

**C18 ACERT**  
**528 ekW/ 660 kVA/ 50 Hz/ 1500 rpm/ 400 V/ 0.8 Power Factor**

Rating Type: STANDBY

Fuel Strategy: LOW FUEL CONSUMPTION



**C18 ACERT**  
**528 ekW/ 660 kVA**  
**50 Hz/ 1500 rpm/ 400 V**

Image shown may not reflect actual configuration

**Metric**                      **English**

<b>Package Performance</b>		
Genset Power Rating with Fan @ 0.8 Power Factor	528 ekW	
Genset Power Rating	660 kVA	
Aftercooler (Separate Circuit)	N/A	N/A

<b>Fuel Consumption</b>		
100% Load with Fan	135.0 L/hr	35.7 gal/hr
75% Load with Fan	100.9 L/hr	26.7 gal/hr
50% Load with Fan	69.5 L/hr	18.3 gal/hr
25% Load with Fan	40.1 L/hr	10.6 gal/hr

<b>Cooling System<sup>1</sup></b>		
Engine Coolant Capacity	20.8 L	5.5 gal

<b>Inlet Air</b>		
Combustion Air Inlet Flow Rate	34.2 m <sup>3</sup> /min	1206.4 cfm
Max. Allowable Combustion Air Inlet Temp	49 ° C	120 ° F

<b>Exhaust System</b>		
Exhaust Stack Gas Temperature	571.1 ° C	1060.0 ° F
Exhaust Gas Flow Rate	102.4 m <sup>3</sup> /min	3614.4 cfm
Exhaust System Backpressure (Maximum Allowable)	10.0 kPa	40.0 in. water



**C18 ACERT**  
**528 kW/ 660 kVA/ 50 Hz/ 1500 rpm/ 400 V/ 0.8 Power Factor**

**Rating Type: STANDBY**

**Fuel Strategy: LOW FUEL CONSUMPTION**

<b>Heat Rejection</b>		
Heat Rejection to Jacket Water	169 kW	9625 Btu/min
Heat Rejection to Exhaust (Total)	504 kW	28661 Btu/min
Heat Rejection to Aftercooler	91 kW	5186 Btu/min
Heat Rejection to Atmosphere from Engine	84 kW	4787 Btu/min
Heat Rejection to Atmosphere from Generator	33 kW	1877 Btu/min

<b>Alternator<sup>2</sup></b>	
Motor Starting Capability @ 30% Voltage Dip	1391 skVA
Current	953 amps
Frame Size	A3335L4
Excitation	AR
Temperature Rise	163 ° C

<b>Emissions (Nominal)<sup>3</sup></b>		
NOx	3486.4 mg/Nm <sup>3</sup>	7.0 g/hp-hr
CO	507.4 mg/Nm <sup>3</sup>	1.0 g/hp-hr
HC	1.7 mg/Nm <sup>3</sup>	0.0 g/hp-hr
PM	4.7 mg/Nm <sup>3</sup>	0.0 g/hp-hr

**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  
528 ekW/ 660 kVA/ 50 Hz/ 1500 rpm/ 400 V/ 0.8 Power Factor**

**Rating Type: STANDBY**

**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.

**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.

**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](http://www.Cat-ElectricPower.com)

Performance No.: DM9822-00

Feature Code: U.K: C18DEAH, China: C18 DEBH

Generator Arrangement: 5027419

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.

LEHE1107-00 (05/16)