

CATERPILLAR GENERATOR SET – C18-770



Standby & Prime: 50Hz

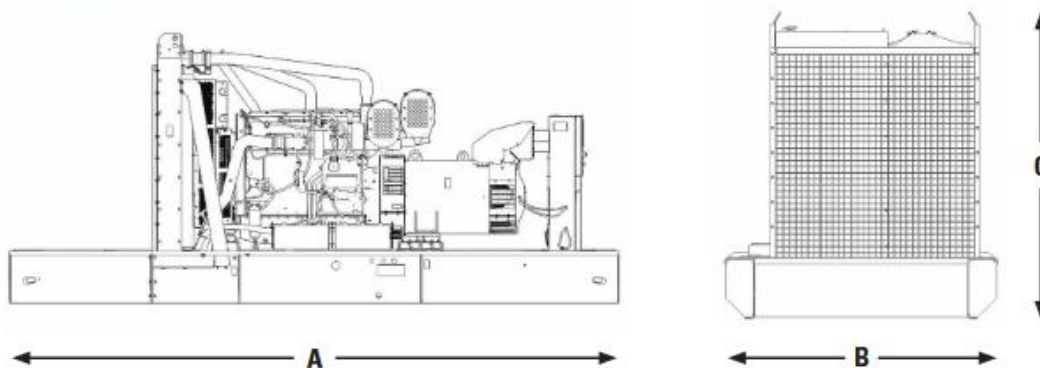


Image shown might not reflect actual configuration

Engine Model	Cat® C18 In-line 6, 4-cycle Diesel
Bore x Stroke	145mm x 183mm (5.7in x 7.2in)
Displacement	18.13 L (1106.3 in ³)
Compression Ratio	14:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	Electronic Unit Injection
Governor	Electronic ADEM™ A4 - G3 Class* capable

Model	Standby	Prime	Emission Strategy
DE850E0	850 kVA	770 kVA	Low BSFC

WEIGHTS & DIMENSIONS



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
4130 (163)	1689 (67)	2570 (101)	4532 (9991)

PACKAGE PERFORMANCE

Performance	Standby		Prime	
	50 Hz			
Frequency	50 Hz			
Genset power rating	850 kVA		770 kVA	
Genset power rating with fan @ 0.8 pf	680 ekW		616 ekW	
Emissions	Low BSFC			
Performance Number	EM3830		EM3831	
Fuel Consumption				
100% load with fan, L/hr (gal/hr)	175.7 (46.4)		158 (41.7)	
75% load with fan, L/hr (gal/hr)	128.3 (33.8)		115 (30.3)	
50% load with fan, L/hr (gal/hr)	86.5 (22.8)		80 (21.1)	
25% load with fan, L/hr (gal/hr)	47 (12.4)		46.6 (12.3)	
Cooling System¹				
Radiator air flow restriction (system), kPa (in. water)	0.12 (0.48)		0.12 (0.48)	
Radiator air flow, m ³ /min (cfm)	852 (30088)		852 (30088)	
Engine coolant capacity, L (gal)	21 (5.5)		21 (5.5)	
Radiator coolant capacity, L (gal)	86.5 (23.5)		89 (23.5)	
Total coolant capacity, L (gal)	110 (29.1)		110 (29.1)	
Inlet Air				
Combustion air inlet flow rate, m ³ /min (CFM)	62 (2189)		58.2 (2055)	
Max. allowable air intake restriction, (kPa)	3.7 (clean element) / 6.2 (dirty element)			
Exhaust System				
Exhaust stack gas temperature, °C (°F)	423 (793)		404 (759)	
Exhaust gas flow rate, m ³ /min (CFM)	147 (5191)		134 (4732)	
Exhaust system backpressure (maximum allowable), kPa (in. water)	10 (40.1)		10 (40.1)	
Heat Rejection				
Heat rejection to jacket water, kW (BTU/min)	198 (11260)		176 (10009)	
Heat rejection to exhaust (total), kW (BTU/min)	624 (35486)		565 (32131)	
Heat rejection to aftercooler, kW (BTU/min)	231 (13136)		203 (11544)	
Heat rejection to atmosphere from engine, kW (BTU/min)	109 (6198)		96 (5459)	

Emissions ² (Nominal-corr 5% O ₂)	Standby			Prime		
	NO _x , mg/Nm ³ (g/hp-hr)	2748 (6.01)			2751.3 (5.96)	
CO, mg/Nm ³ (g/hp-hr)	1000.6 (2.19)			501.7 (1.09)		
HC, mg/Nm ³ (g/hp-hr)	66.4 (0.17)			26.5 (0.09)		
PM, mg/Nm ³ (g/hp-hr)	70.2 (0.18)			68.3 (0.1)		
Alternator						
Voltages	415 V	400 V	380 V	415 V	400 V	380 V
Motor starting capability @ 30% Voltage Dip & 0.6 pf	2268 skVA	2118 skVA	1924 skVA	2268 skVA	2118 skVA	1924 skVA
Current	1182.5 amps	1227 amps	1291.4 amps	1071.2 amps	1111.4 amps	1170 amps
Frame Size	LC7224L	LC7224L	LC7224L	LC7224L	LC7224L	LC7224L
Excitation	AREP	AREP	AREP	AREP	AREP	AREP
Temperature Rise ³	150°C	150°C	150°C	125°C	125°C	125°C