

BILL OF MATERIALS

Model: C15 GCABR
 Quantity: 1
 Rating: 500 kW
 Certification: U.S. EPA Stationary Emergency Use Only
 Fuel: DIESEL
 Excitation: SE
 Frequency: 60 Hz
 Voltage: 480 V
 Duty: STANDBY

The following features will be included:

Quantity	Characteristic Name	Feature Code	Feature Description
1	PGS EMISSION CERTIFICATION	CERTESE_I	EPA STATIONARY EMERGENCY Meets USA Environmental Protection Agency (EPA). Stationary Emergency Certifications for Stationary Use only during defined emergency conditions. Standby ratings - Stationary Emergency emissions levels Tier 3 Outside EPA-regulated territories and in Guam, American Samoa or the Commonwealth of the Northern Mariana Islands, these restrictions do not apply.
1	VOLTAGE OPTION	60H0480_I	60HZ 480 VOLT (WYE) Voltage Indicator 60 Hz, 480V
1	APPLICATION INDICATOR	STANDBY_I	STANDBY POWER STANDBY POWER APPLICATION Output available with varying load for duration of the interruption of the normal source power. Average power output is 70 % if the standby power rating. Typical operation is 200 hours per year, with the maximum expected usage of 500 hours per year.
1	ENGINE RATING	KW00500_I	500ekW, 60Hz, 1800rpm
1	CONFIGURATION	C15DEQB_I	C15 D500GC PGS PSB
1	UL LISTING	ULCEP01_I	cULus CERTIFIED GEN SET UL2200 Valid for US & Canada
1	SEISMIC CERTIFICATION	IBSCCCB_I	IBC SEISMIC CERT OF COMPLIANCE IBC SEISMIC CERT OF COMPLIANCE
1	DECAL LANGUAGE	LANENGO_I	ENGLISH INSTRUCTION LANGUAGE
1	GOVERNOR TYPE	ADEMA4_I	ADEM A4 GOVERNOR
1	MARKET SEGMENT CODES	MSEPGGN_I	GENERAL EPG All engines and generator sets utilized in the generation of electrical power for general residential, commercial, utility, construction and communications, commercial and residential building, agricultural, construction, mining, manufacturing, public and civil services.
1	CUSTOMER SEGMENT	MSCEC72_I	COMMERCIAL BUSINESSES
1	MARKET WORK CODE	MWCODEF_I	STANDBY POWER
1	PERMANENT MAGNET	PMEXCI3_I	PERMANENT MAGNET GENERATOR Permanent magnet generator provides improved source of excitation to alternators.
1	ALTERNATOR	OGNSEMV_I	M3154L41, 60HZ, SE, ALT MV
1	ALT POWER	FULLPWR_I	FULL POWER
1	BATTERY DISCONNECT SWITCH	BATDS03_I	BATTERY DISCONNECT SWITCH

1	BASE TYPE (MOUNTING OPTION)	FTDW037_I	C15 INTEGRAL TANK (24HR)UL142 875 Gal, 24Hr, UL142 integral fuel tank base. Integral diesel fuel tank is incorporated into the generator set base frame. The robust base design includes linear vibration isolators between tank base and engine generator. Ref: LEHE2015
1	FUEL TANK OPTIONS	FSCO5G_I	5 GALLON SPILL CONTAINMENT The 5 gallon spill containment box is designed for containment of small spills during filling of an above ground storage tank.
1	ENCLOSURE	ENCSAR5_I	C15 SA LVL2 (WHITE) w/MUFFLER Sound Attenuated Level 2 Enclosure (White) with Muffler Ref: LEHE2014
1	CONTROL PANEL MODEL	GCCP12U_I	CONTROL PANEL DEEPPSEA 6310 UL 3rd Edition Certified
1	NFPA110 BUNDLE	NFPA01_I	NFPA BUNDLE The NFPA Bundle provides parts and/or functionality to assist the dealer in obtaining NFPA compliancy. NFPA compliancy is an end application requirement and meeting this application requirement is the responsibility of the dealer and / or installer. NFPA 110 application bundle selection will auto-select the following priced items: Local Alarm Horn (PAA1). Low Coolant Shutdown Circuit (WSS1). Low Coolant Temperature Alarm (WCA1). Low Fuel Level Alarm (FSS) with Engine Options Harness (ENGOPT). Battery Charger (PBC10NU). Depending on the local authority having jurisdiction (AHJ), the following options may be required in addition to the automatic selections: Jacket Water Heater (WHH) Remote Annunciator (ANNR010 or ANNR001) 0.8 Power Factor Test (TRSGEN7)
1	PANEL MOUNTED AUDIBLE ALARM	PAA1_I	PANEL MOUNTED AUDIBLE ALARM
1	LOAD CENTER	LDC100A_I	100A LOAD CENTER 100A Load Center
1	EMERGENCY STOP	CSB2_I	EXTERNAL EMERGENCY STOP Installed enclosure emergency stop button
1	BATTERY OPTIONS	BAT2461_S	1000CCA WET BAT 90A/HR SHP LOS Standard wet Cat battery set. 1000CCA, 90amp/hr
1	BATTERY CHARGERS	BTC1028_I	BATTERY CHARGER 10 AMP This 10 Amp battery charger offers accurate, automatic charging of lead-acid and nickel cadmium batteries. The output voltage automatically adjusts to changing input, load, battery and ambient conditions. This prevents battery over-charging and consequent loss of battery electrolyte. Ref: LEHE2022
1	JACKET WATER HEATER	WHHH01_I	JACKET WATER HTR (PUMP STYLE) Factory-installed tank-styled jacket water heater for increased cold-starting capability. The system includes a thermostatically controlled heater, hoses and heater disconnect relay. The compact design is ideal for location that require minimal mounting space.

1	CURRENT TRANSFORMER	CT1005A_I	1000:5 CT RATIO
1	1ST CIRCUIT BREAKER	CBK0702_I	800A LSI SINGLE MANUAL CB 800A LSI SINGLE MANUAL CB
1	SUSE DECALS	FLMSUSE_S	SUSE DECALS & FILMS Suitable for Use as Service Equipment (SUSE) decal and ability to disconnect neutral bar.
1	NEUTRAL BARS	NDTS800_I	NEUTRAL BAR 800A W/ DISCONNECT
1	RADIATOR	STD RAD_I	STANDARD RADIATOR
0	REMOTE ANNUNCIATOR (GCCP)	ANNR01_S	REMOTE ANNUNCIATOR (GCCP)
1	TELEMATICS HARDWARE	PL444_I	PRODUCT LINK 4G LTE TELEMATICS Cat PL444 is a factory installed 4G LTE, Telematics hardware used with Cat Remote Asset Monitoring (RAM) to remotely monitor several genset parameters like fault codes, Alerts and notifications, remote start/stop, geofencing and more. Refer LEHE20360/61
1	CELLULAR BAND	AM_I	AMERICAS BAND
1	TELEMATICS HARDWARE CERTIFIED	TCVYES_I	ACCEPT - REVIEW LINK IN DESC You AGREE to limiting use of this device to those locations where all legal requirements for the use of the device and related communications networks have been satisfied. You have checked on the website below and the destination country/device is designated "green" approved. https://dealer.cat.com/en/products/technology/construction-technology/product-link/product-link-hardware-certification.html You understand that you are responsible for collecting data authorization for all connected assets" https://dealer.cat.com/en/bt/data-governance-office/dealer-responsibilities.html
1	TESTING - GENERATOR SET	STDTEST_I	STD TEST - PKG GEN SET 0.8 PF

GENERATOR SET

Cat® D500 GC

Diesel Generator Sets



Standby : 60 Hz



Image shown may not reflect actual configuration.

Engine Model	Cat® C15 In-line 6, 4-cycle diesel
Bore x Stroke	137 mm x 171 mm (5.4 in x 6.8 in)
Displacement	15.2 L (928 in³)
Compression Ratio	16.1:1
Aspiration	Turbocharged Air-to-Air Aftercooled
Fuel Injection System	MEUI
Governor	Electronic ADEM™ A4

Model	Standby	Emission Strategy
D500 GC	500 kW, 625 kVA	EPA Certified for Stationary Emergency Application

PACKAGE PERFORMANCE

Performance	Standby
Frequency	60 Hz
Genset Power Rating	625 kVA
Genset power rating with fan @ 0.8 power factor	500 kW
Emissions	EPA TIER 2
Performance Number	DM8155
Fuel Consumption	
100% load with fan, L/hr (gal/hr)	135.2 (35.7)
75% load with fan, L/hr (gal/hr)	109.1 (28.8)
50% load with fan, L/hr (gal/hr)	70.4 (18.6)
25% load with fan, L/hr (gal/hr)	41.3 (10.9)
Cooling System¹	
Radiator air flow restriction (system), kPa (in water)	0.12 (0.48)
Radiator air flow, m³/min (cfm)	705 (24896)
Engine coolant capacity, L (gal)	20.8 (5.5)
Radiator coolant capacity, L (gal)	54 (14)
Total coolant capacity, L (gal)	75 (20)
Inlet Air	
Combustion air inlet flow rate m³/min (cfm)	38.2 (1347.7)
Max. allowable combustion air inlet temp, °C (°F)	49 (120)
Exhaust System	
Exhaust stack gas temperature, °C (°F)	531.1 (988.0)
Exhaust gas flow rate, m³/min (cfm)	102.1 (3605.5)
Exhaust system backpressure (maximum allowable) kPa (in. water)	10.0 (40.0)
Heat Rejection	
Heat rejection to jacket water, kW (Btu/min)	182 (10375)
Heat rejection to exhaust (total), kW (Btu/min)	493 (28039)
Heat rejection to aftercooler, kW (Btu/min)	121 (6860)
Heat rejection to atmosphere from engine, kW (Btu/min)	91 (5182)
Heat rejection from alternator, kW (Btu/min)	29 (1655)
Emissions (Nominal)²	
NOx, mg/Nm³ (g/hp-hr)	2129.1 (4.6)
CO, mg/Nm³ (g/hp-hr)	301.5 (0.6)
HC, mg/Nm³ (g/hp-hr)	8.8 (0.03)
PM, mg/Nm³ (g/hp-hr)	9.5 (0.03)

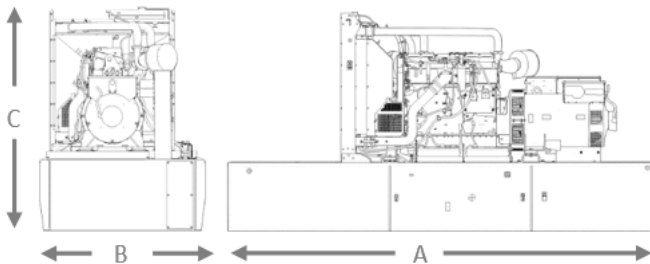
D500 GC Diesel Generator Sets

Electric Power



Alternator ³		
Voltages	480V	600V
Motor starting capability @ 30% Voltage Dip, skVA	1160	1350
Current Amps	751.8	601.4
Frame Size	M3154L41	M3136L41
Excitation	S.E	AREP
Temperature Rise, °C	105	130

WEIGHTS & DIMENSIONS – OPEN SET



FUEL TANK CAPACITY

Tank Design	Total Capacity L (gal)	Useable Capacity L (gal)
Integral	3671 (969.7)	3323 (877.8)

Base	Length "A" mm (in)	Width "B" mm (in)	Height "C" mm (in)	Generator Set Weight kg (lb)
Skid (Wide Base)	4815 (189.6)	1630 (64.2)	2034 (80.1)	3756 (8280.6)
Integral Tank Base	4815 (189.6)	1630 (64.2)	2584 (101.7)	4693 (10346.3)

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

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

FUEL RATES: 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/litre (7.001 lbs/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Caterpillar representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

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 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.

