



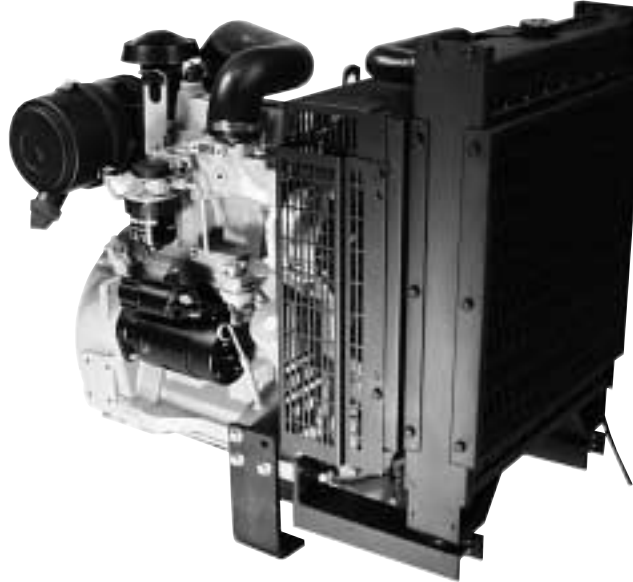
JOHN DEERE

3029DF128 SERIES 300

SPECIFICATIONS

For Gen Set Applications

Power Units

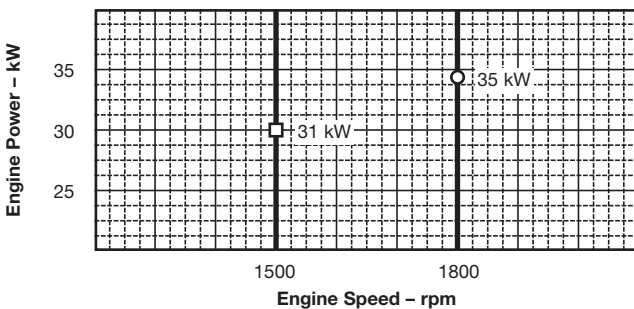


PERFORMANCE DATA

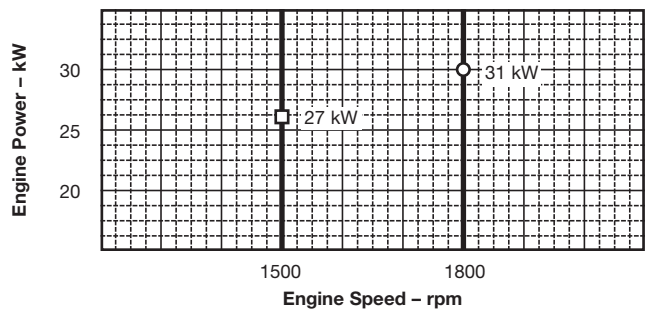
Speed (Hz)	Generator Efficiency %	Fan Power kW	Power Factor	Calculated Gen Set rating					
				Prime			Standby ⁽¹⁾		
				kW net	kVA	kWe	kW net	kVA	kWe
1500 (50)	88-92	1,5	0.8	26	28-30	23-24	29.5	32-34	26-27
1800 (60)	88-92	2	0.8	30	32-34	25-27	33	36-38	29-31

Note⁽¹⁾: based on nominal engine power

STANDBY POWER



PRIME POWER



Performance Data

	1500 rpm	1800 rpm
Gross Rated Power (without fan)		
Prime = PRP – 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
BMEP		
Prime = PRP – 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 = PRP	21.0 : 1	24.0 : 1
Standby = LTP	20.0 : 1	22.0 : 1
Noise		
Prime = PRP – dB(A) @ 1 m	91.1	92.4
Standby = LTP – dB(A) @ 1 m	91.8	92.7

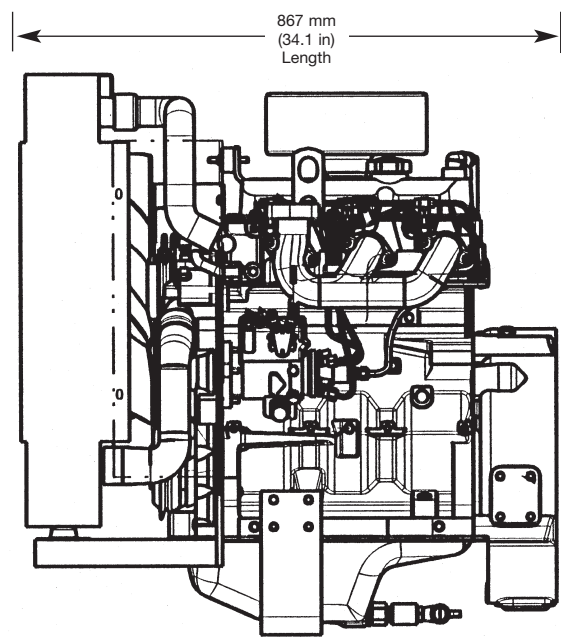
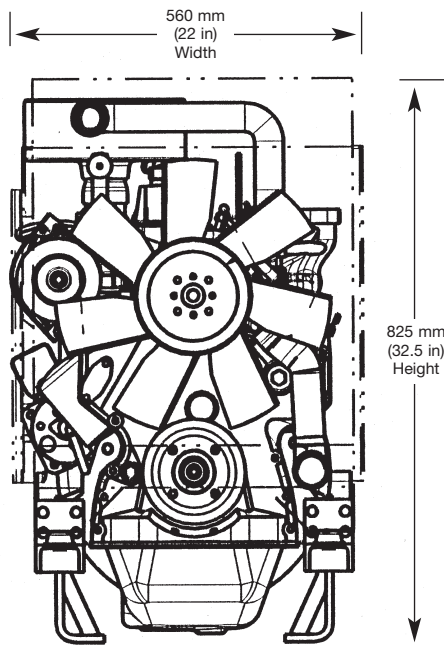
STANDBY POWER is the nominal engine power available at varying load factors for up to 500 hours per year. This rating conforms to ISO 8528-1 “limited time running power (LTP)”. The calculated generator set rating range for standby applications is based on minimum engine power (nominal –5%) to provide 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 – l/h	1500 rpm		1800 rpm	
	Prime = PRP	Standby = LTP	Prime = PRP	Standby = LTP
25% Power	2.2	2.5	2.4	2.8
50% Power	3.7	4.1	4.5	5.1
75% Power	5.2	5.8	6.4	7.1
100% Power	6.9	8.5	8.0	9.1

General Data

Model	3029DF128
Number of cylinders	3
Bore and Stroke – mm (in.)	106 x 110 (4.19 x 4.33)
Displacement – dm ³ (in ³)	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.H ₂ O)	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. H ₂ O)	6.25 (25)	6.25 (25)
Clean Air Cleaner – kPa (in. H ₂ O)	3 (12)	3 (12)
Engine Air Flow		
Prime = PRP – m ³ /min (ft ³ /min)	1.7 (61)	2.2 (78)
Standby = LTP – m ³ /min (ft ³ /min)	1.8 (66)	2.3 (80)

Exhaust System

	1500 rpm	1800 rpm
Exhaust Flow		
Prime = PRP – m ³ /min (ft ³ /min)	4.7 (170)	6.1 (218)
Standby = LTP – m ³ /min (ft ³ /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.H ₂ O)	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)
Engine Angularity Limits (continuous)		
Any Direction – degrees	20	20

This paper is environmentally friendly. (As it's not chlorine based)

1/02 7/5/5

YY12810.01E



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