



DEERE

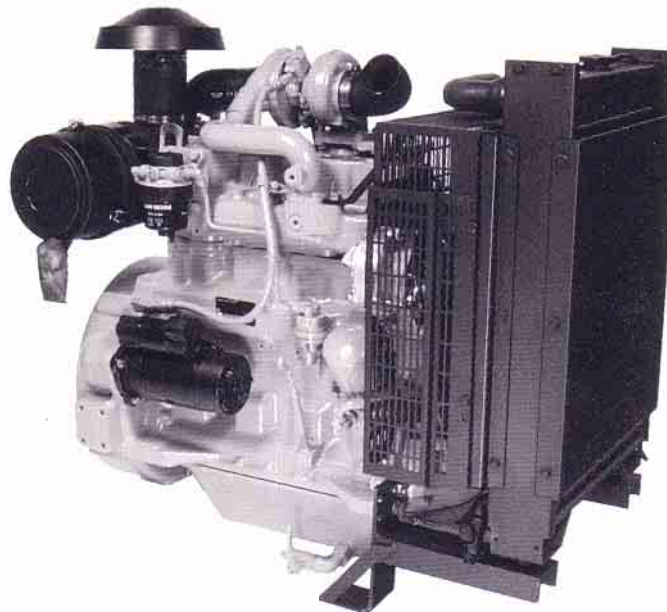
DIESEL

4039TF

SERIES 300

SPECIFICATIONS
For Gen Set Applications

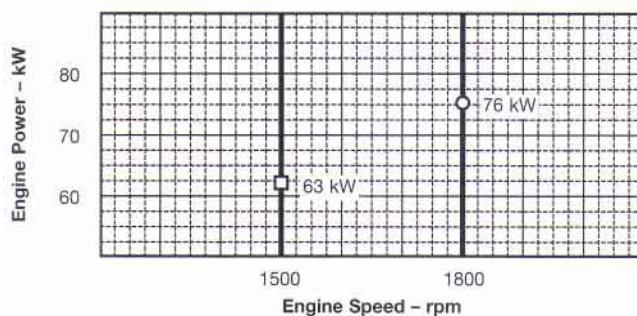
Power Units



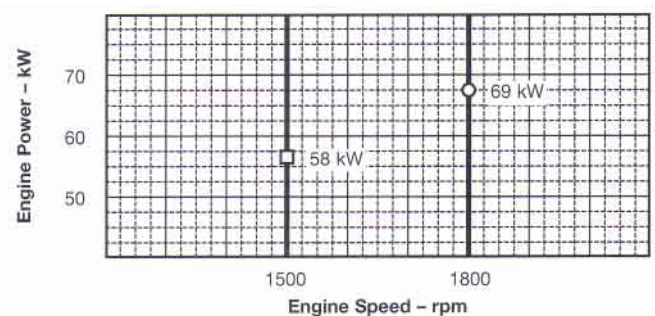
PERFORMANCE DATA

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	2	0.8	56	61-44	49-52	61	66-70	53-56
1800 (60)	88-92	2.5	0.8	66.5	73-77	58-61	73.5	80-84	64-67

STANDBY POWER



PRIME POWER



Performance Data

	1500 rpm	1800 rpm
Gross Rated Power (without fan)		
Prime = PRIP - kW (hp)	57(76)	69(92)
Standby = LTP - kW (hp)	63(85)	76(102)
Rated Speed - rpm	1500	1800
Low Idle Speed - rpm	No	No
BIVIEP		
Prime = PRP - kPa (psi)	1158(168)	1164(169)
Standby = LTP - kPa (psi)	1296(188)	1296(188)
Friction Power @ Rated Speed - kW (hp)	15(20)	18(24)
Altitude Capability - m (ft)	1525(5000)	1525(5000)
Air: Fuel Ratio		
Prime = PRP	20.0 : 1	24.0 : 1
Standby = LTP	19.0 : 1	22.0 : 1
Noise		
Prime = PRP - dB(A) @ 1 m	90.1	91.1
Standby = LTP - dB(A) @ 1 m	90.3	91.3

