

DETROIT DIESEL

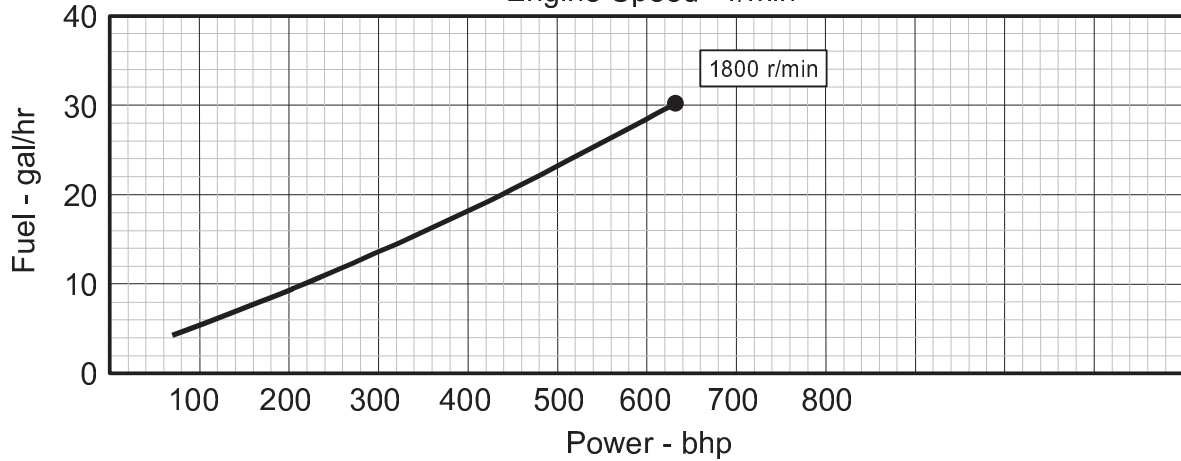
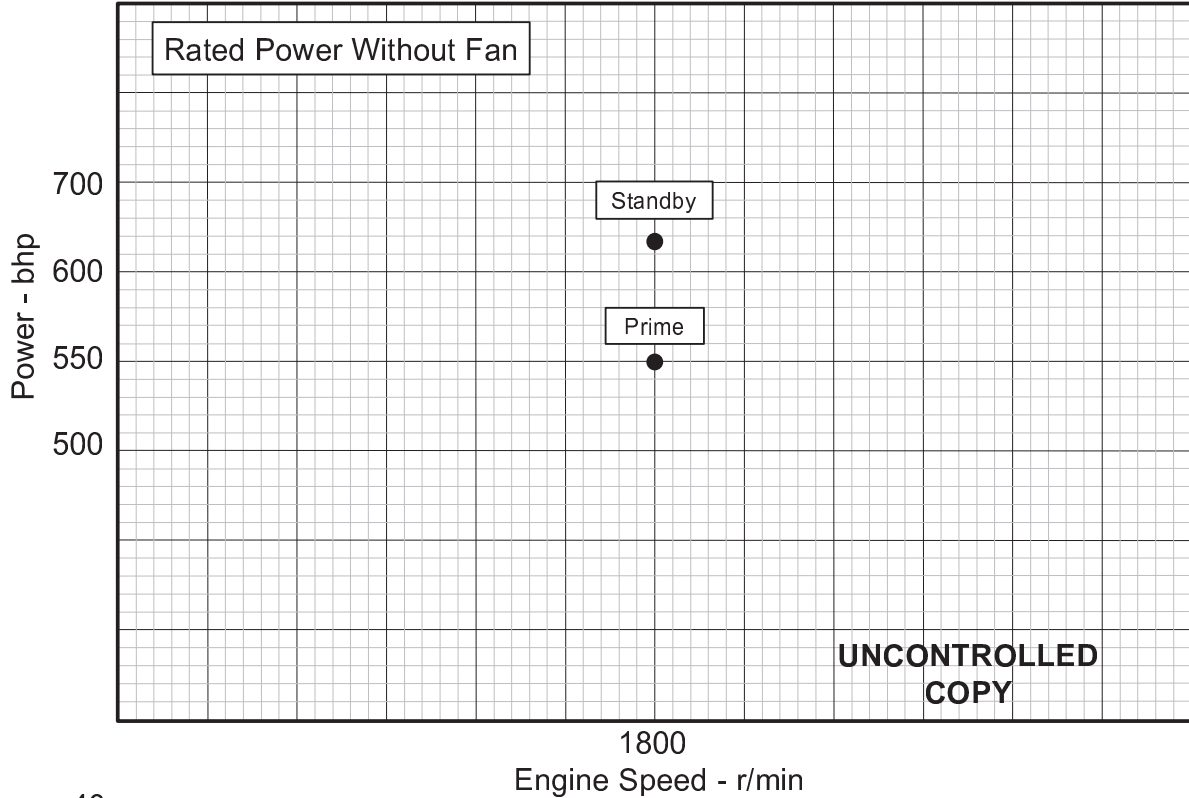