³ 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.

LET'S DO THE WORK.™

LEHE2011-10 (04/24)

www.cat.com/electricpower

©2024 Caterpillar

All rights reserved.

Materials and specifications are subject to change without notice.

The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

Generator Data

Selected Model

Engine: C15 **Generator Frame:** M3154L41 **Genset Rating (kW):** 500.0 **Line Voltage:** 480
Fuel: Diesel **Generator Arrangement:** 6263798 **Genset Rating (kVA):** 625.0 **Phase Voltage:** 277
Frequency: 60 **Excitation Type:** Permanent Magnet **Pwr. Factor:** 0.8 **Rated Current:** 751.8
Duty: STANDBY **Connection:** - STAR **Application:** EPG **Status:** Current
Version: 42423 /44804 /45978 /14056

Spec Information

Generator Specification			Generator Efficiency		
Frame: M3154L41	Type: SR500	No. of Bearings: 1	Per Unit Load	kW	Efficiency %
Winding Type: RANDOM WOUND					
Flywheel: 14					
Connection: -STAR					
Housing: 1			0.25	125	93.5
Phases: 3			0.5	250	95.1
No. of Leads: 6			0.75	375	95.2
Wires per Lead: 0			1	500	94.8
Poles: 4					
Generator Pitch: 0.6667					
Sync Speed: 1800					

Reactances		Per Unit	Ohms
SUBTRANSIENT - DIRECT AXIS X''_d		0.1345	0.0496
SUBTRANSIENT - QUADRATURE AXIS X''_q		0.1799	0.0663
TRANSIENT - SATURATED X'_d		0.1923	0.0709
SYNCHRONOUS - DIRECT AXIS X_d		3.8224	1.4091
SYNCHRONOUS - QUADRATURE AXIS X_q		1.9496	0.7187
NEGATIVE SEQUENCE X_2		0.1571	0.0579
ZERO SEQUENCE X_0		0.0079	0.0029

Time Constants		Seconds
OPEN CIRCUIT TRANSIENT - DIRECT AXIS T'_{d0}		1.9872
SHORT CIRCUIT TRANSIENT - DIRECT AXIS T'_d		0.1000
OPEN CIRCUIT SUBTRANSIENT - DIRECT AXIS T''_{d0}		0.0142
SHORT CIRCUIT SUBTRANSIENT - DIRECT AXIS T''_d		0.0100
OPEN CIRCUIT SUBTRANSIENT - QUADRATURE AXIS T''_{q0}		0.1084
SHORT CIRCUIT SUBTRANSIENT - QUADRATURE AXIS T''_q		0.0100
EXCITER TIME CONSTANT T_e		0.0270
ARMATURE SHORT CIRCUIT T_a		0.0150

Short Circuit Ratio: 0.32	Stator Resistance = 0.0104Ohms	Field Resistance = 0.596 Ohms
---------------------------	--------------------------------	-------------------------------

Voltage Regulation		Generator Excitation		
Voltage level adjustment: +/-	5.0%	No Load	Full Load, (rated) pf	
Voltage regulation, steady state: +/-	0.8%		Series	Parallel
Voltage regulation with 3% speed change: +/-	0.8%	Excitation voltage:	8.5 Volts	42.6 Volts Volts
Waveform deviation line - line, no load: less than	2.0%	Excitation current	0.8 Amps	3.3 Amps Amps
Telephone influence factor: less than	50			

Selected Model

Engine: C15 **Generator Frame:** M3154L41 **Genset Rating (kW):** 500.0 **Line Voltage:** 480
Fuel: Diesel **Generator Arrangement:** 6263798 **Genset Rating (kVA):** 625.0 **Phase Voltage:** 277
Frequency: 60 **Excitation Type:** Permanent Magnet **Pwr. Factor:** 0.8 **Rated Current:** 751.8
Duty: STANDBY **Connection:** - STAR **Application:** EPG **Status:** Current
Version: 42423 /44804 /45978 /14056

Generator Mechanical Information

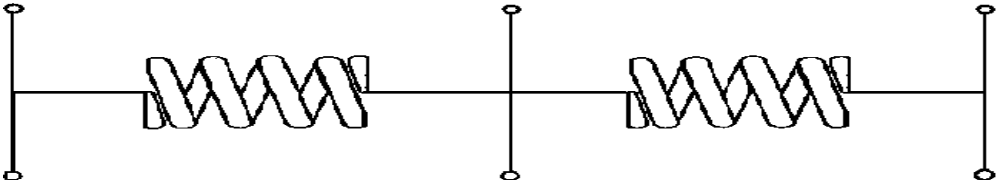
Center of Gravity		
Dimension X	-515 mm	-20.3 IN.
Dimension Y	0 mm	0.0 IN.
Dimension Z	0 mm	0.0 IN.

- "X" is measured from driven end of generator and parallel to rotor. Towards engine fan is positive. See General Information for details
- "Y" is measured vertically from rotor center line. Up is positive.
- "Z" is measured to left and right of rotor center line. To the right is positive.

Generator WT = 1230 kg	* Rotor WT = 492 kg	* Stator WT = 738 kg
2,712 LB	1,085 LB	1,627 LB

Rotor Balance = 0 mm deflection PTP
 Overspeed Capacity = 125% of synchronous speed

Generator Torsional Data

						
J1 = Coupling and Fan		J2 = Rotor			J3 = Exciter End	
TOTAL J = J1 + J2 + J3						
K1 = Shaft Stiffness between J1 + J2 (Diameter 1)			K2 = Shaft Stiffness between J2 + J3 (Diameter 2)			
J1	K1	Min Shaft Dia 1	J2	K2	Min Shaft Dia 2	J3
18.2 LB IN. s ²	52.5 MLB IN./rad	4.9 IN.	48.1 LB IN. s ²	66.6 MLB IN./rad	4.3 IN.	1.9 LB IN. s ²
2.06 N m s ²	5.93 MN m/rad	125 mm	5.43 N m s ²	7.53 MN m/rad	110 mm	0.21 N m s ²
Total J						
68.2 LB IN. s ²						
7.7 N m s ²						

Selected Model

Engine: C15 **Generator Frame:** M3154L41 **Genset Rating (kW):** 500.0 **Line Voltage:** 480
Fuel: Diesel **Generator Arrangement:** 6263798 **Genset Rating (kVA):** 625.0 **Phase Voltage:** 277
Frequency: 60 **Excitation Type:** Permanent Magnet **Pwr. Factor:** 0.8 **Rated Current:** 751.8
Duty: STANDBY **Connection:** - STAR **Application:** EPG **Status:** Current
Version: 42423 /44804 /45978 /14056

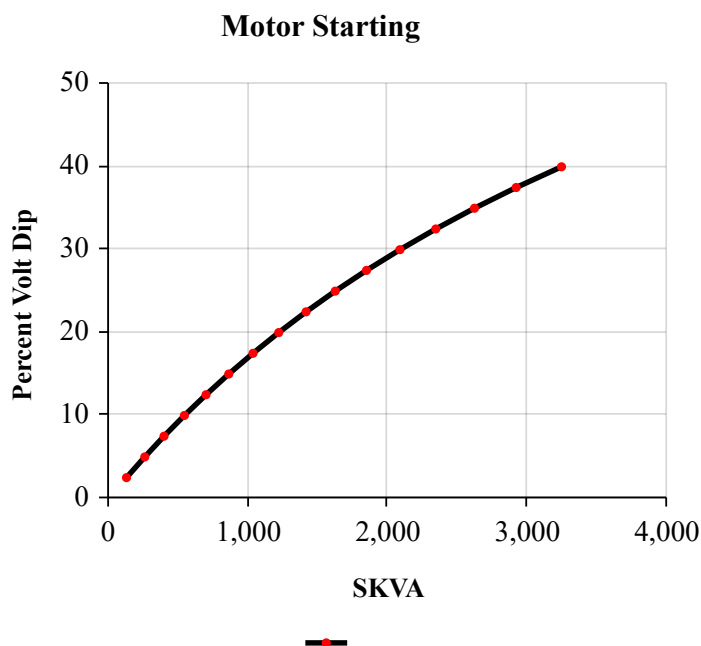
Generator Cooling Requirements - Temperature - Insulation Data		
Cooling Requirements:	Temperature Data: (Ambient 40 °C)	
Heat Dissipated: 27.4 kW	Stator Rise:	105 °C
Air Flow: 66 m ³ /min	Rotor Rise:	105 °C
Insulation Class: H		
Insulation Reg. as shipped: 100MΩ minimum at 40 °C		
Thermal Limits of Generator		
Frequency:	60 Hz	
Line to Line Voltage:	480 Volts	
B BR 80/40	552 kVA	
F BR -105/40	627.9 kVA	
H BR - 125/40	690 kVA	
F PR - 130/40	690 kVA	
H PR - 150/40	731.4 kVA	
H PR27 - 163/27	759 kVA	

Selected Model

Engine: C15 **Generator Frame:** M3154L41 **Genset Rating (kW):** 500.0 **Line Voltage:** 480
Fuel: Diesel **Generator Arrangement:** 6263798 **Genset Rating (kVA):** 625.0 **Phase Voltage:** 277
Frequency: 60 **Excitation Type:** Permanent Magnet **Pwr. Factor:** 0.8 **Rated Current:** 751.8
Duty: STANDBY **Connection:** - STAR **Application:** EPG **Status:** Current
Version: 42423 /44804 /45978 /14056

