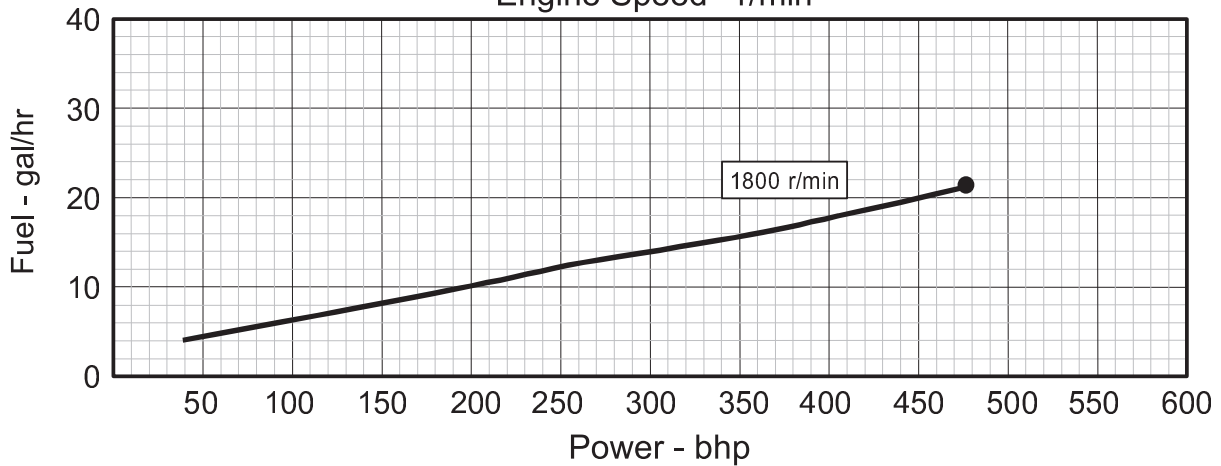
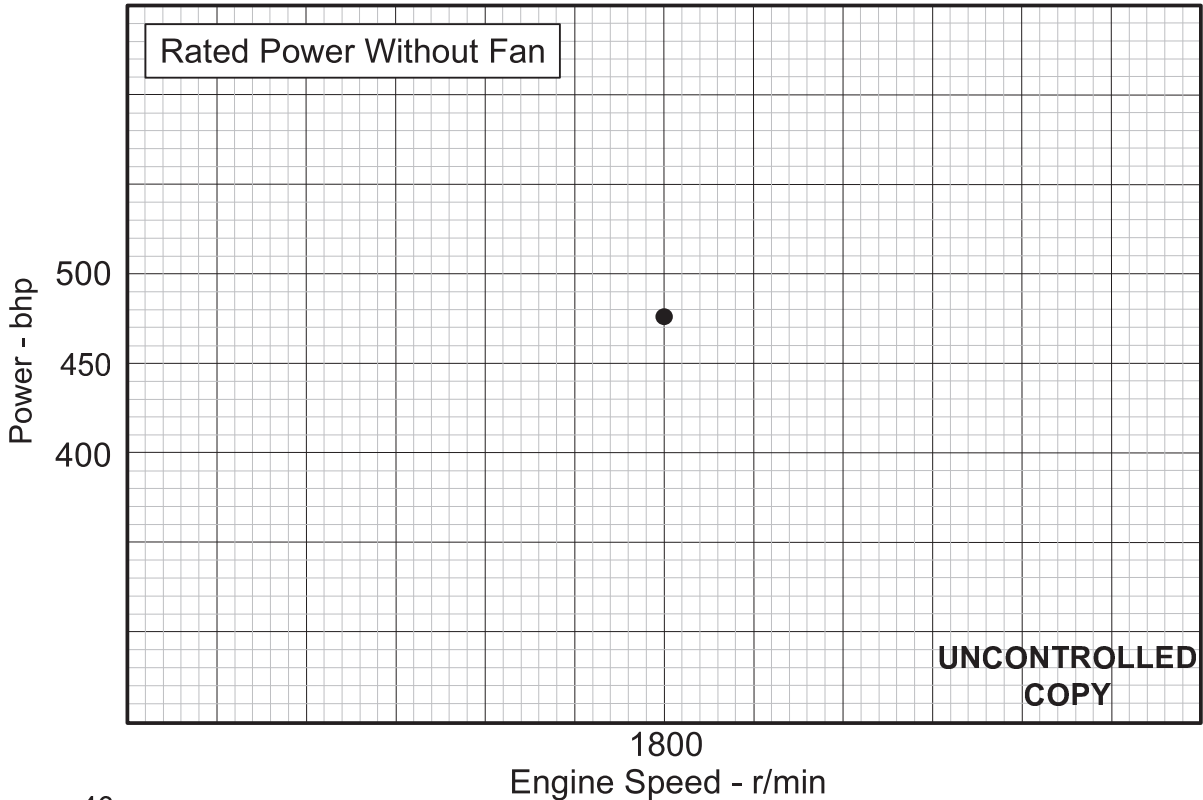