Generator Set Power

Model: Series 60®

Rating: Standby 635 bhp (474 kW) @ 1800 r/min
 Prime 550 bhp (410 Kw) @ 1800 r/min

Certification:
 1999 Nonroad



<p>Power output guaranteed within 5% at SAE J1995 conditions: 77°F (25°C) air inlet temperature; 29.31 in. Hg (99kPa) dry barometer; Fuel consumption data is based on diesel fuel No.2 with a fuel weight of 7.11 lb/U.S. gal (.85kg/liter) Performance is based on minimum intake and exhaust restrictions Values derived are from currently available data and subject to change without notice</p>	<p><i>Conversion Factors:</i> Power: kW = bhp x 0.746 Fuel: L/hr = gal/hr x 3.785</p>	<p>6N04M - 7057 Catalytic Device - (not required)</p>
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Certified by: 

Performance Curve

Curve No. E4-6065-32-23
Rev. / Date : 2 / 3-24-99
Sheet No. 1 of 2

Generator Specification Sheet

Standby Power - 1800 RPM

General Data

Model.....	6063-HK35
Number of Cylinders	6
Bore and Stroke – in. x in. (mm x mm).....	5.24 x 6.61 (133 x 168)
Displacement – in. ³ (L).....	855 (14.0L)
Compression Ratio	15:1

Configuration

Turbocharger.....	GT4708 (1.27 A/R)
Camshaft (92J/16E/44N)	23524292
Charge Air Cooling.....	Air to Air

Physical Data

Size:	
Length – in. (mm)	56.9 (1448)
Width – in. (mm).....	36.3 (923)
Height – in. (mm).....	50.4 (1279)
Weight, Dry – lb (kg).....	2550 (1157)
Weight, Wet – lb (kg).....	2678 (1215)
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.....	2SA-948

Mechanical Data

Thrust Bearing Load Limit, Continuous – lb (N)	900 (4000)
Thrust Bearing Load Limit, Intermittent – lb (N).....	1800 (8000)
Maximum Static Bending Moment at Rear	
Face of Block – lb-ft (N-m).....	1000 (1356)
Additional Mechanical Data	E4-6040-32-01

Fuel System

Fuel Injector	5237026
Injection Timing Height – mm	81.0
Maximum Fuel Inlet Temperature – °F (°C).....	140 (60)
Fuel Temperature Rise @ Rated – °F (°C).....	N/A
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 (2.0)

Rated Speed gal/hr (L/hr)

Fuel Consumption	30.3 (114.5)
Spill Flow	58.2 (220)
Total Flow	88.6 (335)

