Hg | kPa | 3.0 | 10.2 | | | Max | psi | kPa | 82 | 565.4 | |
| Maximum EPR Rated Pressure | psi | kPa | 1 | 7 | Max Allowable Oil Temperature | | °F | °C | 250 | 121 | | |
| Maximum Operating pressure to EPR | in-H ₂ O | kPa | 11 | 2.7 | Coolant Capacity (Engine only) | | gal | L | 29.1 | 110 | | |
| Minimum Operating pressure to EPR | in-H ₂ O | kPa | 7 | 1.7 | Coolant Capacity (Radiator only) | | gal | L | 25.3 | 96 | | |
| Minimum Gas Supply Pipe Size ⁵ | in | mm | 3 | 76 | Radiator Weight (Dry) | | lb | kg | 1289 | 586 | | |
| Maximum Pressure Drop Across CAC | psi | kPa | 1.0 | 6.9 | Thermostat Operating Temperature Range ⁹ | | Cracking | °F | °C | 176 | 80 | |
| Maximum Allowable Intake Restriction | Clean Air Filter | in-H ₂ O | kPa | 5.0 | | | 1.2 | Full Open | °F | °C | 198 | 92 |
| | Dirty Air Filter | in-H ₂ O | kPa | 15.0 | 3.7 | ECU Coolant Temp Warning | | °F | °C | 220 | 104 | |
| Spark Plug Part Number | Denso GK3-5 | | | | ECU Coolant Temp Shutdown | | °F | °C | 230 | 110 | | |
| Standard Spark Plug Gap ¹⁰ | in | mm | 0.012 | 0.3 | 50°C Ambient Capable ¹¹ | | | | | | | |
| Spark Plug Coil - Primary Resistance | Ohms | | 0.59Ω ± 10% | | Max External Coolant Friction Head | | psi | kPa | 7 | 50 | | |
| Battery Voltage | Volts | | | | CAC Rise Above Ambient Specified | | F | C | 15 | 9 | | |
| Starter Motor Power | HP | kW | 15.7 | 12 | | | | | | | | |
| Performance Data 60Hz ^{3,5} | | | | | | | | | | | | |
| Nominal Engine Speed | RPM | | | | 1800 | | Engine Coolant Flow | | gal/min | L/min | 361 | 1368 |
| Mean Piston Speed | ft/min | m/s | 1772 | 9.0 | Cooling Fan Power ¹¹ | | HP | kW | 32.0 | 24 | | |
| RPM Range (Min-Max) ISO 8528-5 G1 | RPM | | | | 1778 - 1823 | | Cooling Fan Speed | | RPM | | 1050 | |
| Charging Alternator Voltage | Volts | | | | 28 | | Cooling Fan Air Flow ¹¹ | | SCFM | m ³ /min | 41200 | 1167 |
| Charging Alternator Current | Amps | | | | 55 | | | | | | | |
| LPG 60Hz Standby | | Load | | 100% | | 75% | | 50% | | 25% | | |
| Power Rating ^{1,2,3,4} Per ISO 3046 | HP | kWm | 637 | 475 | 478 | 356 | 318 | 238 | 160 | 119 | | |
| MEP (@ rated Load on NG) | psi | bar | 144 | 10.0 | 108 | 7.5 | 72 | 5.0 | 36 | 2.5 | | |
| Fuel Consumption ^{3,4,7,12} | lb/hr | kg/hr | 300 | 136 | 222 | 101 | 153 | 69 | 107 | 49 | | |
| | gal/hr | L/hr | 70 | 267 | 52 | 198 | 36 | 136 | 25 | 95 | | |
| BSFC | lb/(hp-hr) | g/(kW-hr) | 0.471 | 287 | 0.465 | 283 | 0.479 | 291 | 0.669 | 407 | | |
| Turbine Outlet Temperature | °F | °C | 1208 | 653 | 1117 | 603 | 1057 | 569 | 973 | 523 | | |
| Exhaust Flow at Turbine Outlet Conditions (entire engine) | lb/hr | kg/hr | 4851 | 2201 | 3601 | 1633 | 2556 | 1160 | 1737 | 788 | | |
| | ACFM | m ³ /min | 3338 | 95 | 2362 | 67 | 1622 | 46 | 1051 | 30 | | |
| Air Induction System ⁵ | | | | | | | | | | | | |
| Combustion Air required (entire engine) | lb/hr | kg/hr | 4551 | 2064 | 3379 | 1533 | 2404 | 1090 | 1630 | 739 | | |
| | ACFM | m ³ /min | 992 | 28 | 736 | 21 | 524 | 15 | 355 | 10 | | |
| Compressor Outlet Temperature ² | °F | °C | 255 | 124 | 220 | 104 | 164 | 73 | 123 | 50 | | |
| Thermal Balance ⁵ | | | | | | | | | | | | |
| 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 | BTU/min | kW | 30994 | 545 | 25757 | 453 | 20306 | 357 | 14388 | 253 | | |
| Heat Rejected to CAC | BTU/min | kW | 3127 | 55 | 1868 | 33 | 770 | 14 | 240 | 4 | | |
| Heat Rejected 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 | | |