## Generator Set Power

**Model:** Series 60®  
**Rating:** 477 bhp (354 kW) @ 1800 r/min

**Certification:**  
 1998 Nonroad  
 Prime Power



|  |   |   |
|--|---|---|
| <p>Power output guaranteed within 5% at SAE J1995 conditions:<br/>                 77°F (25°C) air inlet temperature; 29.31 in. Hg (99kPa) dry barometer;<br/>                 Fuel consumption data is based on diesel fuel No.2 with a fuel weight of<br/>                 7.11 lb/U.S. gal (.85kg/liter)<br/>                 Performance is based on minimum intake and exhaust restrictions<br/>                 Values derived are from currently available data and subject to change<br/>                 without notice</p> | <p><i>Conversion Factors:</i><br/>                 Power: kW = bhp x 0.746<br/>                 Fuel: L/hr = gal/hr x 3.785</p> | <p><b>Turbo:</b> TMF55 (1.34 A/R)<br/> <b>Injector:</b> 5235695</p> |
|--|---|---|

Certified by: Phil Aronow

**Curve No.** E4-6065-32-15  
**Rev. / Date:** 2 / 8-13-98  
**Sheet No.** 1 of 2

## Performance Curve

# GENERATOR SPECIFICATION SHEET

## PRIME POWER - 1800 r/min

### General Data

|                                       |                         |
|---------------------------------------|-------------------------|
| Model                                 | 6063-TK35               |
| Number of Cylinders                   | 6                       |
| Bore and Stroke – in. x in. (mm x mm) | 5.12 x 6.30 (130 x 160) |
| Displacement – in. <sup>3</sup> (L)   | 778 (12.7)              |
| Compression Ratio                     | 15.0:1                  |
| Piston Speed – ft/min (m/min)         | 1890 (576)              |
| Intake Valves Per Cylinder            | 2                       |
| Exhaust Valves Per Cylinder           | 2                       |
| Combustion System                     | DIRECT INJECTION        |
| Engine Type                           | INLINE 4 CYCLE          |
| Aspiration                            | TURBOCHARGED            |

### Configuration

|                              |                  |
|------------------------------|------------------|
| Injection Device             | EUI              |
| Turbocharger                 | TMF55 (1.34 A/R) |
| Charge Air Cooling           | AIR TO AIR       |
| Engine Crankcase Vent System | OPEN             |

### Physical Data

|   |               |
|---|---------------|
| Size:                                   |               |
| Length – in. (mm)                       | 57.2 (1453)   |
| Width – in. (mm)                        | 35 (889)      |
| Height – in. (mm)                       | 54.2 (1377)   |
| Weight, Dry – lb (kg)                   | 2630 (1193)   |
| Weight, Wet – lb (kg)                   | 2752 (1248)   |
| Center of Gravity Distance:             |               |
| From R.F.O.B. (x axis) – in. (mm)       | 22.3 (566)    |
| Above Crankshaft (y axis) – in. (mm)    | 8.6 (218)     |
| Right of Crankshaft (z axis) – in. (mm) | -1.4 (-35.6)  |
| Installation Drawing                    | 23515495 REF. |

