

# Cat® D30

## Diesel Generator Sets



Standby : 60 Hz



Image shown may not reflect actual configuration

Engine Model	Cat® C2.2 In-line 4, 4-cycle Diesel
Bore x Stroke	84 mm x 100 mm (3.3 in x 3.93 in)
Displacement	2.2 L (134 in³)
Compression Ratio	23.3:1
Aspiration	Turbocharged air to air charge cooling
Fuel Injection System	Electronically Actuated Mechanical Cassette Type

Model	Standby	Emission Strategy
D30	30	EPA TIER 4I (EPA 40 CFR Part 1039 Interim Tier 4)

## Package Performance

Performance	Standby	
	3-Phase	1-Phase
Frequency	60	
Genset Power Rating, kVA	37.5	30
Genset power rating with fan, ekW	30	30
Performance Number	P3524A	
Fuel Consumption		
100% load with fan, L/hr (gal/hr)	9.8 (2.59)	
75% load with fan, L/hr (gal/hr)	7 (1.85)	
50% load with fan, L/hr (gal/hr)	5.1 (1.35)	
Cooling System¹		
Radiator air flow, m³/min (CFM)	89 (3143)	
Radiator air flow restriction (system), kPa (in. water)	0.12	
Engine coolant capacity, L (gal)	3.6 (0.95)	
Radiator coolant capacity, L (gal)	5.72 (1.51)	
Total coolant capacity, L (gal)	9.32 (2.46)	
Inlet Air		
Max. combustion air intake restriction, kPa (in. water)	6.4 (25.7)	
Combustion air inlet flow rate, m³/min (CFM)	2.49 (87.9)	
Exhaust System		
Exhaust stack gas temperature, °C (°F)	478 (892)	
Exhaust gas flow rate, m³/min (CFM)	8.4 (296.6)	
Exhaust system back pressure (maximum allowable), kPa (in. water)	10.2 (41.0)	
Heat Rejection		
Heat rejection to jacket water, kW (BTU/min)	37.7 (2144)	
Heat rejection from alternator, kW (BTU/min)	4.2 (238)	
Heat rejection to atmosphere from engine, kW (BTU/min)	4.6 (262)	
Heat rejection to exhaust (total), kW (BTU/min)	29.0 (1649)	

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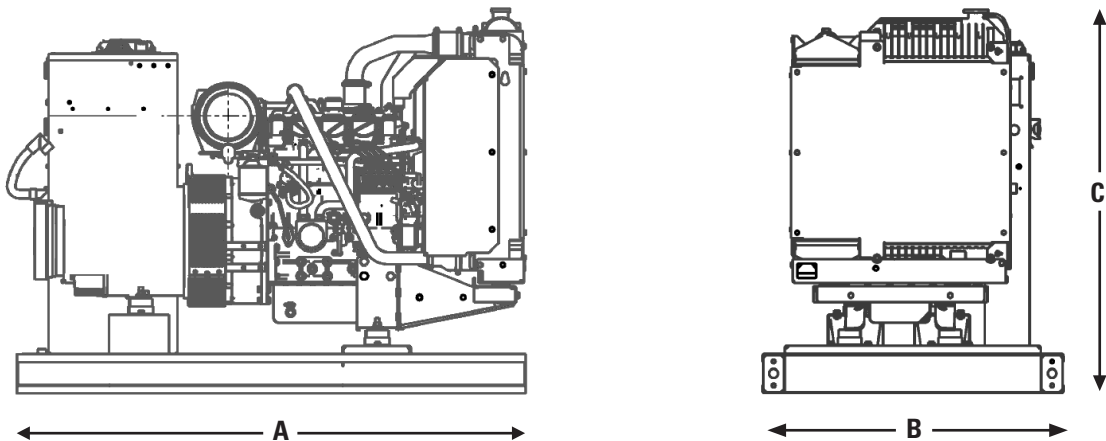
### Electric Power



Alternator <sup>3</sup>						
Duty Cycle		Standby				
Phase		3-Phase				1-Phase
Voltages, V		208/120	480/277	600/346	240/120	240/120V
Current, Amps		106	46	36	91	125
Excitation		SE	SE	AREP	SE	SE
Frame: M1717L4	Temperature Rise @ 40°C	125	125	125	125	
	Motor Starting Capability @ 30% Voltage Dip, skVA	14	64	76	18	
Frame: M1736L4	Temperature Rise @ 40°C					105
	Motor Starting Capability @ 30% Voltage Dip, skVA					76



WEIGHTS & DIMENSIONS



Length "A" mm (in)	Width "B" mm (in)	Height "C" mm (in)	Dry Weight kg (lb)
1581 (62)	970 (38)	1193 (47)	612 (1349)

**Note:** General configuration not to be used for installation. See general dimension drawings for detail.

APPLICABLE CODES AND STANDARDS:

CSA C22.2 No 100-04, UL142, UL489, UL869, cUL/UL2200, NFPA 37, NFPA 70, NFPA 99,NFPA 110, IBC, IEC60034-1, ISO 3046, ISO 8528, NEMA MG 1-33.

Note: Codes may not be available in all model configurations. Please consult your local Cat Dealer representative for availability.

**STANDBY:** Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

**RATINGS:** Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

DEFINITIONS AND CONDITIONS

- <sup>1</sup> For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.
- <sup>2</sup> Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77° F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 BTU/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.
- <sup>3</sup> UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.