

**FSA20-EQU18.0, ITEM# 128**  
**GENERATOR: 500kW Generator Package**  
**Caterpillar C15 - 500KW BASE**

Feature	Qty	Description
CERTESE_I	1	EPA STATIONARY EMERGENCY
60H0480_I	1	60HZ 480 VOLT (WYE)
STANDBY_I	1	STANDBY POWER
KW00500_I	1	500ekW, 60Hz, 1800rpm
C15DECF_I	1	C15 60HZ PKG 500 CERTESE
ULLIST_I	1	UL 2200 LISTED PACKAGE GEN SET
NONCSA_I	1	NO CSA CERTIFICATION
NONIBC_I	1	NO SEISMIC CERTIFICATION
LANENGO_I	1	ENGLISH INSTRUCTION LANGUAGE
ESCNONE_I	1	STANDARD WARRANTY
MSEPGGN_I	1	GENERAL EPG
MSCEC70_I	1	ENERGY UTILITIES
MWCODEF_I	1	STANDBY POWER
PMEXCI3_I	1	PERMANENT MAGNET EXCITATION 03
SHK0012_I	1	SPACE HEATER 12
OGNSE1N_I	1	LC6114F SE ALT 1N
GENMTG_I	1	GEN MOUNTING DUCT PLATE
STDIVR_I	1	INTEGRATED VOLTAGE REGULATOR
GENT130_I	1	130C TEMP RISE OVER 40C AMB
MNTWB04_I	1	WIDE BASE W/EXTENSION 04
NOMITKB_I	1	NO MICHIGAN TANK KITBUNDLE
FTDW005_I	1	1000 Gal SUB TANK BASE
FFOPV2_I	1	OVERFILL PREV & SPILL CONTAIN
FAHL90_I	1	AUD&VIS FUEL ALARM (90% LEVEL)
FAPLS01_I	1	90% FUEL ALARM PANEL & SENSOR
ENCAL02_I	1	Aluminium SA Enclosure- White
IBCWBC2_I	1	150 MPH IBC CERT WIND ENCLOSU
NOCOLDB_I	1	NO COLD WEATHER BUNDLE.
EMCP42B_I	1	EMCP4.2B CONTROL PANEL
EMCCPLH_I	1	CONTROL PANEL MOUNTING LEFT
CT1005A_I	1	1000:5 CT RATIO
HTRCG01_I	1	HEATER CONTROL GROUP
BAT2454_I	1	STANDARD WET BATTERY
BTC1028_I	1	BATTERY CHARGER 10 AMP DUAL
LDC125A_I	1	125A LOAD CENTER
PWRCTRH_I	1	POWER CENTER - RH MOUNTED
SINGLE_I	1	SINGLE CIRCUIT BREAKER
CBK0701_I	1	600A LSI SINGLE MANUAL CB
NOSUSE_I	1	NO SUSE DECALS & FILMS
NTS1_I	1	NEUTRAL BAR NTS1
NONNTD_I	1	NOT REQUIRED
CBLG002_I	1	CB CABLE GP ABB/T6-800/600
NCBG002_I	1	NEUTRAL CABLE GP 800A
STDAIR_I	1	STD AIR CLEANER - LIGHT DUTY
STD RAD_I	1	STANDARD RADIATOR
CAN_I	1	ENCLOSURE SILENCER
EMCLAM1_I	1	LOCAL ANNUN NFPA99-110/CSA282
ANNR001_S	1	QTY REMOTE ANNUNC
ANNMB01_S	0	ANNUNCIATOR BOX
ANNR010_S	0	QTY REMOTE ANNUNC
EMGSTP1_S	0	REMOTE E-STOP BUTTON
PLG641_I	1	PRODUCT LINK GEN CELLULAR
TCVYES_I	1	ACCEPT - REVIEW LINK IN DESC
STDTEST_I	1	STD TEST - PKG GEN SET 0.8 PF
CATDEC_I	1	CAT DECALS

**C15 ACERT**  
**500 ekW/ 625 kVA/ 60 Hz/ 1800 rpm/ 480 V/ 0.8 Power Factor**

Rating Type: **STANDBY**

Emissions: U.S. EPA Certified for Stationary Emergency  
 Use Only (Tier 2 Nonroad Equivalent Emission Standards)



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**500 ekW/ 625 kVA**  
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Image shown may not reflect actual configuration

**Metric**

**English**

**Package Performance**

Genset Power Rating with Fan @ 0.8 Power Factor	500 ekW	
Genset Power Rating	625 kVA	
Aftercooler (Separate Circuit)	N/A	N/A

**Fuel Consumption**

100% Load with Fan	137.0 L/hr	36.2 gal/hr
75% Load with Fan	110.5 L/hr	29.2 gal/hr
50% Load with Fan	71.3 L/hr	18.8 gal/hr
25% Load with Fan	41.9 L/hr	11.1 gal/hr

**Cooling System<sup>1</sup>**

Engine Coolant Capacity	20.8 L	5.5 gal
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**Inlet Air**

Combustion Air Inlet Flow Rate	38.2 m <sup>3</sup> /min	1347.7 cfm
Max. Allowable Combustion Air Inlet Temp	49 ° C	120 ° F

**Exhaust System**

Exhaust Stack Gas Temperature	531.1 ° C	988.0 ° F
Exhaust Gas Flow Rate	102.1 m <sup>3</sup> /min	3605.5 cfm
Exhaust System Backpressure (Maximum Allowable)	10.0 kPa	40.0 in. water

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#### Heat Rejection

Heat Rejection to Jacket Water	182 kW	10375 Btu/min
Heat Rejection to Exhaust (Total)	493 kW	28039 Btu/min
Heat Rejection to Aftercooler	121 kW	6860 Btu/min
Heat Rejection to Atmosphere from Engine	91 kW	5182 Btu/min
Heat Rejection to Atmosphere from Generator	29 kW	1655 Btu/min

#### Alternator<sup>2</sup>

Motor Starting Capability @ 30% Voltage Dip	1428 skVA
Current	752 amps
Frame Size	LC6114F
Excitation	SE
Temperature Rise	130 ° C

#### Emissions (Nominal)<sup>3</sup>

NOx	2129.1 mg/Nm <sup>3</sup>	4.6 g/hp-hr
CO	301.5 mg/Nm <sup>3</sup>	0.6 g/hp-hr
HC	8.8 mg/Nm <sup>3</sup>	0.0 g/hp-hr
PM	9.5 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.

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**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.: DM8155-04

Feature Code: C15DECF

Generator Arrangement: 4183867

Date: 07/05/2016

Source Country: U.S.

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