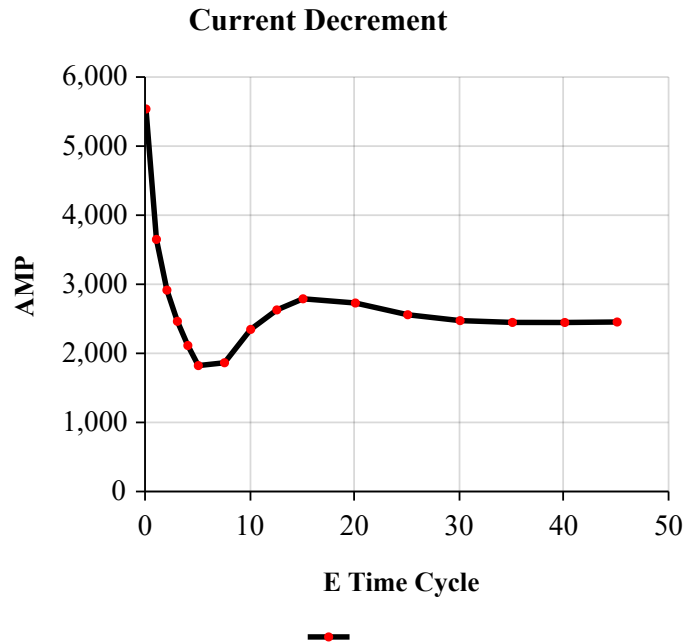
Starting Capability & Current Decrement Motor Starting Capability (0.6 pf)

SKVA Percent Volt Dip	
125	2.5
256	5.0
394	7.5
540	10.0
695	12.5
858	15.0
1,032	17.5
1,216	20.0
1,412	22.5
1,621	25.0
1,845	27.5
2,085	30.0
2,342	32.5
2,619	35.0
2,918	37.5
3,243	40.0



Current Decrement Data

E Time Cycle AMP	
0.0	5,550
1.0	3,662
2.0	2,928
3.0	2,476
4.0	2,126
5.0	1,835
7.5	1,876
10.0	2,359
12.5	2,641
15.0	2,802
20.0	2,741
25.0	2,571
30.0	2,486
35.0	2,460
40.0	2,459
45.0	2,466



Instantaneous 3 Phase Fault Current: 5550 Amps

Instantaneous Line - Line Fault Current: 4435 Amps

Instantaneous Line - Neutral Fault Current: 7478 Amps

Selected Model

Engine: C15

Generator Frame: M3154L41

Genset Rating (kW): 500.0 **Line Voltage:** 480

Fuel: Diesel

Generator Arrangement: 6263798

Genset Rating (kVA): 625.0 **Phase Voltage:** 277

Frequency: 60

Excitation Type: Permanent Magnet **Pwr. Factor:** 0.8

Rated Current: 751.8

Duty: STANDBY **Connection:** - STAR

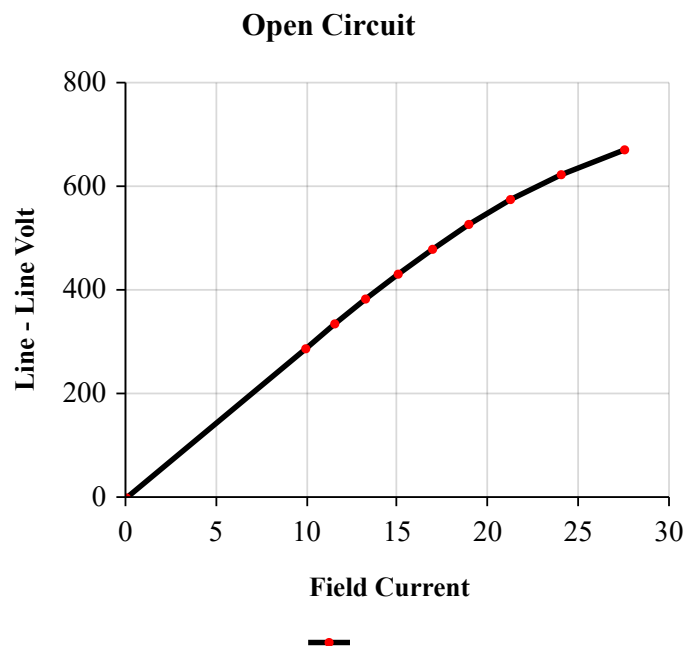
Application: EPG

Status: Current

Version: 42423 /44804 /45978 /14056

Generator Output Characteristic Curves Open Circuit Curve

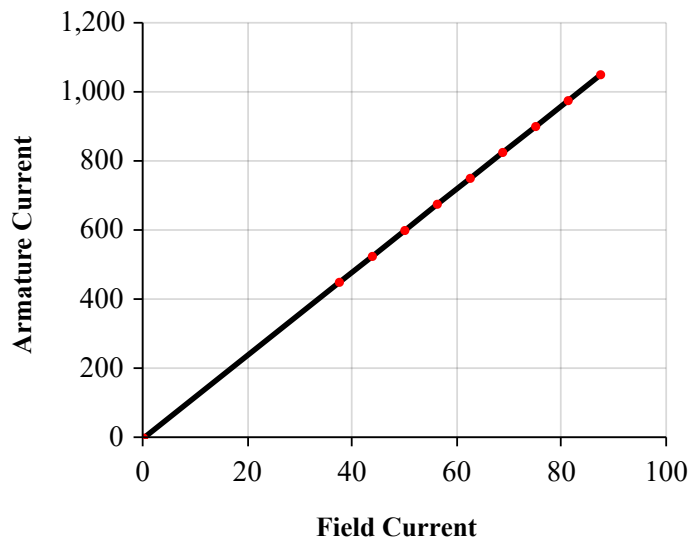
Field Current Line - Line Volt	
0.0	0
9.9	288
11.5	336
13.2	384
15.0	432
16.9	480
18.9	528
21.2	576
24.0	624
27.5	672



Short Circuit Curve

Short Circuit

Field Current	Armature Current
0.0	0
37.4	451
43.7	526
49.9	601
56.1	677
62.4	752
68.6	827
74.9	902
81.1	977
87.3	1,052



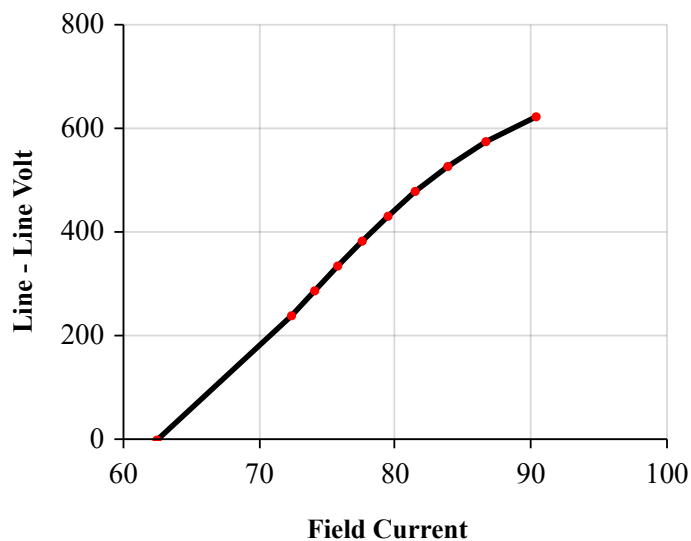
Selected Model

Engine: C15 **Generator Frame:** M3154L41 **Genset Rating (kW):** 500.0 **Line Voltage:** 480
Fuel: Diesel **Generator Arrangement:** 6263798 **Genset Rating (kVA):** 625.0 **Phase Voltage:** 277
Frequency: 60 **Excitation Type:** Permanent Magnet **Pwr. Factor:** 0.8 **Rated Current:** 751.8
Duty: STANDBY **Connection:** - STAR **Application:** EPG **Status:** Current
Version: 42423 /44804 /45978 /14056

Generator Output Characteristic Curves Zero Power Factor Curve

Zero Power

Field Current	Line - Line Volt
62.4	0
72.3	240
74.0	288
75.7	336
77.5	384
79.4	432
81.4	480
83.8	528
86.6	576
90.3	624

