



DEERE

DIESEL

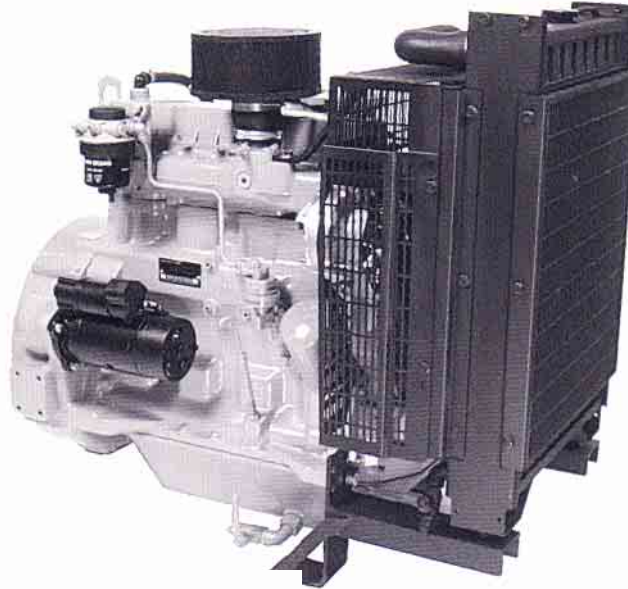
4039DF

SERIES 300

SPECIFICATIONS

For Gen Set Applications

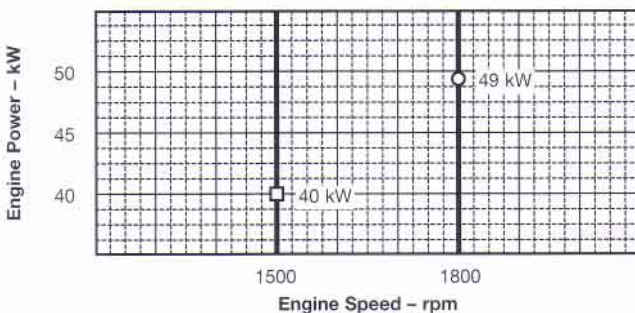
Power Units



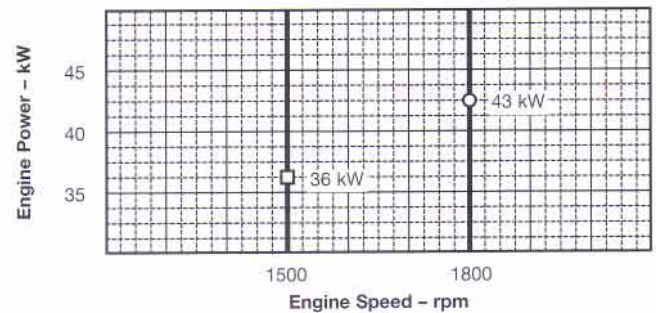
PERFORMANCE DATA

Speed (Hz)	Generator Efficiency %	Fan Power kW	Power Factor	Calculated Gen Set rating					
				Prime			Standby		
				kW net	kVA	kWe	kW net	kVA	kWe
1500 (50)	88-92	1.5	0.8	34.5	38-40	30-32	38.5	42-44	34-36
1800 (60)	88-92	2	0.8	41	45-48	36-38	47	52-54	41-44

STANDBY POWER



PRIME POWER



Performance Data

	1500 rpm	1800 rpm
Gross Rated Power (without fan)		
Prime = PRP - kW (hp)	36(48)	43(58)
Standby = LTP - kW (hp)	40(54)	49(66)
Rated Speed - rpm	1500	1800
Low Idle Speed - rpm	No	No
BIVIEP		
Prime = PRP - kPa (psi)	730(106)	737(107)
Standby = LTP - kPa (psi)	820(119)	840(122)
Friction Power @ Rated Speed - kW (hp)	14(19)	17(23)
Altitude Capability - m (ft)	1525(5000)	1525(5000)
Air: Fuel Ratio		
Prime = PRP	21.0 : 1	22.0 : 1
Standby = LTP	18.0 : 1	20.0 : 1
Noise		
Prime = PRP - dB(A) @ 1 m	91.8	94.3
Standby = LTP - dB(A) @ 1 m	92.3	95.0