### Mechanical Data

|                                       |             |
|---------------------------------------|-------------|
| Thrust Bearing Load Limit – lb (N)    | 900 (4000)  |
| Maximum Static Bending Moment at Rear |             |
| Face of Block – lb-ft (N-m)           | 1000 (1356) |
| Additional Mechanical Data            | E4-606-32-1 |

### Fuel System

|   |              |
|---|--------------|
| Fuel Injector – Part Number               | 5235695      |
| Injection Timing Height                   | 78.8         |
| Certification Code                        | 5020         |
| Fuel Consumption – lb/hr (kg/hr)          | 151.8 (69.0) |
| Fuel Consumption – gal/hr (L/hr)          | 21.3 (81.0)  |
| Fuel Spill – lb/hr (kg/hr)                | 465 (211)    |
| Fuel Spill – gal/hr (L/hr)                | 65.4 (248)   |
| Total Fuel Flow – lb/hr (kg/hr)           | 617 (280)    |
| Total Fuel Flow – gal/hr (L/hr)           | 86.8 (328)   |
| Maximum Fuel Inlet Temperature – °F (°C)  | 140 (60)     |
| Maximum Fuel Pump Suction:                |              |
| Clean System – in. Hg (kPa)               | 6 (20.3)     |
| Dirty System – in. Hg (kPa)               | 12 (41)      |
| Fuel Filter Size, Primary – Microns       | 25           |
| Fuel Filter Size, Secondary – Microns     | 8            |
| Fuel Spill Restrictive Fitting – in. (mm) | 0.08 (2.03)  |

### Lubrication System

|   |           |
|---|-----------|
| Oil Pressure at Rated Speed – lb/in. <sup>2</sup> (kPa) | 50 (345)  |
| Oil Pressure at Low Idle – lb/in. <sup>2</sup> (kPa)    | 12 (83)   |
| In Pan Oil Temperature – °F                             | 235 (113) |
| Oil Flow – gal/min (L/min)                              | 31 (117)  |
| Oil Pan Capacity:                                       |           |
| High Limit – qt (L)                                     | 32 (30)   |
| Low Limit – qt (L)                                      | 26 (25)   |
| Total Engine Oil Capacity with Filters – qt (L)         | 38 (36)   |
| Engine Angularity Limits, Front Up – Degrees            | 27        |
| Engine Angularity Limits, Front Down – Degrees          | 27        |
| Engine Angularity Limits, Side Tilt – Degrees           | 21        |

### Electrical System

|   |        |
|---|--------|
| Recommended Battery Capacity (CCA @ 0°F): |        |
| 12 Volt System                            | 1875   |
| 24 Volt System                            | 950    |
| Maximum Resistance of Starting Circuit:   |        |
| 12 Volt System – ohms                     | 0.0012 |
| 24 Volt System – ohms                     | 0.002  |

### Cooling System

|  |               |
|--|---------------|
| Engine Heat Rejection – Btu/min (kW)   | 7050 (124) †  |
| Charge Air Cooler Heat Rejection – Btu/min (kW)                                | 4610 (81.0) † |
| Engine Radiated Heat – Btu/min (kW)  | 2775 (48.8) † |
| Coolant Flow – gal/min (L/min)   | 96 (363)      |
| Thermostat:  |               |
| Start to Open – °F (°C)  | 190 (88)      |
| Fully Open – °F (°C)   | 205 (96)      |
| Maximum Water Pump Inlet Restriction – in. Hg (kPa)                            | 0 (0)         |
| Engine Coolant Capacity – qt (L)   | 24 (23)       |
| Minimum Pressure Cap – lb/in. <sup>2</sup> (kPa)                               | 9 (62)        |
| Water Pump Discharge Pressure  |               |
| (Exclusive Pressure Cap) – lb/in. <sup>2</sup> (kPa)                           | 16 (10)       |
| Maximum Top Tank Temperature – °F (°C)   | 210 (99)      |
| Minimum Top Tank Temperature – °F (°C)   | 160 (71)      |
| Minimum Coolant Fill Rate – gal/min (L/min)                                    | 3 (11.4)      |
| Cooling Index (110 °F Ambient w/H <sub>2</sub> O @ Sea Level):                 |               |
| Maximum Air to Water Diff. – °F (°C)   | 100 (56)      |
| Deaeration. Air Handling Capacity – ft <sup>3</sup> /min (m <sup>3</sup> /min) | 0.6 (0.017)   |
| Minimum Drawdown Requirement – qt (L)  | 4 (3.8)       |