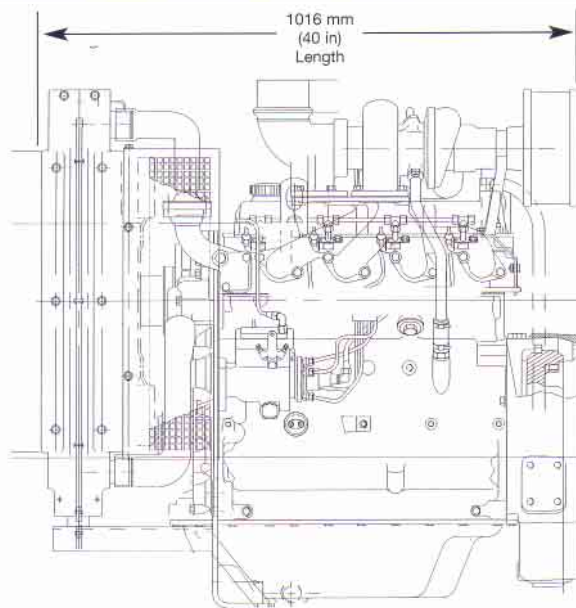
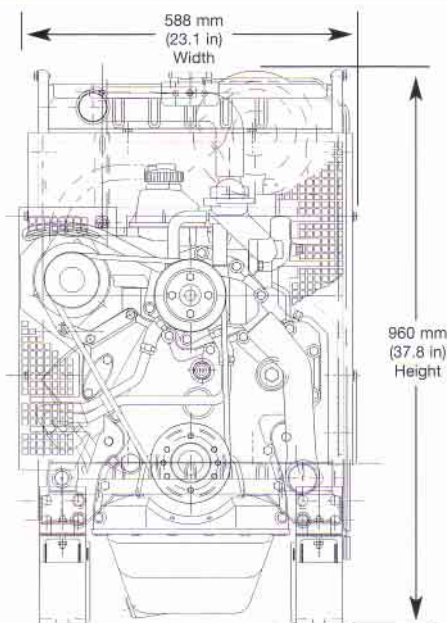
STANDBY POWER is the nominal engine power available at varying load factors for up to 500 hours per year. This rating conforms to ISO 8528-1 "limited time running power (LTP)". The calculated generator set rating range for standby applications is based on minimum engine power (nominal -5%) to provide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

Photographs may show non standard equipment.



Power Unit Specification Data



Fuel Consumption - l/h	1500 rpm		1800 rpm	
	Prime = PRP	Standby = LTP	Prime = PRP	Standby = LTP
25% Power	3.5	4.0	4.5	5.5
50% Power	7.0	7.5	9.0	10.5
75% Power	10.5	12.0	13.0	14.5
100% Power	14.5	16.0	17.0	19.0

General Data

Model	4039TF
Number of cylinders	4
Bore and Stroke - mm (in.)	106 x 110 (4.19 x 4.33)
Displacement - dm ³ (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	Turbocharged
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)	488(1076)
(includes flywheel housing, flywheel, & electrics)	
Center of gravity location	
From Rear Face of block (X-axis) - mm (in.)	300(11.8)
Right of Crankshaft (Y-axis) - mm (in.)	-18(-0.7)
Above Crankshaft (Z-axis) - mm (in.)	149(5.8)

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 0°C (32°F) - Amp	780
At -30°C (-22°F) - Amp	1000
Starter Rolling Current - 24 Volt System	
At 0°C (32°F) - Amp	600
At -30°C (-22°F) - Amp	700

Air System

	1500 rpm	1800 rpm
Maximum Allowable Temperature Rise		
Ambient Air to Engine Inlet - °C (°F)	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 = PRP - m ³ /min (ft ³ /min)	3.7(130)	5.0(175)
Standby = LTP - m ³ /min (ft ³ /min)	4.0(141)	5.1(180)

Exhaust System

	1500 rpm	1800 rpm
Exhaust Flow		
Prime = PRP - m ³ /min (ft ³ /min)	11.1(390)	13.2(465)
Standby = LTP - m ³ /min (ft ³ /min)	11.8(415)	14.0(495)
Exhaust Temperature		
Prime = PRP - °C (°F)	566(1050)	532(990)
Standby = LTP - °C (°F)	623(1153)	585(1085)
Max. Allow. Back Pressure - kPa (in.H2O)	7.5(30)	7.5(30)
Recommended Exhaust Pipe Dia - mm (in.)	101.6(4)	101.6(4)

Cooling System

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

Fuel System

	1500 rpm	1800 rpm
Fuel Injection Pump	Stanadyne	Stanadyne
Governor Regulation	5%	5%

	1500 rpm	1800 rpm
Governor Type		
	Mechanical	Mechanical
Total Fuel Flow		
Prime = PRP - 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 - °C (°F)		
	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

Specifications and design subject to change without notice.



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

