

C18 ACERT
545 ekW/ 681 kVA/ 60 Hz/ 1800 rpm/ 480 V/ 0.8 Power Factor

Rating Type: PRIME

Fuel Strategy: LOW FUEL CONSUMPTION



C18 ACERT
545 ekW/ 681 kVA
60 Hz/ 1800 rpm/ 480 V

Image shown may not reflect actual configuration

Metric English

Package Performance		
Genset Power Rating with Fan @ 0.8 Power Factor	545 ekW	
Genset Power Rating	681 kVA	
Aftercooler (Separate Circuit)	N/A	N/A

Fuel Consumption		
100% Load with Fan	150.6 L/hr	39.8 gal/hr
75% Load with Fan	111.0 L/hr	29.3 gal/hr
50% Load with Fan	76.6 L/hr	20.2 gal/hr
25% Load with Fan	46.2 L/hr	12.2 gal/hr

Cooling System ¹		
Engine Coolant Capacity	20.8 L	5.5 gal

Inlet Air		
Combustion Air Inlet Flow Rate	46.9 m ³ /min	1655.1 cfm
Max. Allowable Combustion Air Inlet Temp	49 ° C	120 ° F

Exhaust System		
Exhaust Stack Gas Temperature	493.7 ° C	920.7 ° F
Exhaust Gas Flow Rate	124.3 m ³ /min	4389.4 cfm
Exhaust System Backpressure (Maximum Allowable)	10.0 kPa	40.0 in. water



**C18 ACERT
545 kW/ 681 kVA/ 60 Hz/ 1800 rpm/ 480 V/ 0.8 Power Factor**

Rating Type: PRIME

Fuel Strategy: LOW FUEL CONSUMPTION

Heat Rejection		
Heat Rejection to Jacket Water	173 kW	9824 Btu/min
Heat Rejection to Exhaust (Total)	567 kW	32217 Btu/min
Heat Rejection to Aftercooler	137 kW	7819 Btu/min
Heat Rejection to Atmosphere from Engine	102 kW	5823 Btu/min
Heat Rejection to Atmosphere from Generator	30 kW	1706 Btu/min

Alternator²	
Motor Starting Capability @ 30% Voltage Dip	1446 skVA
Current	819 amps
Frame Size	AA3325L4
Excitation	AR
Temperature Rise	125 ° C

Emissions (Nominal)³		
NOx	2358.1 mg/Nm ³	4.9 g/hp-hr
CO	75.1 mg/Nm ³	0.2 g/hp-hr
HC	6.0 mg/Nm ³	0.0 g/hp-hr
PM	N/A	N/A

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. 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.
3. 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.

**C18 ACERT
545 ekW/ 681 kVA/ 60 Hz/ 1800 rpm/ 480 V/ 0.8 Power Factor**

Rating Type: PRIME

Fuel Strategy: LOW FUEL CONSUMPTION

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.

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

Fuel Rates are based on fuel oil of 35° API [16° C (60° F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29° C (85° F) and weighing 838.9 g/liter (7.001 lbs/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Cat representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

www.Cat-ElectricPower.com

Performance No.: DM9833-01

Feature Code: U.K : C18DE6U ,China : C18DE8U

Generator Arrangement: 5027418

Date: 05/20/2016

Source Country: U.K.or China

The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, ADEM, EUI, S•O•S, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

LEHE1102-00 (05/16)