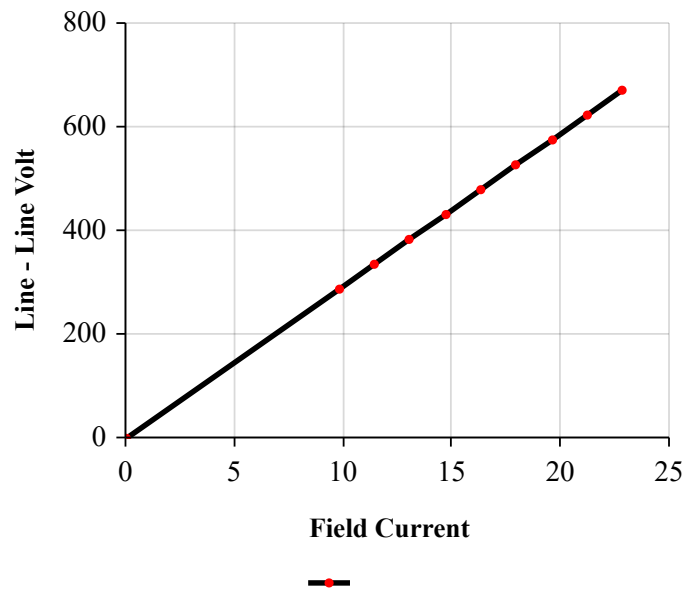


Air Gap Curve

Air Gap

Field Current Line - Line Volt

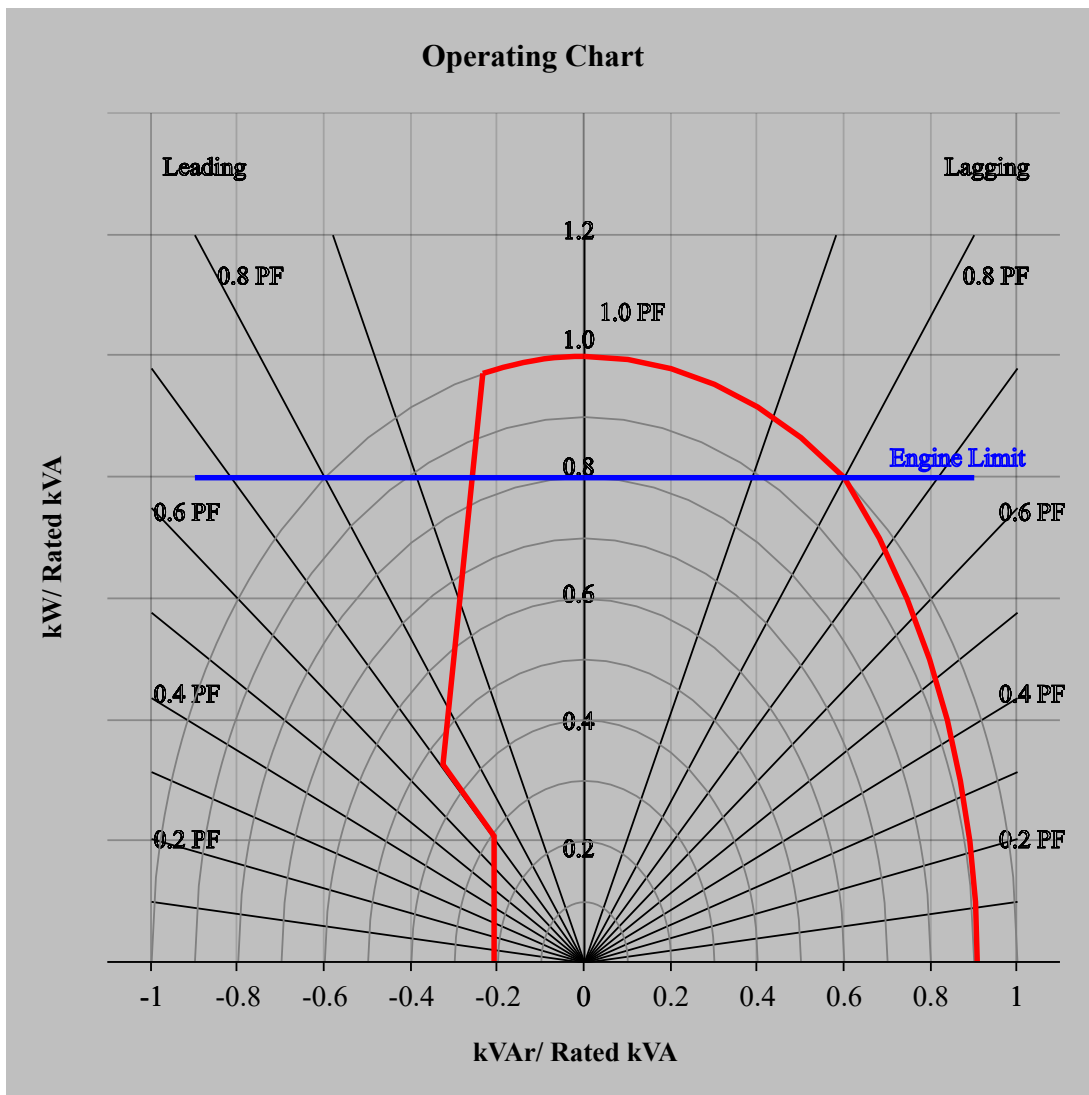
0.0	0
9.8	288
11.4	336
13.0	384
14.7	432
16.3	480
17.9	528
19.6	576
21.2	624
22.8	672



Selected Model

Engine: C15	Generator Frame: M3154L41	Genset Rating (kW): 500.0	Line Voltage: 480
Fuel: Diesel	Generator Arrangement: 6263798	Genset Rating (kVA): 625.0	Phase Voltage: 277
Frequency: 60	Excitation Type: Permanent Magnet	Pwr. Factor: 0.8	Rated Current: 751.8
Duty: STANDBY	Connection: - STAR	Application: EPG	Status: Current
Version: 42423 /44804 /45978 /14056			

Reactive Capability Curve



Selected Model

Engine: C15	Generator Frame: M3154L41	Genset Rating (kW): 500.0	Line Voltage: 480
Fuel: Diesel	Generator Arrangement: 6263798	Genset Rating (kVA): 625.0	Phase Voltage: 277
Frequency: 60	Excitation Type: Permanent Magnet	Pwr. Factor: 0.8	Rated Current: 751.8
Duty: STANDBY	Connection: - STAR	Application: EPG	Status: Current
Version: 42423 /44804 /45978 /14056			

General Information

GENERATOR INFORMATION (DM7900)

1. Motor Starting

Motor starting curves are obtained in accordance with IEC60034, and are displayed at 0.6 power factor.

2. Voltage Dip

Prediction of the generator synchronous voltage dip can be made by consulting the plot for the voltage dip value that corresponds to the desired motor starting kVA value.

3. Definitions

A) Generator Keys

Frame: abbreviation of generator frame size

Freq: frequency in hertz.

PP/SB: prime/standby duty respectively

Volts: line - line terminal voltage

kW: rating in electrical kilo watts

Model: engine sales model

B) Generator Temperature Rise

The indicated temperature rises are the IEC/NEMA limits for standby or prime power applications. The quoted rise figures are maximum limits only and are not necessarily indicative of the actual temperature rise of a given machine winding.

C) Centre of Gravity

The specified centre of gravity is for the generator only. For single bearing, and two bearing close coupled generators, the center of gravity is measured from the generator/engine flywheel-housing interface and from the centreline of the rotor Shaft.

For two bearing, standalone generators, the center of gravity is measured from the end of the rotor shaft and from the centerline of the rotor shaft.

D) Generator Current Decrement Curves

The generator current decrement curve indicates the generator armature current arising from a symmetrical three-phase fault at the generator terminals. Generators equipped with AREP or PMG excitation systems will sustain 300% of rated armature current for 10 seconds.

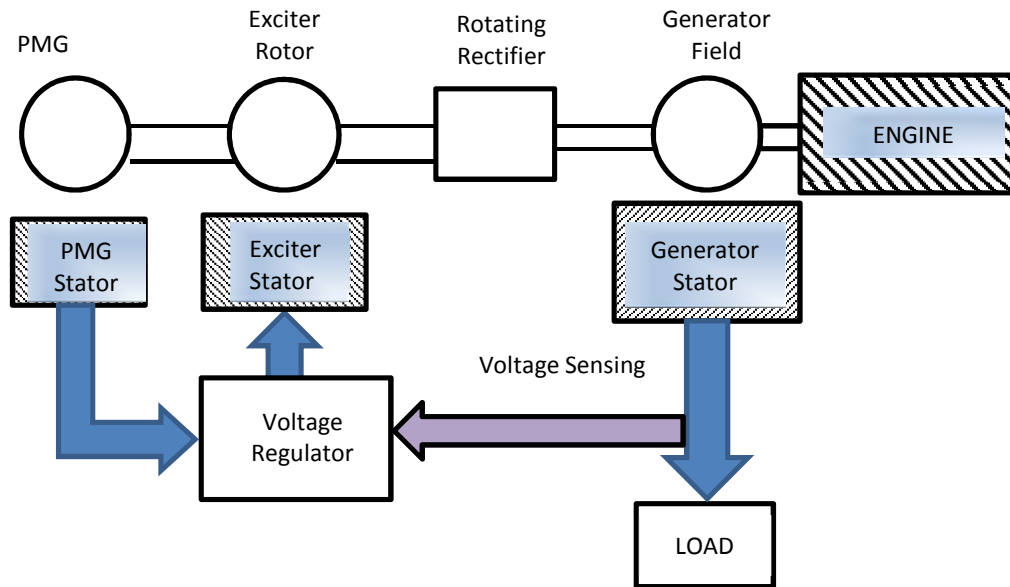
E) Generator Efficiency Curves

The efficiency curve is displayed for the generator only under the given conditions of rating, voltage, frequency and power factor. This is not the overall generating set efficiency curve.

Permanent Magnet Excitation



Block Diagram of Diesel Generator set using Permanent Magnet Generator (PMG) excitation system



In Diesel generator sets employing PMG excitation system a small permanent magnet generator (PMG) is attached to the same shaft as the main generator at the non-drive end. The PMG stator produces clean power source for the voltage regulator.

The PMG excitation system can be retrofittable on most alternators. It has the following benefits over a self-excitation system.

1. Provides reliable, isolated power which is independent of the generator output
2. Ability to provide sustained short circuit current (up to 3 times the rated current) during fault conditions and allows breaker discrimination.
3. Provides clean and uninterrupted power to the voltage regulator even when the diesel generator set is supplying non-linear or harmonic loads.
4. Can provide reduced transient voltage dip on motor starting compared to a self-excited diesel generator set.



D250 GC – D600 GC Sound Attenuated Enclosures

60 Hz

Image shown may not reflect actual configuration.

Features

Robust Construction

- Manufactured from carbon steel
- Safeguards genset against environmental and weather conditions
- Factory installed on skid base or tanks base
- Environmentally friendly, polyester powder baked paint
- Enclosure constructed with 18-gauge steel
- Interior zinc plated fasteners
- Internally mounted exhaust silencing system
- Comply with ASCE /SEI 7 for Wind loads up to 100 mph
- Designed and tested to comply with UL 2200 Listed generator set package

Excellent Access

- Large cable entry area for installation ease
- Accommodates side mounted single or multiple breakers
- Two doors on both sides
- Vertically hinged allow 180° opening rotation
- Radiator fill cover

Security and Safety

- Lockable access doors which give full access to control panel and breaker
- Cooling fan and battery charging alternator fully guarded
- Fuel fill, oil fill and battery can only be reached via lockable access
- Externally mounted emergency stop button (Optional)
- Designed for spreader bar lifting to ensure safety
- Stub-up area is rodent proof

Sound Attenuated Level 2

- Caterpillar white paint
- UL Listed integral fuel tank with 24 hours running time capacity (Optional)
- DC lighting package (Optional)

Enclosure Package Operating Characteristics

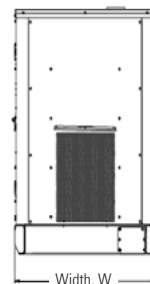
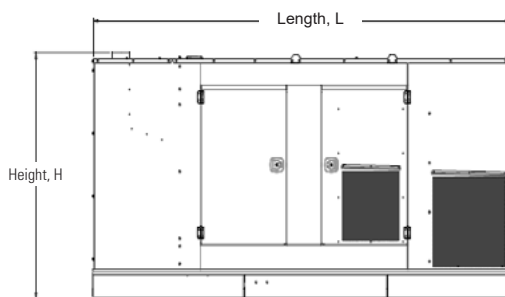
Enclosure Type	Standby	Cooling Air Flow Rate		Ambient Capability*		Sound Pressure Levels (dBA) at 7m (23 ft)
	ekW	m ³ /s	cfm	°C	°F	100% Load
Level 2 Sound Attenuated Enclosure (Steel)	250	6.4	13561	57	135	74
	300	6.4	13561	51	125	74
	350	7.4	15680	57	134	71
	400	7.4	15680	53	127	71
	450	8.4	17692	54	130	73
	500	8.4	17692	50	122	73
	550	11.2	23731	56	133	73
	600	11.2	23731	53	127	73

*Cooling system performance at sea level. Consult your Cat[®] dealer for site specific ambient and altitude capabilities.

