Cat® C18
Diesel Generator Sets

Standby & Prime: 50 Hz



Image shown might not reflect actual configuration

Engine Model	Cat® C18 In-line 6, 4-cycle Diesel
Bore x Stroke	145 mm x 183 mm (5.7 in x 7.2 in)
Displacement	18.1 L (1106 in³)
Compression Ratio	14.5:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4 - G3 Class* capable

Model	Standby	Prime	Emission Strategy
DE605E0	605 kVA, 484 ekW	550 kVA, 440 ekW	Low BSFC

PACKAGE PERFORMANCE

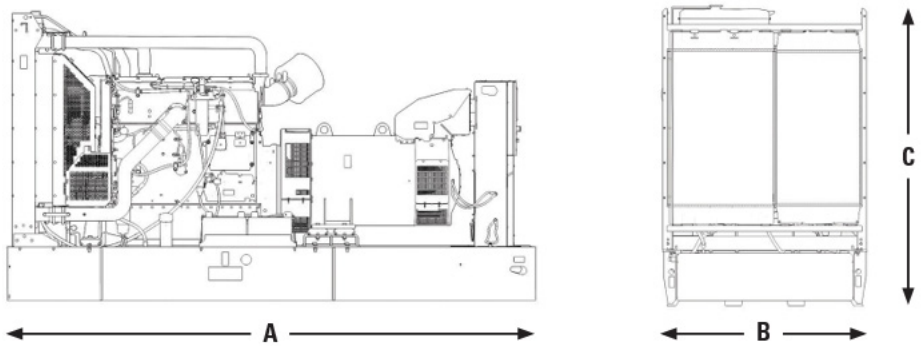
Performance	Standby	Prime
Frequency	50 Hz	
Genset power rating	605 kVA	550 kVA
Genset power rating with fan @ 0.8 pf	484 ekW	440 ekW
Emissions	Low BSFC	
Performance number	DM9820	DM9819
Fuel Consumption		
100% load with fan, L/hr (gal/hr)	122.7 (32.4)	111 0 (29.3)
75% load with fan, L/hr (gal/hr)	92.0 (24.3)	83.9 (22.2)
50% load with fan, L/hr (gal/hr)	64.0 (16 9)	58.8 (15.5)
25% load with fan , L/hr (gal/hr)	37.2 (9.8)	34.4 (9.1)
Cooling System[1]		
Radiator air flow restriction (system), kPa (in. water)	0.12 (0.48)	0.12 (0.48)
Radiator air flow, m³/min (CFM)	373 (13172)	373 (13172)
Engine coolant capacity, L (gal)	20.8 (5.5)	20.8 (5.5)
Radiator coolant capacity, L (gal)	34 (8.9)	34 (8.9)
Total coolant capacity, L (gal)	54.8 (14.4)	54.8 (14.4)
Inlet Air		
Combustion air inlet flow rate, m³/min (CFM)	31.6 (1117.5)	29.2 (1032.0)
Max. allowable combustion air inlet temp, °C (°F)	49 (121)	47 (117)
Exhaust System		
Exhaust stack gas temperature, °C (°F)	553.8 (1028.8)	543.1 (1009.6)
Exhaust gas flow rate, m³/min (CFM)	92.1 (3251.0)	83.5 (2948.0)
Exhaust system backpressure (maximum allowable), kPa (in. water)	10.0 (40.0)	10.0 (40.0)
Exhaust System		
Heat rejection to jacket water, kW (Btu/min)	157 (8945)	146 (8309)
Heat rejection to exhaust (total), kW (Btu/min)	449 (25525)	404 (22965)
Heat rejection to aftercooler, kW (Btu/min)	76 (4313)	63 (3606)
Heat rejection to atmosphere from engine, kW (Btu/min)	84 (4784)	78 (4438)
Heat rejection to atmosphere from generator, kW (Btu/min)	36 (2047)	31 (1763)

Emissions (Nominal)[2]		
NOx, mg/Nm³ (g/hp-hr)	3762.8 (7.7)	4029.2 (8.1)
CO, mg/Nm³ (g/hp-hr)	656.7 (1.3)	615.0 (1.2)
HC, mg/Nm³ (g/hp-hr)	3.2 (0.0)	3.3 (0.0)
PM, mg/Nm³ (g/hp-hr)	12.6 (0.0)	10.4 (0.0)

Alternator[3]			
Voltages	380V	400V	415V
Motor Starting Capability @ 30% Voltage Dip	1362 skVA	1507 skVA	1539 skVA
Current	SB: 919A, PP: 811A	SB: 873A, PP: 794A	SB: 842A, PP: 765A
Frame Size	A3325L4	A3325L4	A3325L4
Excitation	SE	SE	SE
Temperature Rise, °C (°F)	SB: 163°C, PP: 125°C		

SB: Standby PP: Prime Power.

WEIGHTS & DIMENSIONS



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
3910 (154)	1461 (58)	2156 (85)	3740 (8245)

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

APPLICABLE CODES AND STANDARDS:

AS1359, IEC60034-1, ISO3046, ISO8528, NEMA MG1-33, UKCA, CE, EAC.
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.

PRIME: Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated ekW with 10% overload capability for emergency use for a maximum of 1 hour in 12. Overload operation cannot exceed 25 hours per year

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

DEFINITIONS AND CONDITIONS

[1] For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

[2] 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.

[3] Generator temperature rise is based on a 40° C ambient per IEC60034-1.

* Governing Class capability as per ISO8528-5.Consult your local Cat dealer for configuration and site specific transient performance classification.

LET'S DO THE WORK.™

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