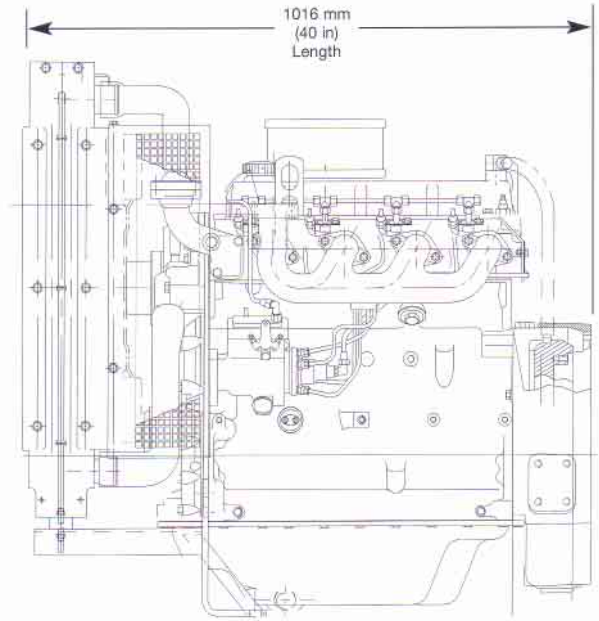
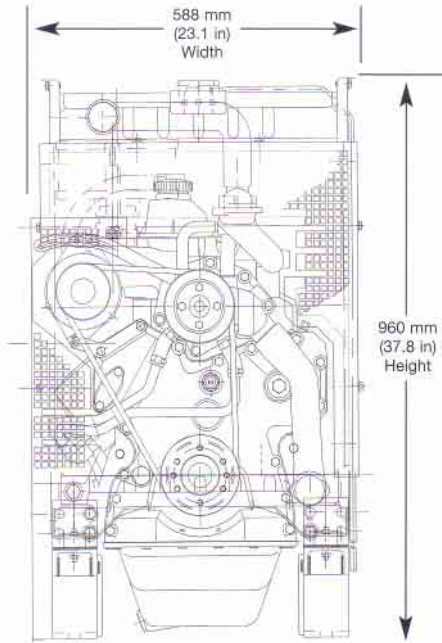
Photographs may show non standard equipment.

STANDBY POWER is the nominal engine power available at varying load factors for up to 500 hours per year. This rating conforms to ISO 8528-1 "limited time running power (LTP)". The calculated generator set rating range for standby applications is based on minimum engine power (nominal -5%) to provide 100% meet-or-exceed performance for assembled

standby generator sets.
PRIME POWER is the nominal power an engine is capable of delivering with a variable load for an unlimited number of hours per year. This rating conforms to ISO 8528-1 "prime power (PRP)".



Power Unit Specification Data



Fuel Consumption - l/h	1500 rpm		1800 rpm	
	Prime = PRP	Standby = LTP	Prime = PRP	Standby = UP
25% Power	3.0	3.5	4.0	4.5
50% Power	5.0	5.5	6.0	6.5
75% Power	7.5	7.5	9.0	9.5
100% Power	9.0	10.0	10.5	11.5

General Data

Model	4039DF
Number of cylinders	4
Bore and Stroke - mm (in.)	106 x 110 (4.19 x 4.33)
Displacement - dml (in ³)	3.9(239)
Compression Ratio	17.8: 1
Valves per Cylinder - Intake/Exhaust	1 / 1
Firing Order	1-3-4-2
Combustion System	Direct Injection
Engine type	In-line, 4-cycle
Aspiration	Natural
Engine Crankcase Vent System	Open
Engine Crankcase Pressure - kPa (in.H2O)	0.5(2)