¹ Standby and overload ratings based on ISO 3046 gross flywheel power.

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

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.

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⁶ >1400RPM.

⁷ See PSI Energy Technical Spec. 56300019 - Fuel Standard.

⁸ Standard Sump Capacity.

⁹ ± 2 degrees Celsius.

¹⁰ ± 0.002" or 0.05mm.

¹¹ At 0.5 in-H₂O of Package Restriction at 50C Ambient Air Temperature.

¹² Volume calculated using density of 0.717 kg/m³ for NG, 0.51 kg/L for LPG

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| 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 Ash content 0.25 - 0.5% by weight | | |
| Displacement | in ³ | L | 1941 | 31.8 | Engine Oil Capacity ⁸ | | Min | qts | L | 95.1 90.0 | |
| Compression Ratio | 10.5 : 1 | | | | Max | | qts | L | 129.0 | 122.1 | |
| Exhaust Manifold Type | Water Cooled | | | | ECU Oil Pressure Warning ⁶ | | psi | kPa | 57 | 393 | |
| Turbo Exhaust Outlet Pipe Size | in | mm | 3.50 | 88.9 | ECU Oil Pressure Shut Down ⁶ | | psi | kPa | 47 | 324.1 | |
| Catalyst Inlet Size | in | mm | 5.00 | 127 | Oil Pressure at 1000 RPM (Idle) | | Min | psi | kPa | 74 510.2 | |
| Catalyst Dp | in-H ₂ O | kPa | 20 | 5.1 | Max | | psi | kPa | 82 | 565.4 | |
| 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 | 7 | Coolant Capacity (Engine only) | | gal | L | 29.1 | 110 | |
| Maximum Operating pressure to EPR | in-H ₂ O | kPa | 11 | 2.7 | Coolant Capacity (Radiator only) | | gal | L | 25.3 | 96 | |
| Minimum Operating pressure to EPR | in-H ₂ O | kPa | 7 | 1.7 | Radiator Weight (Dry) | | lb | kg | 1289 | 586 | |
| Minimum Gas Supply Pipe Size ⁵ | in | mm | 3 | 76 | Thermostat Operating | | Cracking | °F | °C | 176 80 | |
| Maximum Pressure Drop Across CAC | psi | kPa | 1.0 | 6.9 | Temperature Range ⁹ | | Full Open | °F | °C | 198 92 | |
| Maximum Allowable Intake Restriction | Clean Air Filter | in-H ₂ O | kPa | 5.0 | 1.2 | ECU Coolant Temp Warning | | °F | °C | 220 104 | |
| | Dirty Air Filter | in-H ₂ O | kPa | 15.0 | 3.7 | ECU Coolant Temp Shutdown | | °F | °C | 230 110 | |
| Spark Plug Part Number | Denso GK3-5 | | | | 50°C Ambient Capable ¹¹ | | Pass | | | | |
| Standard Spark Plug Gap ¹⁰ | in | mm | 0.012 | 0.3 | Max External Coolant Friction Head | | psi | kPa | 7 | 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 | 12 | | | | | | | |
| Performance Data 50Hz ^{3,5} | | | | | | | | | | | |
