

# Cat® C15

## Diesel Generator Set



### Standby & Prime: 60 Hz



Engine Model	Cat® C15 ACERT™ In-line 6, 4-cycle diesel
Bore x Stroke	137 mm x 171 mm (5.4 in x 6.8 in)
Displacement	15.2 L (928 in <sup>3</sup> )
Compression Ratio	16.1:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4

Image shown might not reflect actual configuration.

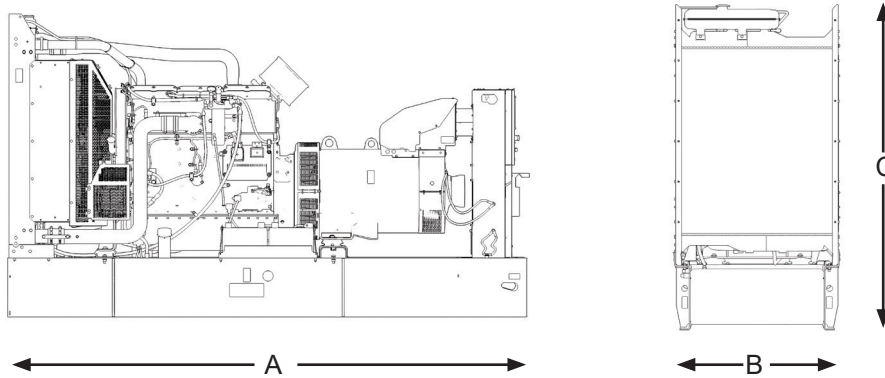
Model	Standby	Prime	Emission Strategy
C15	360 ekW, 450 kVA	328 ekW, 410 kVA	Low BSFC

### PACKAGE PERFORMANCE

Performance	Standby	Prime
Frequency	50 Hz	
Genset Power Rating	450 kVA	410 kVA
Genset power rating with fan @ 0.8 power factor	360 ekW	328 ekW
Emissions	Low BSFC	
Performance Number	DM8487	DM8486-02
<b>Fuel Consumption</b>		
100% load with fan, L/hr (gal/hr)	92.6 (24.5)	86.0 (22.7)
75% load with fan, L/hr (gal/hr)	70.1 (18.5)	64.7 (17.1)
50% load with fan, L/hr (gal/hr)	50.7 (13.4)	46.6 (12.3)
25% load with fan, L/hr (gal/hr)	31.0 (8.2)	28.8 (7.6)
<b>Cooling System<sup>1</sup></b>		
Radiator air flow restriction (system), kPa (in. Water)	0.12 (0.48)	0.12 (0.48)
Radiator air flow, m <sup>3</sup> /min (cfm)	558 (19706)	558 (19706)
Engine coolant capacity, L (gal)	20.8 (5.5)	20.8 (5.5)
Radiator coolant capacity, L (gal)	37.0 (9.7)	37.0 (9.7)
Total coolant capacity, L (gal)	57.8 (15.2)	37.0 (9.7)
<b>Inlet Air</b>		
Combustion air inlet flow rate, m <sup>3</sup> /min (cfm)	26.2 (924.4)	24.7 (871.1)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	49 (119)	48.5 (119.2)
<b>Exhaust System</b>		
Exhaust stack gas temperature, °C (°F)	529.0 (984.1)	519.0 (966.1)
Exhaust gas flow rate, m <sup>3</sup> /min (cfm)	71.3 (2517.8)	66.4 (2344.2)
Exhaust system backpressure (maximum allowable) kPa (in. water)	10.0 (40.0)	10.0 (40.0)
<b>Heat Rejection</b>		
Heat rejection to jacket water, kW (Btu/min)	137 (7795)	129 (7351)
Heat rejection to exhaust (total) kW (Btu/min)	339 (19302)	313 (17821)
Heat rejection to aftercooler, kW (Btu/min)	55 (3133)	48 (2741)
<b>Emissions (Nominal)<sup>2</sup></b>		
NO <sub>x</sub> , mg/Nm <sup>3</sup> (g/hp-hr)	3353.8 (6.6)	3408.3 (6.7)
CO, mg/Nm <sup>3</sup> (g/hp-hr)	157.3 (0.3)	143.3 (0.3)
HC, mg/Nm <sup>3</sup> (g/hp-hr)	6.8 (0.0)	9.4 (0.0)
PM, mg/Nm <sup>3</sup> (g/hp-hr)	9.0 (0.0)	10.7 (0.0)

Alternator <sup>3</sup>		
Voltages	380V	
Motor starting capability @ 30% Voltage Dip	1658 skVA	
Current	684 amps	623 amps
Frame Size	GTA312AE45	
Excitation	Auxiliary Coil	
Temperature Rise	150°C	125°C

**WEIGHTS & DIMENSIONS**



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
3830 (151)	1130 (44)	2255 (89)	3650 (8047)

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

**APPLICABLE CODES AND STANDARDS:**

AS1359, CSA C22.2 No100-04, UL142, UL489, UL869, UL2200, NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO3046, ISO8528, NEMA MG1-22, NEMA MG1-33, 2006/95/EC, 2006/42/EC, 2004/108/EC.

**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 kW 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**

- <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.

**LET'S DO THE WORK.™**

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