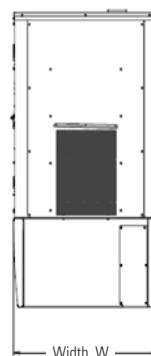
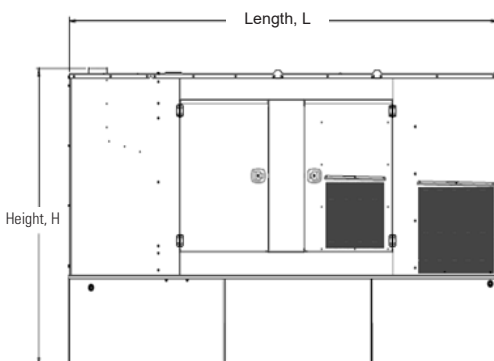
Note: Sound level measurements are subject to instrumentation, installation and manufacturing variability, as well as ambient site conditions

Weights and Dimensions

Enclosure Type	Standby Ratings	Length, L		Width, W		Height, H		Package Weights	
	ekW	mm	in	mm	in	mm	in	kg	lb
Sound Attenuated Enclosure on Skid Base	250	3958	155.8	1440	56.7	1991	78.4	2857	6298.6
	300							2945	6492.6
	350	4633	182.4	1630	64.2	2227	87.7	3983	8781.0
	400							4017	8856.0
	450	4823	189.8	1630	64.2	2227	87.7	4408	9718.0
	500							4457	9826.0
	550	4980	196.1	1865	73.4	2172	85.5	4754	10480.8
	600							4837	10663.8
Sound Attenuated Enclosure on UL Listed Integral Fuel Tank Base	250	3958	155.8	1440	56.7	2487	97.9	3497	7709.6
	300							3585	7903.6
	350	4633	182.4	1630	64.2	2644	104.1	4765	10505.0
	400							4799	10580.0
	450	4823	189.8	1630	64.2	2777	109.3	5345	11783.7
	500							5394	11891.7
	550	4980	196.1	1865	73.4	2723	107.2	5973	13168.2
	600							6056	13351.2
Sound Attenuated Enclosure on UL Listed Extended Integral Fuel Tank Base	250	4608	181.4	1430	56.3	2379	93.7	3590	7914.6
	300							3678	8108.6
	350	5251	203.7	1620	63.8	2561	100.8	4876	10749.7
	400							4910	10824.7
	450	5909	232.6	1620	63.8	2612	102.8	5497	12118.8
	500							5546	12226.8
	550	6759	266.1	1865	73.4	2487	97.9	6237	13750.2
	600							6320	13933.2



Sound Attenuated Enclosure on Skid Base



Sound Attenuated Enclosure on a UL Listed Integral Fuel Tank Base

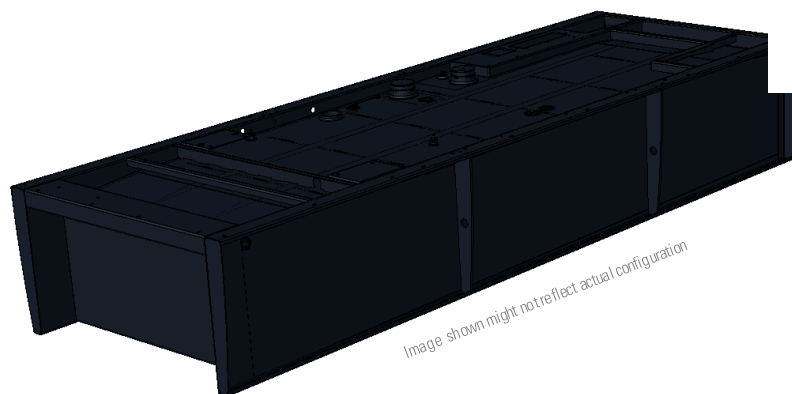
Image shown may not reflect actual configuration

www.cat.com/electricpower

© 2026 Caterpillar
All rights reserved.

Materials and specifications are subject to change without notice.

The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.



INTEGRAL FUEL TANKS

D250 GC – D600 GC

FEATURES

- UL Listed for United States (UL 142) and Canada (CAN/ULC S601)
- Facilitates compliance with NFPA 30 code, NFPA 37 and 110 standards and CSA C282 code
- Dual wall
- Low fuel level warning standard, customer configurable warning or shutdown
- Primary tank leak detection switch in containment basin
- Tank design provides capacity for thermal expansion of fuel
- Fuel supply dip tube is positioned so as not to pick up fuel sediment
- Fuel return and supply dip tube is separated by an internal baffle to prevent immediate re-supply of heated return fuel
- Pressure washed with an iron phosphate solution
- Interior tank surfaces coated with a solvent-based thin-film rust preventative
- Heavy gauge steel gussets with internal lifting rings
- Primary and secondary tanks are leak tested at 20.7 kPa (3 psi) minimum
- Compatible with open packages and enclosures
- Gloss black polyester alkyd enamel exterior paint
- Welded steel containment basin (minimum of 110% of primary tank capacity)
- Direct reading fuel gauge with variable electrical output
- Emergency vents on primary and secondary tanks are sized in accordance with NFPA 30.

INTEGRAL

- Integral diesel fuel tank is incorporated into the generator set base frame
- Robust base design includes linear vibration isolators between tank base and engine generator.

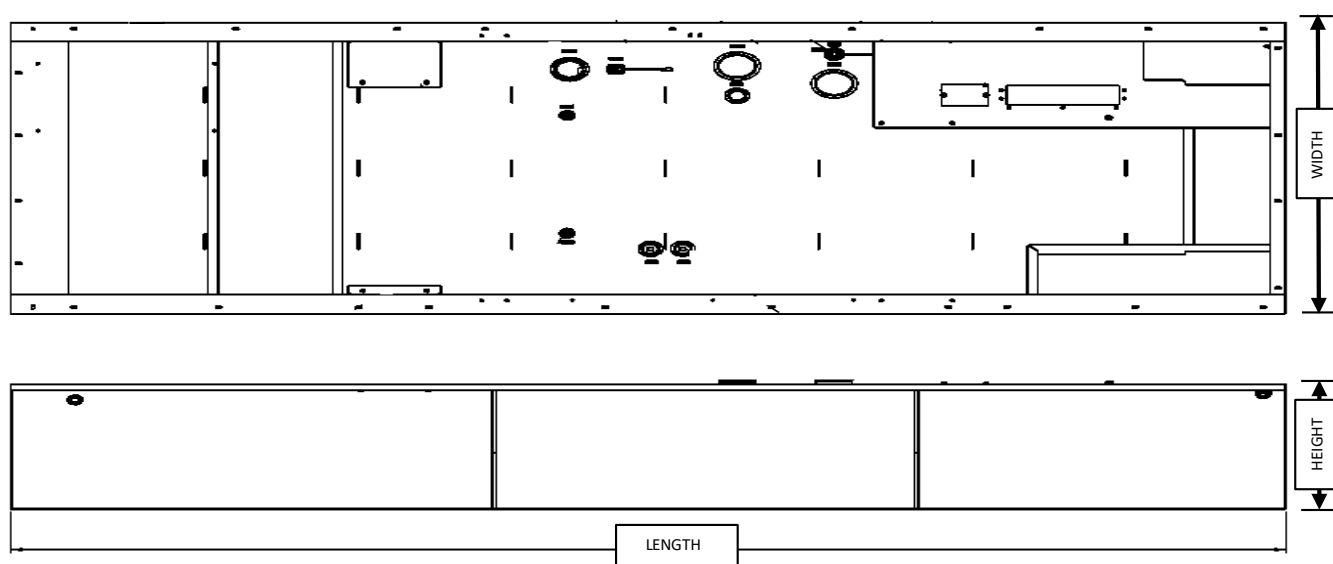
OPTIONS

- Audio/visual fuel level alarm panel
- 5gal (18.9 L) spill containment*
- Locking Fuel Fill
- Overfill prevention Valve*

*Applicable for D350GC-D600GC Models only

Integral Fuel Tank Base Useable Capacities with Fuel Tank Dimensions & Weights

Standby ekW	Width mm	Width in
250-300	1430	56.3
350-400	1630	64.1
450-500	1630	64.1
550-600	1865	73.4



The heights listed above do not include lumber used during manufacturing and shipping

A. Open Set & Sound Attenuated Enclosure

Tank Design	Feature Code	Total Capacity		Useable Capacity		Tank Only						Overall Package Height with Tank			
						Dry Weight		Height 'H'		Length 'L'		Open		Enclosure	
		Litre	Gallon	Litre	Gallon	kg	lb	mm	in	mm	in	mm	in	mm	in
Integral Tank	FTDW035	2270.7	599.8	2059.9	543.9	970	2138	762.4	30.0	3958	155.8	2202	86.7	2487	97.9
	FTDW036	2820	744.9	2553	674.4	1165	2568	818.8	32.2	4625	182.1	2584	101.7	2644	104
	FTDW037	3671	969.7	3323	877.8	1331	2934	668.2	26.3	4622	181.9	2456	96.7	2644	104
	FTDW038	4292	1133.8	3889	1027.3	1657	3653	816.4	32.1	4980	196	2560	100.7	2721	107.1

B. Estimated Run Time (Hours)

Tank Design	Feature Code	Standby Ratings (kVA)						
		ekW	100%		75%		50%	
			Hrs	L/hr	Hrs	L/hr	Hrs	L/hr
Integral Tank	FTDW035	250	28.1	73.3	35	58.8	47	43.8
		300	24	86.0	30.8	66.8	40	51.5
	FTDW036	350	27.1	94.3	31.2	81.9	42.4	60.2
		400	24.1	105.9	28.1	90.7	38.6	66.2
	FTDW037	450	25.2	131.7	31.3	106.1	42.0	79.1
		500	24.3	137	30.1	110.5	46.6	71.3
	FTDW038	550	25.7	151.1	32.9	118.1	45.2	86.1
		600	24.1	161.6	30.0	129.6	42.4	91.7

Tanks with full electrical stub-up area include removable end channel. Tanks with RH stub-up include stubup area directly below the circuit breaker or power terminal strips.

Fuel tanks and applicable options facilitate compliance with the following United States NFPA Code and Standards:

NFPA 30: Flammable and Combustible Liquids Code

NFPA 37: Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines

NFPA 110: Standard for Emergency and Standby Power Systems

Fuel tanks and applicable options facilitate compliance with the following Canadian Standard and Code:

CSA C282 – Emergency Electrical Power Supply for Buildings

CSA B139-09 – Installation Code for Oil-Burning Equipment

ENGINE MONITORING SYSTEM



Image shown may not reflect actual configuration.