### Air System

|  |             |
|--|-------------|
| Maximum Ambient to Turbo Compressor Inlet                    |             |
| Temperature Rise – °F (°C)                                   | 30 (16.7)   |
| Maximum Air Intake Restriction:                              |             |
| Clean Air Cleaner – in. H <sub>2</sub> O (kPa)               | 12 (3.0)    |
| Dirty Air Cleaner – in. H <sub>2</sub> O (kPa)               | 20 (5.0)    |
| Engine Air Flow – ft <sup>3</sup> /min (m <sup>3</sup> /min) | 1070 (30.3) |
| Manifold Pressure – in. Hg (kPa)                             | 58 (196)    |
| Recommended Intake Pipe Outer Diameter – in. (mm)            | 5 (127)     |
| Maximum Intake Manifold Temperature – °F (°C)                | 150 (66)    |
| Maximum Crankcase Pressure – in. H <sub>2</sub> O (kPa)      | 3.0 (0.75)  |

### Exhaust System

|   |             |
|---|-------------|
| Exhaust Flow – ft <sup>3</sup> /min (m <sup>3</sup> /min) | 2530 (71.6) |
| Exhaust Temperature – °F (°C)                             | 770 (410)   |
| Maximum Back Pressure – in. Hg (kPa)                      | 3.0 (10.1)  |
| Recommended Exhaust Pipe Diameter – in. (mm)              | 5 (127)     |

### Performance Data

|                                  |              |
|----------------------------------|--------------|
| Rated Power – bhp (kW)           | 477 (356)    |
| Rated Speed – r/min              | 1800         |
| BMEP – lb/in. <sup>2</sup> (kPa) | 270 (1862)   |
| Friction Power – fhp (kW)        | 58 (43)      |
| Altitude Capability – ft (m)     | 12000 (3660) |

### Fuel Consumption

|                                  |             |
|----------------------------------|-------------|
| Fuel – gal/hr (L/hr) – 10% Power | 3.3 (12.5)  |
| 25% Power                        | 6.1 (23.2)  |
| 50% Power                        | 11.0 (41.6) |
| 75% Power                        | 15.9 (60.2) |
| 100% Power                       | 21.3 (81.0) |

### Emission Data

|                      |                 |
|----------------------|-----------------|
| Certification        | 1996-98 Nonroad |
| Noise – db(A) @ 1m   | 102.6 *         |
| Smoke – Bosch Number | 2.6*            |

|                        | Load | 10%  | 25%  | 50%  | 75%  | 100% | 5 Mode<br>Cycle<br>g/bhp·hr |
|------------------------|------|------|------|------|------|------|-----------------------------|
| NO <sub>x</sub> – g/hr | 590  | 1155 | 1540 | 2150 | 2610 | 6.56 |                             |
| HC – g/hr              | 29   | 17   | 15   | 16   | 17.0 | 0.07 |                             |
| CO – g/hr              | 250  | 90   | 60   | 66   | 80   | 0.39 |                             |
| PM – g/hr              | 5.1  | 6.0  | 8.0  | 10.0 | 13.0 | 0.04 |                             |

\* Estimated

† For cooling system design capacity see standby power rating E4-6065-32-5

All values are at rated speed and power and with standard hardware, unless otherwise noted.

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