

## Standby & Prime: 50Hz



Image shown might not reflect actual configuration

Engine Model	Cat® C13 ACERT™ In-line 6, 4-cycle diesel
Bore x Stroke	130mm x 157mm (5.1 in x 6.2 in)
Displacement	12.5 L (763 in <sup>3</sup> )
Compression Ratio	16.3:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4

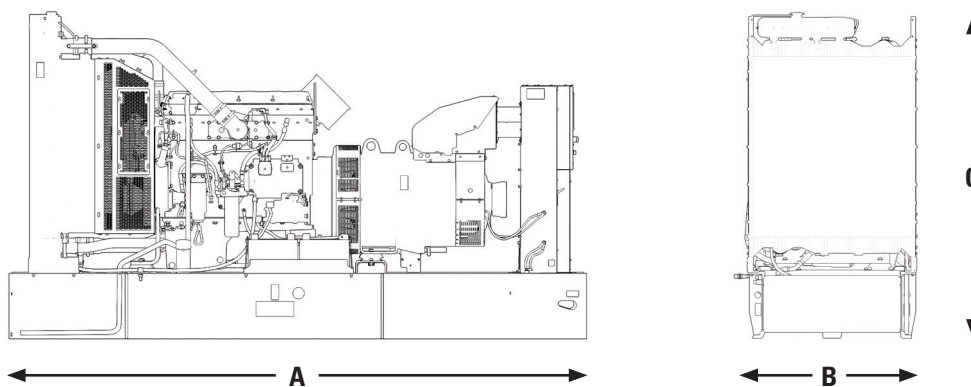
Model	Standby	Prime	Emission Strategy
DE400E0	400 kVA, 320 ekW	350 kVA, 280 ekW	Non-Certified Emissions

## PACKAGE PERFORMANCE

Performance	Standby	Prime
Frequency	50 Hz	
Genset Power Rating	400 kVA	350 kVA
Genset power rating with fan @ 0.8 power factor	320 ekW	280 ekW
Emissions	Non-Certified Emissions	
Performance Number	EM0425	EM0431
<b>Fuel Consumption</b>		
100% load with fan, L/hr (gal/hr)	83.5 (22)	72.4 (19.1)
75% load with fan, L/hr (gal/hr)	61.9 (16.4)	54.8 (14.5)
50% load with fan, L/hr (gal/hr)	43.7 (11.5)	39.0 (10.3)
25% load with fan, L/hr (gal/hr)	26.1 (6.9)	23.8 (6.3)
<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)	398 (14055)	398 (14055)
Engine coolant capacity, L (gal)	13.9 (3.7)	13.9 (3.7)
Radiator coolant capacity, L (gal)	43 (11.5)	43 (11.5)
Total coolant capacity, L (gal)	56.9 (15.2)	56.9 (15.2)
<b>Inlet Air</b>		
Combustion air inlet flow rate, m <sup>3</sup> /min (cfm)	22.3 (790)	20.3 (717.5)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	44 (110)	44 (110)
<b>Exhaust System</b>		
Exhaust stack gas temperature, °C (°F)	529.2 (985)	504.3 (939.7)
Exhaust gas flow rate, m <sup>3</sup> /min (cfm)	62.8 (2216)	54.8 (1936.6)
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)	128 (7271)	113 (6453)
Heat rejection to exhaust (total) kW (Btu/min)	290 (16484)	249 (14146)
Heat rejection to aftercooler, kW (Btu/min)	54 (3037)	43 (2425)
Heat rejection to atmosphere from engine, kW (Btu/min)	53 (3031)	47 (2694)

Emissions (Nominal) <sup>2</sup>	Standby	Prime	
NOx, mg/Nm <sup>3</sup> (g/hp-hr)	2731 (5.3)	2874.9 (5.6)	
CO, mg/Nm <sup>3</sup> (g/hp-hr)	750 (1.47)	761.4 (1.5)	
HC, mg/Nm <sup>3</sup> (g/hp-hr)	8 (0.02)	7.2 (0.0)	
Alternator <sup>3</sup>			
Voltages	<b>415V</b>	<b>400V</b>	<b>380V</b>
Motor starting capability @ 30% Voltage Dip	1071 skVA	793 skVA	888 skVA
Current	556 amps	577 amps	381 amps
Frame Size	A2925L4	A2925L4	A2925L4
Excitation	SE	SE	SE
Temperature Rise	125°C	125°C	125°C

## WEIGHTS & DIMENSIONS



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

Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
<b>3830 (151)</b>	<b>1130 (44)</b>	<b>2156 (85)</b>	<b>3253 (7172)</b>

### 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.™

LEHE1631-02 (05/20)

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