Description

The controller is compatible with electronic (CAN) and non-electronic (magnetic pick-up/alternator sensing) engines and offer an extensive number of flexible inputs, outputs and extensive engine protections so the system can be easily adapted to meet the most demanding industry requirements.

The extensive list of features includes enhanced event and performance monitoring, remote communications & PLC functionality. The modules can be easily configured using a configuration suite PC software.

Full Range of Attachments

- Wide range of system expansion attachments, designed specifically to work with the GCCP controller
- Flexible packaging options for easy and cost effective installation

Benefits

- Hours counter provides accurate information for monitoring and maintenance periods
- User-friendly set-up and button layout for ease of use
- Multiple parameters are monitored & displayed simultaneously for full visibility
- The module can be configured to suit a wide range of applications for user flexibility
- PLC editor allows user configurable functions to meet user specific application requirements
- RS485 Communication port can be used for the Remote Monitoring Communication (Compatible with Cat PLG)

World Wide Product Support

- Cat dealers provide extensive pre and post sale support
- Cat dealers have over 1,600 dealer branch stores operating in 200 countries

GCCP 1.2 – Control Panel

GCCP 1.2 is an Auto Start Control Module suitable for a wide variety of diesel gen-set applications. Monitoring an extensive number of engine parameters, the modules will display warnings, shutdown and engine status information on the back-lit LCD screen, illuminated LEDs and remote PC.

Features

- 4-line back-lit LCD text display
- Multiple display languages
- Five-key menu navigation
- LCD alarm indication
- Customisable power-up text and images
- Data logging facility
- Internal PLC editor
- Protections disable feature
- Fully configurable via PC using USB & RS485 communication
- Front panel configuration with PIN protection
- Power save mode
- 3-phase generator sensing and protection
- Generator current and power monitoring (kW, kvar, kVA, pf) kW and kvar overload and reverse power alarms
- Over current protection
- Unbalanced load protection
- Breaker control via fascia buttons
- Fuel and start outputs configurable when using CAN Support for 0V to 10V & 4 mA to 20 mA sensors
- 8 Configurable digital inputs (3 available for Customer use)
- 8 Configurable digital outputs (5 available for Customer use)
- 4 Configurable analogue inputs (3 available for Customer use)
- CAN, MPU and alternator frequency speed sensing in one variant
- Real time clock
- Engine pre-heat and post-heat functions
- Engine run-time scheduler
- Engine idle control for starting & stopping
- Fuel usage monitor and low fuel level alarms
- 3 Configurable maintenance alarms
- MODBUS RTU support
- User configurable MODBUS pages

SPECIFICATIONS

DC SUPPLY

CONTINUOUS VOLTAGE RATING

8V to 35V continuous
5V for upto 1 minute

CRANKING DROPOUTS

Able to survive 0V for 100 mS, providing supply was at least 10V before dropout and supply recovers to 5V. This is achieved without the need for internal batteries.

LEDs and backlight will not be maintained during cranking

MAXIMUM OPERATING CURRENT

260 mA at 12V, 150 mA at 24V

MAXIMUM STANDBY CURRENT

145 mA at 12V, 85 mA at 24V

CHARGE FAIL/EXCITATION RANGE

0V to 35V

GENERATOR & MAINS (UTILITY) VOLTAGE RANGE

15V to 415 V AC (Ph to N)
26 V to 719 V AC (Ph to Ph)

MAGNETIC PICK-UP VOLTAGE RANGE

+/- 0.5V to 70V

FREQUENCY RANGE

10,000 Hz (max)

INPUTS

DIGITAL INPUTS A TO H

Negative switching

ANALOGUE INPUTS A TO D

Configurable as:

Negative switching digital input 0-10V sensor 4 mA to 20 mA
Resistive Sensor

ANALOGUE INPUTS A TO C

Configurable as:

Negative switching digital input Resistive Sensor

OUTPUTS

OUTPUT A and B (FUEL & START)

15A DC at supply voltage

AUXILIARY OUTPUTS C, D, E, F, G, H, I & J 2

A DC at supply voltage

DIMENSIONS

OVERALL

216 mm x 158 mm x 43 mm
8.5" x 6.2" x 1.5"

PANEL CUTOUT

184 mm x 137 mm
7.2" x 5.3"

MAXIMUM PANEL THICKNESS

8 mm
0.3"

OPERATING TEMPERATURE

-30°C to +70°C
-22°F to +158°F

STORAGE TEMPERATURE RANGE

-40°C to +85°C
-40°F to +185°F

STANDARDS

UL, cUL Listed

NFPA 70#

Electro-Magnetic Compatibility: BS EN 61000-6-2/6-4 Electrical Safety: BS EN 60950

Temperature: BS EN 60068-2-1, BS EN 60068-2-2

Vibration: BS EN 60068-2-6

Humidity: BS EN 60068-2-30, BS EN 60068-2-78 Shock: BS EN 60068-2-27

Degrees of protection provided by enclosures: BS EN 60529 Ingress Protection:

IP65 – Front of module when installed into the control panel with the optional sealing gasket

Applicable codes and standards facilitate compliance to NFPA 70

OPTIONAL MODULES

Remote annunciator



The Remote annunciator with an integral sounder is an output LED expansion module designed to display a maximum of eight individual LED indications up to a maximum distance of 1 km (0.6 miles). The annunciator will consist of two modules to provide a 16 Channel Fault annunciation. The Panels are fitted with removable label cards which can be used to identify the standard NFPA alarms

Key Features:

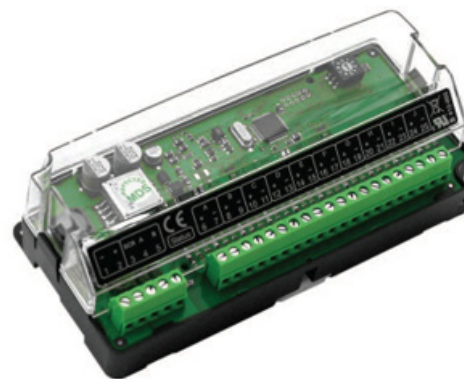
- Panel mount
- Vertical design
- In-built alarm
- Alarm mute button
- Max of 80 configurable LED's

Input Expansion Module

The Input Expansion module is used in conjunction with supported GCCP controllers to provide additional, flexible, input functionality. The module's ID switch is configurable from the module and the 10 inputs can be configured from within the 'host controller'. The inputs can be configured in a number of ways to connect to digital switches, resistive sensors, 0-10V DC signals or 4-20 mA sig.

Key Features:

- DIN rail & chassis mount
- Power on/link lost LED
- 1.2 km (0.75 Mile) working range
- Connect maximum of 4 x Input Modules to a single host controller
- Max of 40 configurable inputs



Output Expansion Module

The output relay expansion module for use with compatible GCCP control modules has been designed to extend a host module's output capabilities. A maximum of 10 relays can be connected to an individual module at any one time. All outputs are configurable via the host controller.

Key Features:

- Power On/Link Lost LED ID SWITCH
- 10 Expansion modules can be connected to 1 host controller at a time
- 8 Configurable relay contacts with LED indicators:
 - o 4 Normally Open (N/O)
 - o 4 Change Over (C/O)
- Terminal strip connection for quick and easy set-up



www.cat.com/electricpower

©2025 Caterpillar

All rights reserved.

Materials and specifications are subject to change without notice.

The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.



ADEM™ A4 Engine Controller

The ADEM™ A4 is the main Electronic Control Module (ECM) used on select diesel engines. The ADEM A4 provides a higher degree of control over a large number of combustion variables. The ADEM A4 is designed to control/interface Electronic Unit Injector (EUI) equipped engines. The ADEM A4 engine system is composed of the ADEM A4 ECM, control software, sensors, actuators, fuel injectors, and interface to the generator system. The prime benefit of an ADEM A4 engine system is to better control and maintain the particulate emissions, both steady state and transient, while improving engine performance.

Features

Reliable, Durable

All ADEM A4 controllers are designed to survive the harshest environments.

- Environmentally sealed, die-cast aluminum housing isolates and protects electronic components from moisture and dirt contamination
- Rigorous vibration testing ensures product reliability and durability
- Accuracy maintained from -40°C to 85°C
- Electrical noise immunity to 100 volts / meter
- Internal circuits are designed to withstand shorts to + battery and – battery

Simple Servicing

Each ADEM A4 system works in combination with the Cat® ET service tool software to keep the engine operating at peak performance.

- Displays measured parameters
- Retrieves active and logged event code documenting abnormal system operation
- Performs calibrations and diagnostic tests
- Supports flash programming of new software into the ADEM A4 ECM

Self Diagnostics

Each ADEM A4 ECM has a full compliment of diagnostics. The ECM can detect faults in the electrical system and report those faults to the service technician for quick repair.

- Self-diagnostic capability pinpoints operational problems in need of attention.

Advanced Features

- Enhanced performance from fuel injection timing and limiting
- Adjustable monitoring of vital engine parameters
- Programmable speed acceleration ramp rate
- Data link interfaces

Description

The ECM is housed in an environmentally sealed cast-iron. All wiring connections to the ECM are made using two sealed connectors: a single seventy-pin connector and a single one hundred twenty-pin connector.

Engine Speed Governing

Desired engine speed is calculated by the ECM and held within ± 0.2 Hz for isochronous and droop mode. The ECM accounts for droop that is requested. The proper amount of fuel is sent to the injectors due to these calculations. The ECM also employs cooldown/shutdown strategies, acceleration delays on startup, acceleration ramp times and speed reference.

Fuel Limiting

Warm and cold fuel-air ratio control limits are controlled by the ECM. Electronic monitoring system derates, torque limit, and cranking limit, programmable torque scaling, and cold cylinder cutout mode are standard features.

Fuel Injection Timing

Master timing for injection is controlled by the ECM control. Temperature dependencies are accounted for in the fuel injection calculations.

Electronic Monitoring

Electronic monitoring of vital engine parameters can be programmed. Warning, derate, and shutdown event conditions may be customized by the user.

Information Management

The ECM stores information to assist with electronic troubleshooting. Active and logged diagnostic codes, active events, logged events, fuel consumption, engine hours, and instantaneous totals aid service technicians when diagnosing electronic faults and scheduling preventive maintenance.

Calibrations

Engine performance is optimized through injection timing. Auto/manual sensor calibrations are standard features.

On-Board System Tests

System tests are available to assist in electronic troubleshooting. These tests include: injector activation, injector cutout, and override of control outputs.

Data Link Interfaces

The ADEM A4 communicates with the EMCP via a dedicated communication network.

Electronic Sensing

The following sensing is available on the ADEM A4: oil pressure, fuel pressure, fuel temperature, atmospheric pressure, air inlet temperature, turbo outlet pressure, engine coolant temperature, engine speed, throttle position, exhaust temperature, oil filter pressure differential, fuel filter pressure differential, air filter pressure differential and crankcase pressure.