| Nominal Engine Speed | RPM | | | | 1500 | | Engine Coolant Flow | | gal/min | L/min | 297 1126 |
| Mean Piston Speed | ft/min | m/s | 1476 | 7.5 | Cooling Fan Power ¹¹ | | HP | kW | 18.5 | 14 | |
| RPM Range (Min-Max) ISO 8528-5 G1 | RPM | | | | 1477 - 1519 | | Cooling Fan Speed | | RPM | | 875 |
| Charging Alternator Voltage | Volts | | | | 28 | | Cooling Fan Air Flow ¹¹ | | SCFM | m ³ /min | 34300 971 |
| Charging Alternator Current | Amps | | | | 53 | | | | | | |
| LPG 50hz Standby | | Load | | 100% | | 75% | | 50% | | 25% | |
| Power Rating ^{1,2,3,4} Per ISO 3046 | HP | kWm | 543 | 405 | 407 | 304 | 272 | 203 | 137 | 102 | |
| MEP (@ rated Load on NG) | psi | bar | 148 | 10.2 | 111 | 7.6 | 74 | 5.1 | 37 | 2.6 | |
| Fuel Consumption ^{3,4,7,12} | lb/hr | kg/hr | 249 | 113 | 179 | 81 | 129 | 58 | 87 | 40 | |
| | gal/hr | L/hr | 59 | 222 | 42 | 159 | 30 | 114 | 21 | 78 | |
| BSFC | lb/(hp-hr) | g/(kW-hr) | 0.459 | 279 | 0.439 | 267 | 0.474 | 288 | 0.640 | 389 | |
| Turbine Outlet Temperature | °F | °C | 1168 | 631 | 1077 | 581 | 1022 | 550 | 947 | 508 | |
| Exhaust Flow at Turbine Outlet Conditions (entire engine) | lb/hr | kg/hr | 4051 | 1838 | 2895 | 1313 | 2097 | 951 | 1440 | 653 | |
| | ACFM | m ³ /min | 2729 | 77 | 1858 | 53 | 1306 | 37 | 857 | 24 | |
| Air Induction System ⁵ | | | | | | | | | | | |
| Combustion Air required (entire engine) | lb/hr | kg/hr | 3802 | 1725 | 2716 | 1232 | 1969 | 893 | 1352 | 613 | |
| | ACFM | m ³ /min | 829 | 23 | 592 | 17 | 429 | 12 | 295 | 8 | |
| Compressor Outlet Temperature ² | °F | °C | 246 | 119 | 185 | 85 | 144 | 62 | 113 | 45 | |
| Thermal Balance ⁵ | | | | | | | | | | | |
| 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 | BTU/min | kW | 26302 | 462 | 20356 | 358 | 16728 | 294 | 12536 | 220 | |
| Heat Rejected to CAC | BTU/min | kW | 2486 | 44 | 1115 | 20 | 486 | 9 | 145 | 3 | |
| Heat Rejected 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 | |

¹ Standby and overload ratings based on ISO 3046 gross flywheel power.

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

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

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

⁶ >1400RPM.

⁷ See PSI Energy Technical Spec. 56300019 - Fuel Standard.

⁸ Standard Sump Capacity.

⁹ ± 2 degrees Celsius.

¹⁰ ± 0.002" or 0.05mm.

¹¹ At 0.5 in-H₂O of Package Restriction at 50C Ambient Air Temperature.

¹² Volume calculated using density of 0.717 kg/m³ for NG, 0.51 kg/L for LPG