



# DEERE

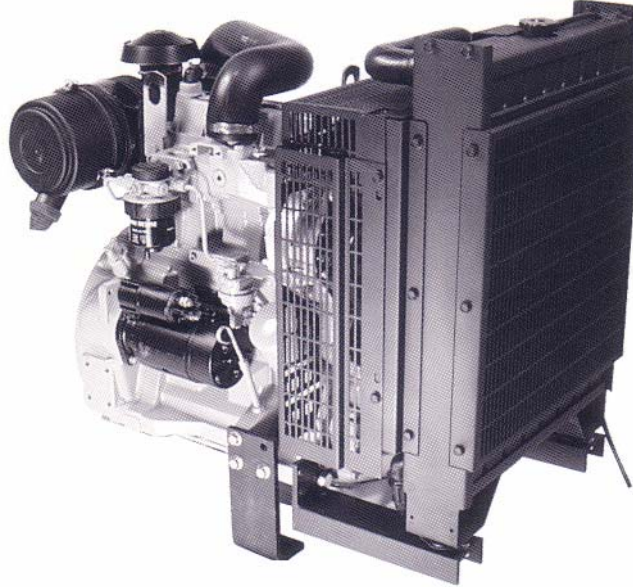
## DIESEL

# 3029DF

## SERIES 300

SPECIFICATIONS  
For Gen Set Applications

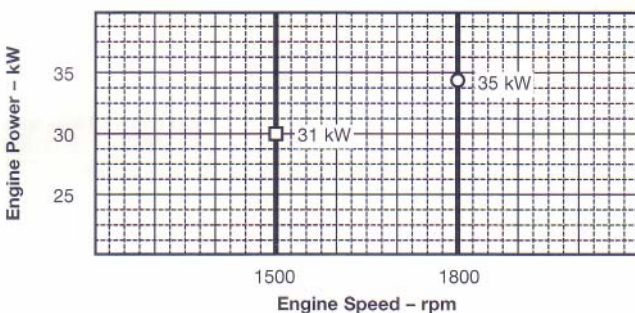
### Power Units



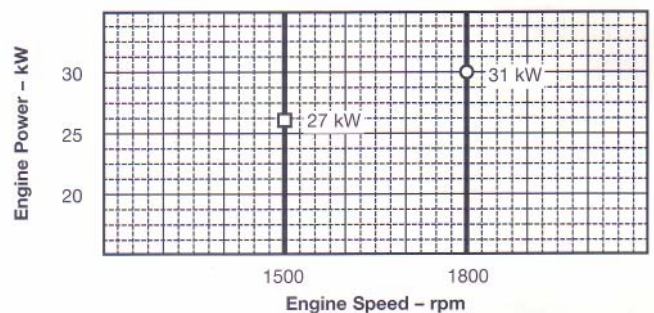
### PERFORMANCE DATA

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	0.8	26	28.5-30	23-24	30	33-34.5	26-27.5
1800 (60)	88-92	1-1.5	0.8	30	33-34.5	26-27.5	33.5	37-40	30-32

### STANDBY POWER



### PRIME POWER



#### Performance Data

	1500 rpm	1800 rpm
Gross Rated Power (without fan)		
Prime = PRIP - kW (hp)	27(31)	31 (42)
Standby = LTP - kW (hp)	31 (42)	35(47)
Rated Speed - rpm	1500	1800
Low Idle Speed - rpm	No	No
BIVIEP		
Prime = PRIP - kPa (psi)	744(108)	712(103)
Standby = LTP - kPa (psi)	855(124)	804(117)
Friction Power @ Rated Speed - kW (hp)	13(18)	16(21)
Altitude Capability - m (ft)	1525(5000)	1525(5000)
Air: Fuel Ratio		
Prime = PRIP	21.0 : 1	24.0 : 1
Standby = LTP	20.0 : 1	22.0 : 1
Noise		
Prime = PRIP - dB(A) @ 1 m	91.1	92.4
Standby = LTP - dB(A) @ 1 m	91.8	92.7