SPECIFICATIONS

Impervious to:

Salt spray, fuel, oil and oil additives, coolant, spray cleaners, chlorinated solvents, hydrogen sulfide and methane gas, and dust.

Input and output protection

All inputs and outputs are protected against short circuits to +battery and –battery

Input voltage range (24 VDC nominal)

18 to 32 VDC

Mounting

Engine mounted

Reverse polarity protected

Shock, withstands 20g

Temperature range

Operating: –40°C to 85°C (–40°F to 185°F)

Storage: –50°C to 120°C (–58°F to 248°F)

Vibration

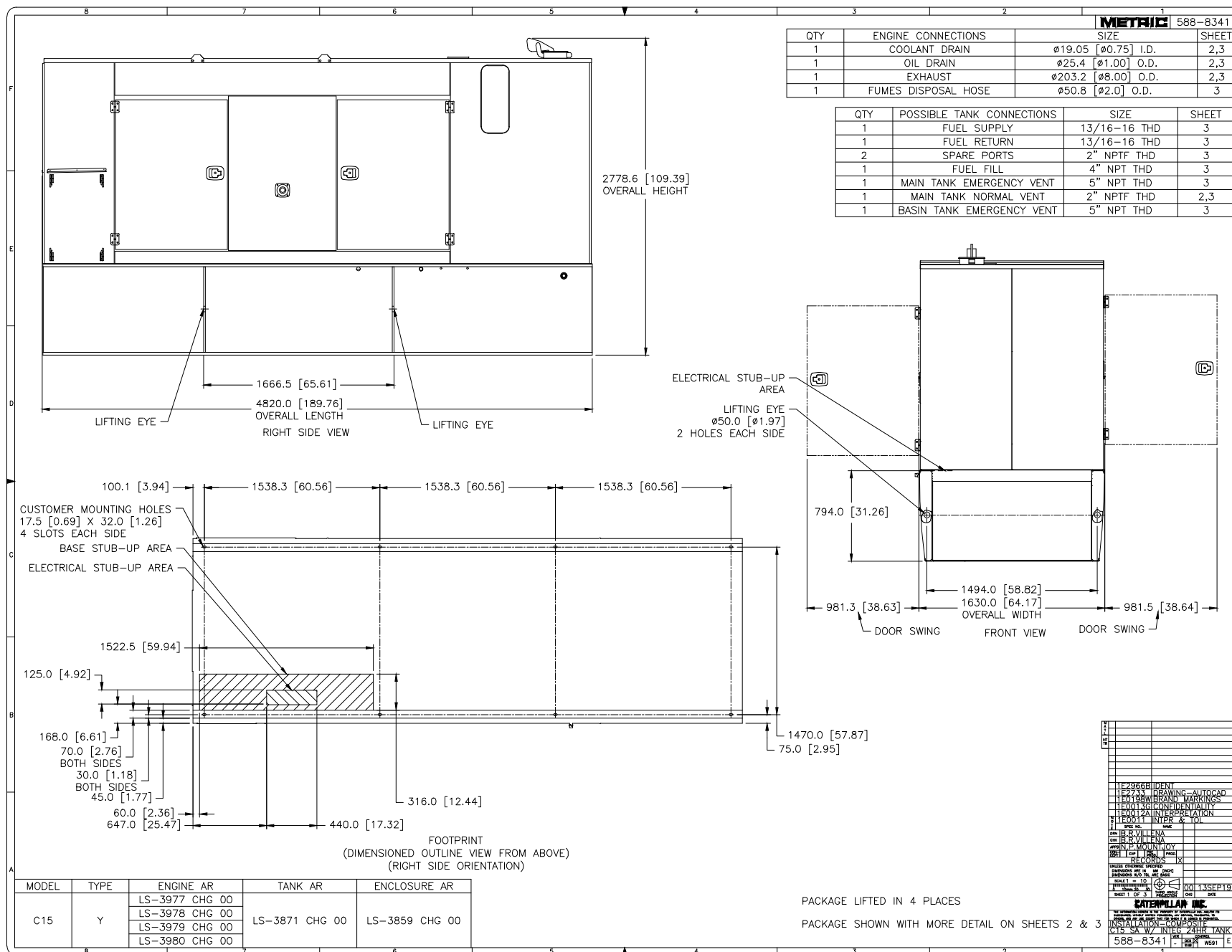
Withstands 8.0g @ 24 to 2 kHz

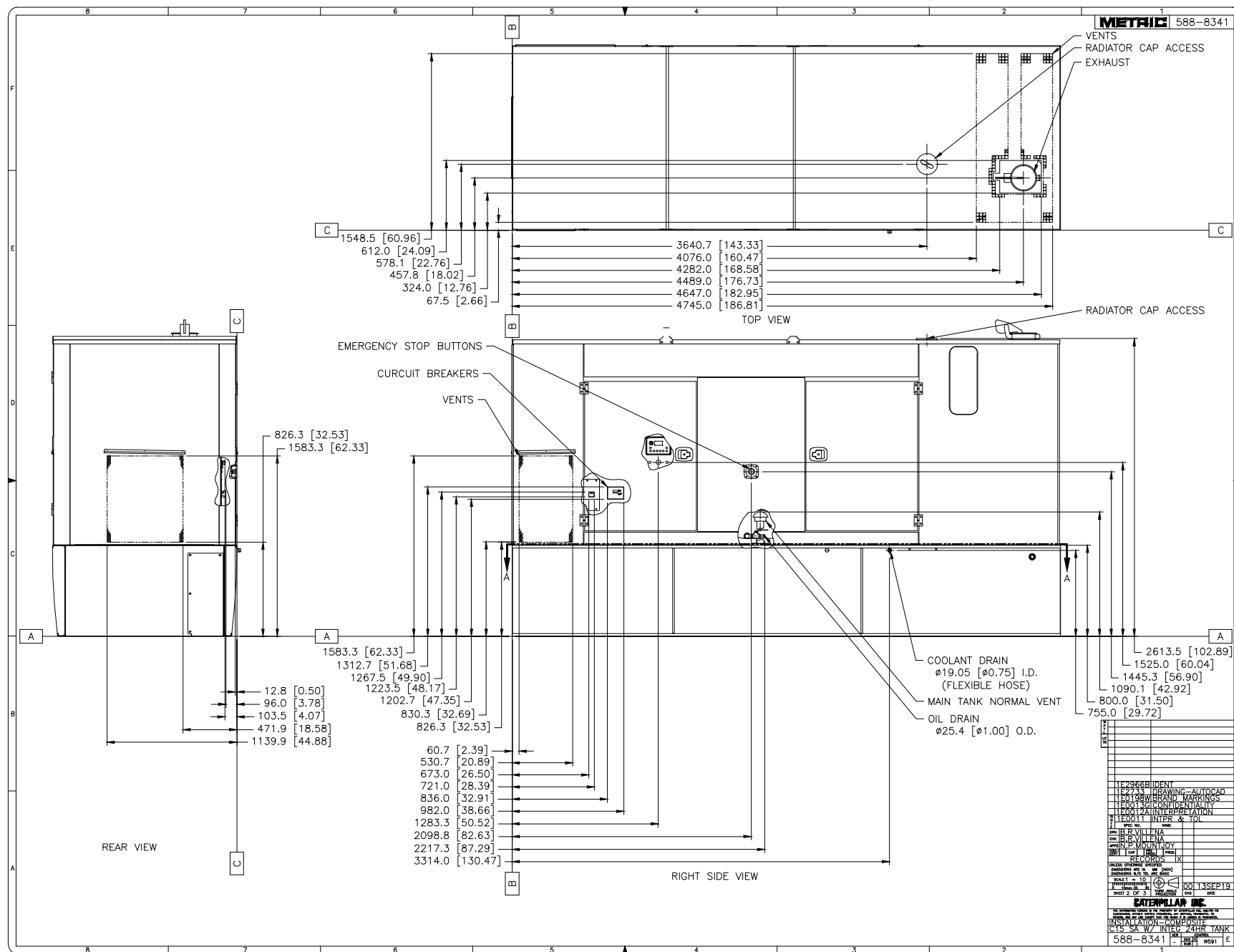
Information contained in this publication may be considered confidential. Discretion is recommended when distributing.

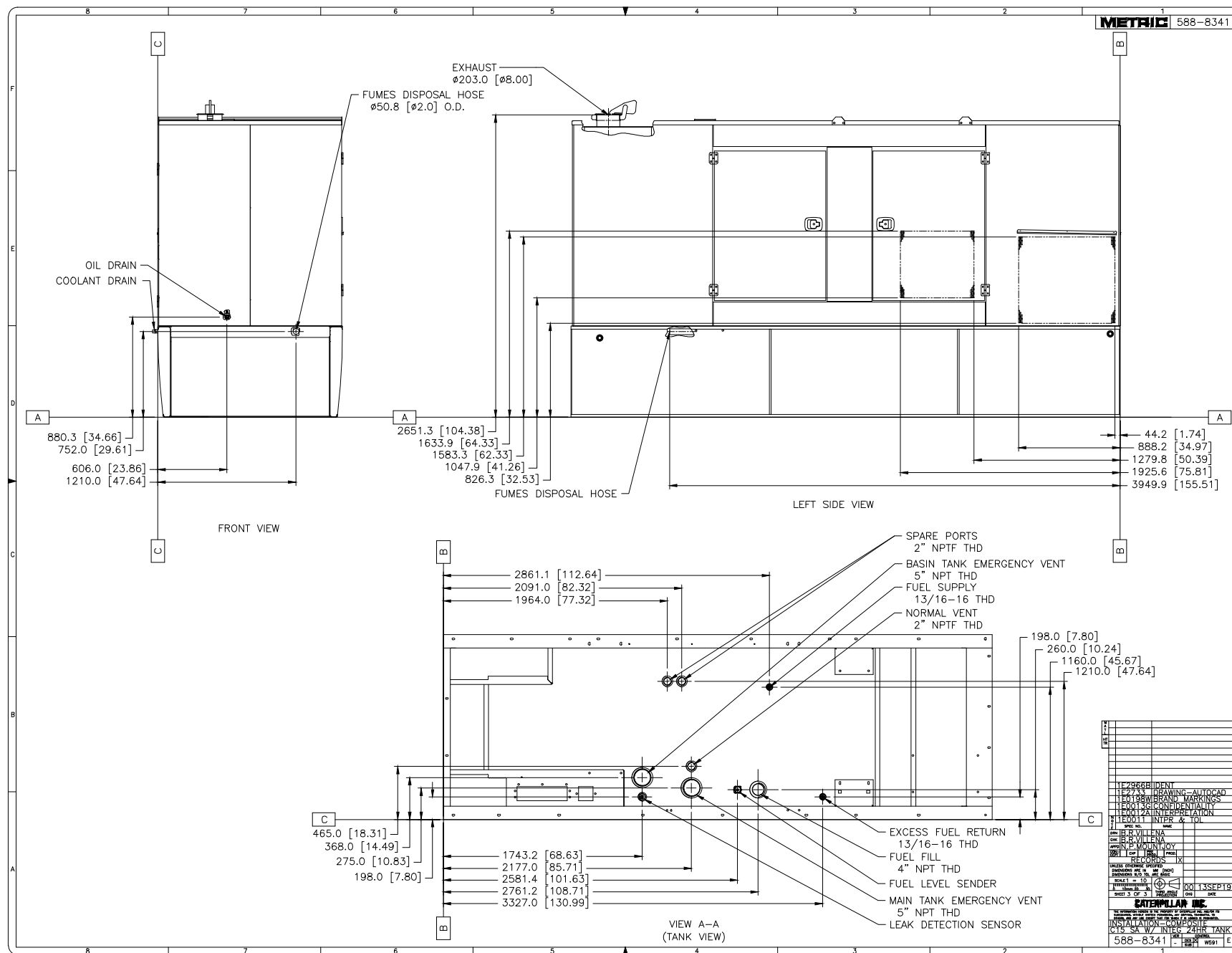
Materials and specifications are subject to change without notice.