Physical Data

Length - mm (in.)	1016(40.0)
Width - mm (in.)	588(23.1)
Height - mm (in.)	960(37.8)
Weight, dry - kg (lb)	468(1032)
(Includes flywheel housing, flywheel, & electrics)	
Center of gravity location	
From Rear Face of block (X-axis) - mm (in.)	306(12.0)
Right of Crankshaft (Y-axis) - mm (in.)	-13(-0.5)
Above Crankshaft (Z-axis) - mm (in.)	145(5.7)

Electrical Data

Recommended Battery Capacity (CCA)	
12 Volt System - Amp	640
24 Volt System - Amp	570
Maximum Allowable Starting Circuit Resistance	
12 Volt System - Ohm	0.0012
24 Volt System - Ohm	0.002
Starter Rolling Current - 12 Volt System	
At O'C (32°F) - Amp	780
At -30°C (-22°F) - Amp	1000
Starter Rolling Current - 24 Volt System	
At O'C (32°F) - Amp	600
At -30°C (-22°F) - Amp	700

Specifications and design subject to change without notice.

Air System

	1500 rpm	1800 rpm
Maximum Allowable Temperature Rise		
Ambient Air to Engine Inlet - °C (oF)	8(15)	8(15)
Maximum Air Intake Restriction		
Dirty Air Cleaner - kPa (in. H2O)	6.25(25)	6.25(25)
Clean Air Cleaner - kPa (in. H2O)	3(12)	3(12)
Engine Air Flow		
Prime = PRIP - m ³ /min (ft ³ /min)	2.4(85)	3.0(107)
Standby = LTP - m ³ /min (ft ³ /min)	2.6(93)	3.3(117)

Exhaust System

	1500 rpm	1800 rpm
Exhaust Flow		
Prime = PRIP - m ³ /min (ft ³ /min)	6.7(237)	8.4(300)
Standby = LTP - m ³ /min (ft ³ /min)	7.4(261)	9.3(328)
Exhaust Temperature		
Prime = PRP - °C (°F)	540 (1004)	560 (1040)
Standby = LTP - °C (°F)	600(1112)	625(1157)
Max. Allow. Back Pressure - kPa (in.H2O)	7.5(30)	7.5(30)
Recommended Exhaust Pipe Dia - mm (in.)	63.5 (2.5)	63.5(2.5)

Cooling System

	1500 rpm	1800 rpm
Thermostat Start to open - oC (oF)	82(180)	82(180)
Power Unit Coolant Capacity - L (qt)	16.5(17.5)	16.5(17.5)
Minimum Air to Boil temperature - oC (oF)	47(117)	47(117)

Fuel System

	1500 rpm	1800 rpm
Fuel Injection Pump	Stanadyne	Stanadyne
Governor Regulation	5%	5%
Governor Type	Mechanical	Mechanical
Total Fuel Flow		
Prime = PRIP - kg/h (lb/h)	92(203)	95(210)
Standby = LTP - kg/h (lb/h)	92(203)	95(210)
Maximum Fuel Transfer Pump Suction - m (ft)	0.9(3)	0.9(3)
Fuel Filter Micron Size @ 98% Efficiency	8	8

Lubrication System

	1500 rpm	1800 rpm
Oil Pressure at Rated Speed - kPa (psi)	345(50)	345(50)
Oil Pressure at Low Idle - kPa (psi)	105(15)	105(15)
In Pan Oil Temperature - oC (oF)	115(240)	115(240)
Total Engine Oil Capacity with filter - L (qt)	12(12.7)	12(12.7)
Engine Angularity Limits (continuous)		
Any Direction - degrees	20	20



Deere Power Systems Group
John Deere Saran
B.P. 11013
45401 Fleury les Aubrais Cedex - France

Tel.: (33) 2 38 82 61 19
Fax: (33) 2 38 84 62 66
<http://www.deere.com/jdpower>



