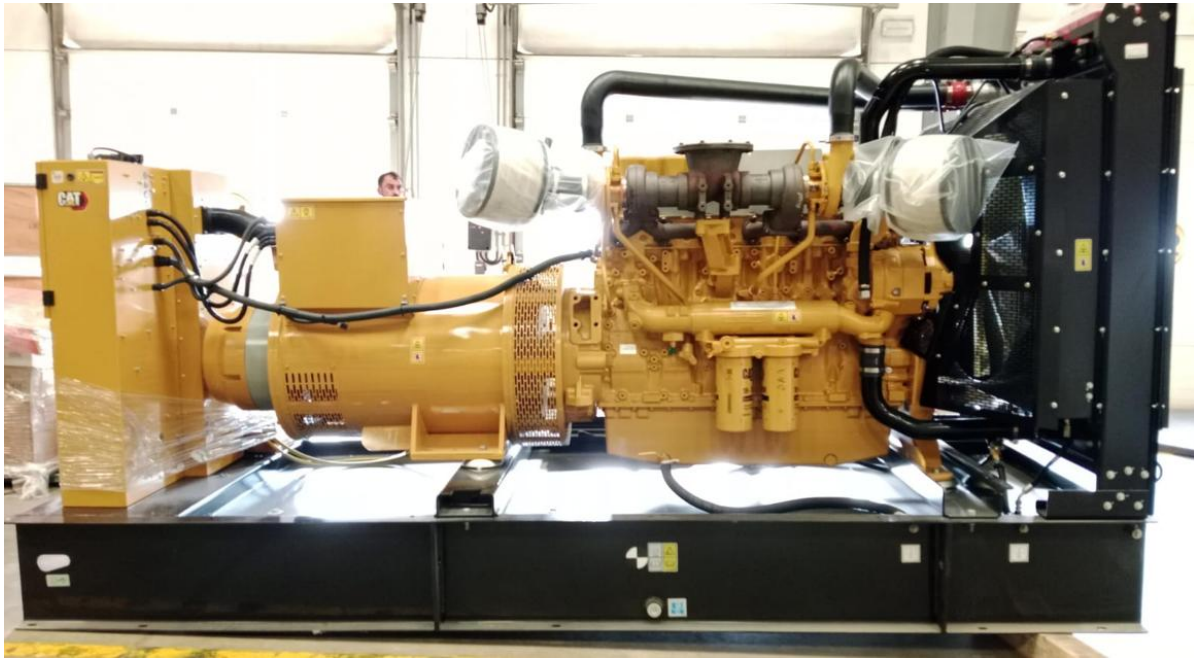


CATERPILLAR GENERATOR SET – C18-650



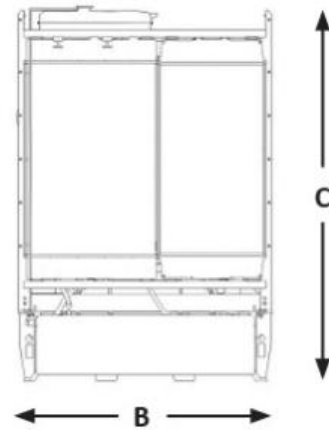
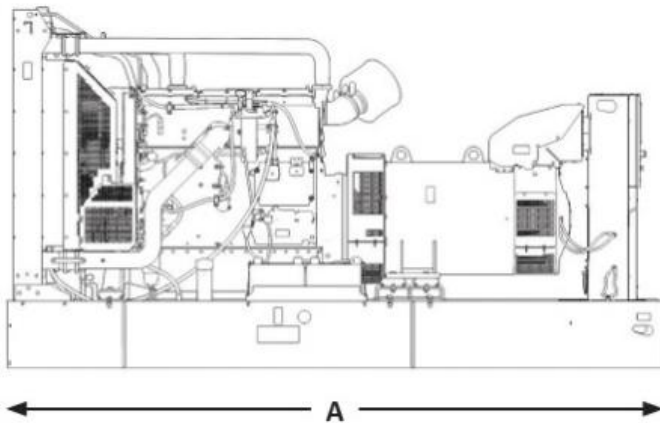
Standby & Prime: 50 Hz



Engine Model	Cat® C18 ACERT™ 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

Model	Standby	Prime	Emission Strategy
DE715E0	50 Hz	50 Hz	Low BSFC
	715 kVA, 572 ekW	650 kVA, 520 ekW	

WEIGHTS & DIMENSIONS



Dim "A" mm (in)	Dim "B" mm (in)	Dim "C" mm (in)	Dry Weight kg (lb)
3910 (154)	1461 (58)	2156 (85)	3862 (8514)

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

PACKAGE PERFORMANCE

Performance	Standby	Prime
Frequency	50 Hz	50 Hz
Genset Power Rating	715 kVA	650 kVA
Genset power rating with fan @ 0.8 power factor	572 ekW	520 ekW
Emissions	Low BSFC	
Performance Number	EM1390	EM1391
Fuel Consumption		
100% load with fan, L/hr (gal/hr)	144.2 (31.7)	131.4 (28.9)
75% load with fan, L/hr (gal/hr)	106.6 (23.5)	97.1 (21.4)
50% load with fan, L/hr (gal/hr)	72.2 (15.9)	66.3 (14.6)
25% load with fan, L/hr (gal/hr)	40.5 (8.9)	37.5 (8.2)
Cooling System¹		
Radiator air flow restriction (system), kPa (in H ₂ O)	0.12 (0.48)	0.12 (0.48)
Radiator air flow, m ³ /min (cfm)	374 (13207)	374 (13207)
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, m ³ /min (cfm)	37.5 (1325.8)	35.3 (1246.1)
Max. Allowable Combustion Air Inlet Temp, °C (°F)	51 (124)	49 (119)
Exhaust System		
Exhaust stack gas temperature, °C (°F)	568.2 (1054.8)	550.5 (1022.9)
Exhaust gas flow rate, m ³ /min (cfm)	110.6 (3906.1)	101.2 (3572.0)
Exhaust system backpressure (maximum allowable) kPa (in H ₂ O)	10.0 (40.0)	10.0 (40.0)
Heat Rejection		
Heat rejection to jacket water, kW (Btu/min)	179 (10181)	165 (9375)
Heat rejection to exhaust (total) kW (Btu/min)	541 (30791)	487 (27711)
Heat rejection to aftercooler, kW (Btu/min)	107 (6091)	91 (5192)
Heat rejection to atmosphere from engine, kW (Btu/min)	89 (5064)	83 (4729)
Emissions (Nominal)²		
NO _x , mg/Nm ³ (g/hp-hr)	2989.7 (6.1)	3135.1 (6.2)
CO, mg/Nm ³ (g/hp-hr)	354.8 (0.7)	411.8 (0.8)
HC, mg/Nm ³ (g/hp-hr)	4.3 (0.0)	7.2 (0.0)
PM, mg/Nm ³ (g/hp-hr)	9.4 (0.0)	14.2 (0.0)

Alternator ³	50 Hz		
	380V	400V	415V
Voltages	380V	400V	415V
Motor starting capability @ 30% Voltage Dip, skVA	1859 skVA	2064 skVA	2228 skVA
Current, amps	SB: 1086A, PP: 988A	SB: 1032A, PP: 938A	SB: 995A, PP: 904A
Temperature Rise, °C	SB: 163, PP: 125		
Frame Size	A3355L4		
Excitation	S.E		