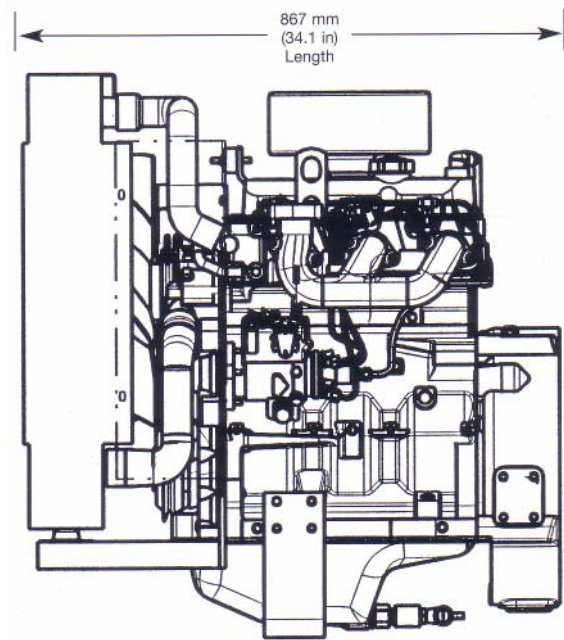
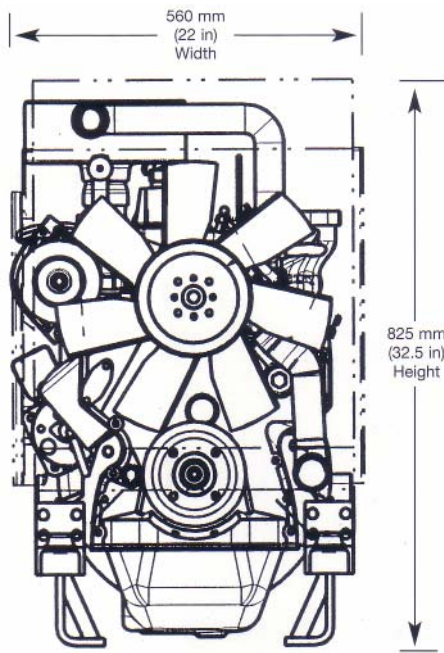
**STANDBY POWER** is the nominal engine power available at varying load factors for up to 500 hours per year. This rating conforms to ISO 8528-1 "limited time running power (LTP)". The calculated generator set rating range for standby applications is based on minimum engine power (nominal -5%) to provide 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 - 1/h	1500 rpm		1800 rpm	
	Prime = PRP	Standby = LTP	Prime = PRP	Standby = LTP
25% Power	2.2	2.5	2.7	2.8
50% Power	3.6	4.0	4.4	5.0
75% Power	5.0	5.5	6.5	7.0
100% Power	7.0	8.5	8.0	9.0

## General Data

Model	3029DF
Number of cylinders	3
Bore and Stroke - mm (in.)	106 x 110 (4.19 x 4.33)
Displacement - dml (in <sup>3</sup> )	2.9(179)
Compression Ratio	17.8 :1
Valves per Cylinder - Intake/Exhaust	1 / 1
Firing Order	1-2-3
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.)	867(34.1)
Width - mm (in.)	560(22.0)
Height - mm (in.)	825(32.5)
Weight, dry - kg (lb)	385(849)
(includes flywheel housing, flywheel, & electrics)	
Center of gravity location	
From Rear Face of block (X-axis) - mm (in.)	230(9)
Right of Crankshaft (Y-axis) - mm (in.)	-10(-0.4)
Above Crankshaft (Z-axis) - mm (in.)	132(5.2)

## 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

Specifications and design subject to change without notice.

## 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 <sup>3</sup> /min (ft <sup>3</sup> /min)	1.7(61)	2.2(78)
Standby = LTP - ml/min (ft <sup>3</sup> /min)	1.8(66)	2.3(80)

## Exhaust System

	1500 rpm	1800 rpm
Exhaust Flow		
Prime = PRP - ml/min (ft <sup>3</sup> /min)	4.7(170)	6.1(218)
Standby = LTP - ml/min (ft <sup>3</sup> /min)	5.2(185)	6.4(225)
Exhaust Temperature		
Prime = PRP - °C (°F)	555 (1027)	570 (1060)
Standby = LTP - °C (°F)	610 (1130)	630 (1166)
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 - °C (°F)	82(180)	82(180)
Power Unit Coolant Capacity - L (qt)	14.5 (15.5)	14.5 (15.5)
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%
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)	6(6.3)	6(6.3)



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