Lubrication System

Oil Pressure at Rated Speed – lb/in. ² (kPa)	50 (345)
Oil Pressure at Low Idle – lb/in. ² (kPa).....	12 (83)
In Pan Oil Temperature – °F (°C)	235 (113)
Oil Flow – gal/min (L/min)	36 (136)
Oil Pan Capacity, High Limit – qt (L).....	32 (30)
Oil Pan Capacity, Low Limit – qt (L)	26 (25)
Total Engine Oil Capacity with Filters – qt (L)	38 (36)
Oil Filter, Two Full Flow – microns.....	30

Electrical System (Engine Only w/out Parasitic Loads)

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).....	9800 (176)
Charge Air Cooler Heat Rejection – Btu/min (kW).....	5650 (99)
Engine Radiated Heat – Btu/min (kW).....	5800 (102)
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. ² (kPa).....	9 (62)
Water Pump Discharge Pressure	
(Exclusive Pressure Cap) – lb/in. ² (kPa).....	16 (10)
Maximum Top Tank Temperature – °F (°C)	210 (99)

(Cooling System Continued)

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 ₂ O @ Sea Level):	
Maximum Air to Water Diff. – °F (°C).....	100 (56)
Deaeration, Air Handling Capacity – ft ³ /min (m ³ /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:		
Dirty Air Cleaner – in. H ₂ O (kPa).....	20 (5)	
Clean Air Cleaner – in. H ₂ O (kPa).....	12 (3)	
Engine Air Flow:		
Rated Speed – ft ³ /min (m ³ /min).....	1270 (36.0)	
Turbocharger Compressor Out Temperature		
Rated Speed – °F (°C).....	378 (192)	
Manifold Pressure – in. Hg (kPa).....	64.3 (217)	
Recommended Intake Pipe Diameter – in. (mm).....	6 (152) †	
Maximum Charge Air Cooler System Total		
Pressure Drop – in. Hg (kPa)	4.0 (13.5)	
Maximum Intake Manifold Temp. – °F (°C).....	150 (66)	
Max. Ambient to Intake Manifold Temp. Diff. – °F (°C)....	45 (35) †	

Maximum Crankcase Pressure – in. H ₂ O (kPa).....	3.0 (0.75)
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Exhaust System

Exhaust Flow:	
Rated Speed – ft ³ /min (m ³ /min).....	3490 (98.8)
Exhaust Temperature	
Rated Speed – °F (°C).....	973 (523)
Maximum Back Pressure – in. Hg (kPa).....	3.0 (10.1)
Recommended Exhaust Pipe Diameter:	
Single – in. (mm).....	5 (127)
Dual – in. (mm).....	4 (102)
Max. Exhaust Brake Back Pressure – in. Hg (kPa)	80 (270)

Performance Data

Rated Power – bhp (kW).....	635 (474)
Rated Speed – r/min	1800
BMEP – lb/in ² (kPa).....	327 (2250)
Friction Power – hp (kW).....	58 (43)
Altitude Capability – ft (m).....	15000 (4570) †

Fuel Consumption

Fuel – gal/hr (L/hr) – 10% Power.....	4.2 (15.8)
25% Power.....	8.0 (30.1)
50% Power.....	14.5 (55.0)
75% Power.....	22.0 (83.1)
100% Power.....	30.3 (114.5)

Emission Data

Certification Approval – Nonroad.....	1999
(CWC) Certification Word Code.....	5031
Noise – db(A) @ 1m.....	N/A
Smoke – Bosch Number	N/A

	Load	10%	25%	50%	75%	100%	5 Mode Cycle g/bhp-hr †
No _x – g/hr	518	960	1984	2978	3988		6.39
HC – g/hr	16.7	11.6	12.1	13.4	16.0		
CO – g/hr	226	88	77	248	1652		
PM – g/hr	13.2	13.8	13.7	20.3	71.7		

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† Revised

N/A = Not Available

Curve No. E4-6065-32-23
Rev. / Date: 2 / 3-24-99
Sheet No. 2 of 2