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

WIRING DIAGRAM

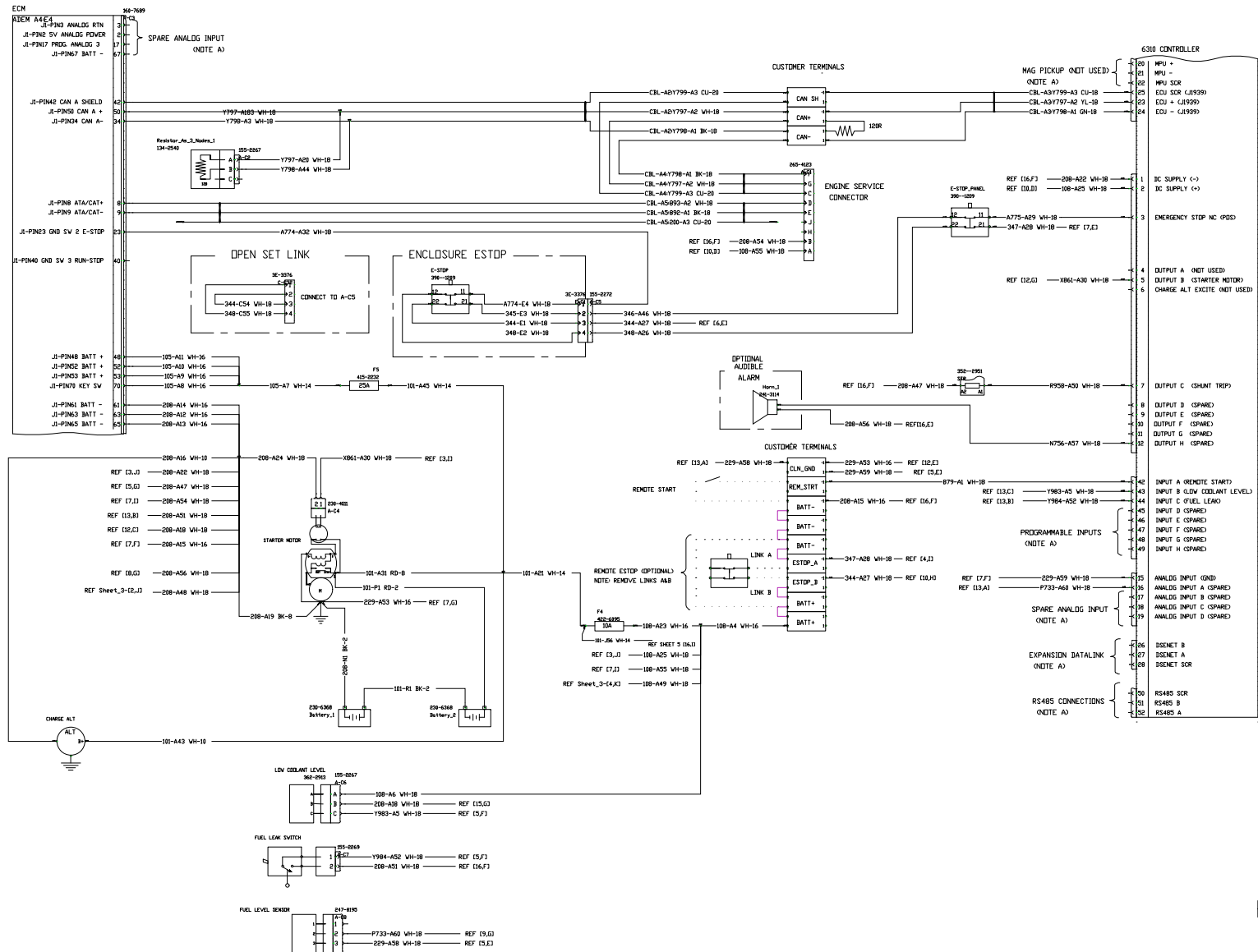




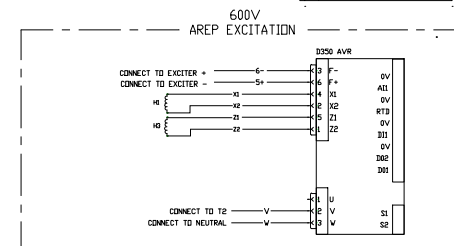
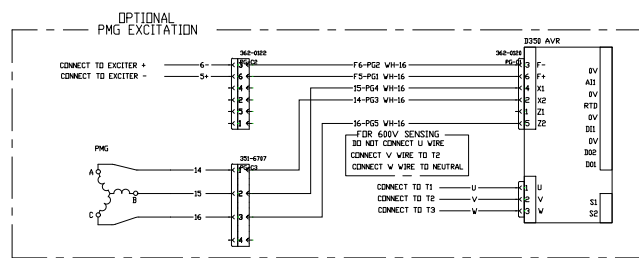
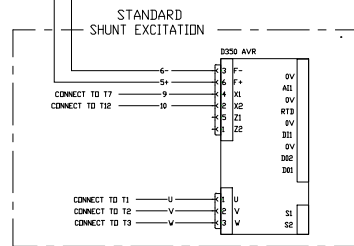
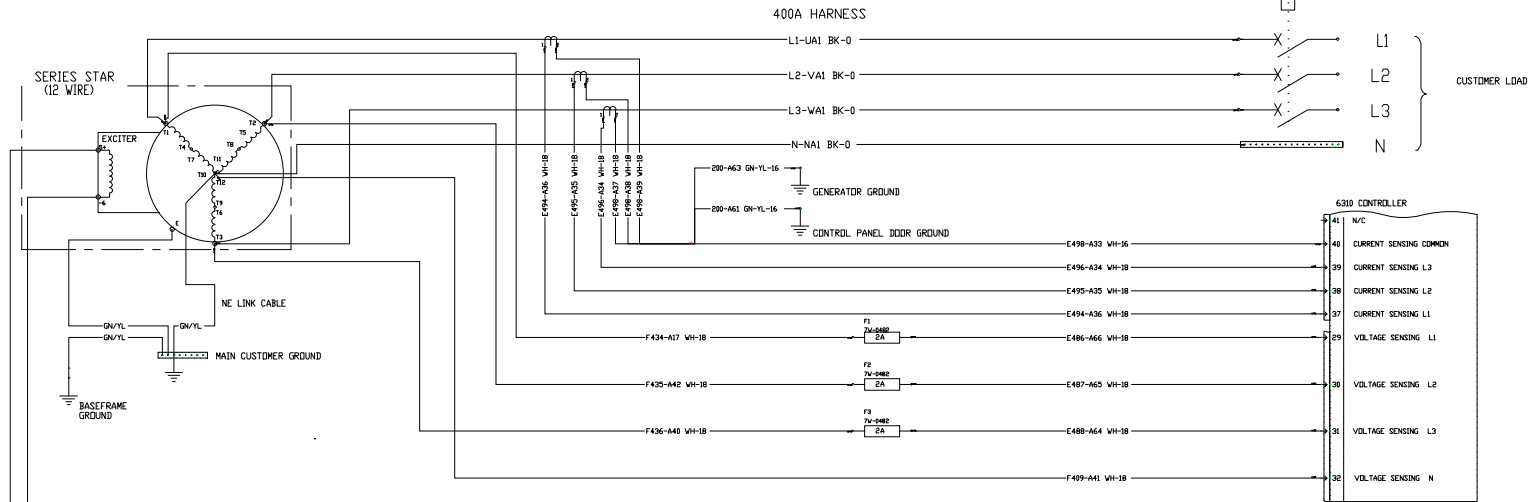
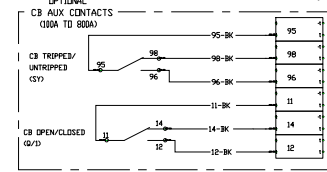
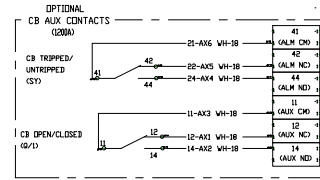
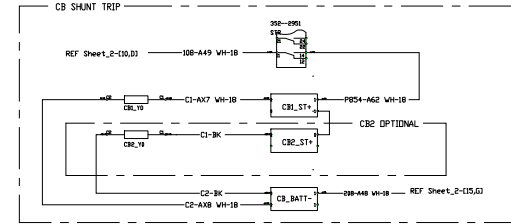
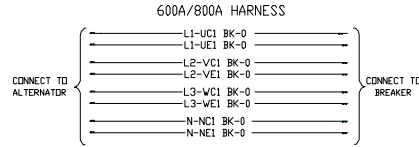
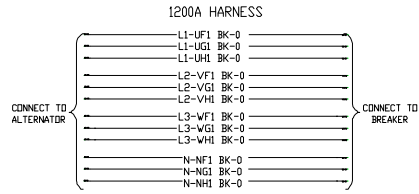
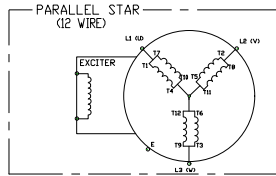
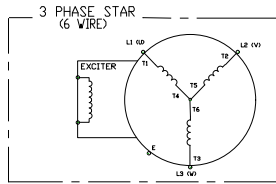


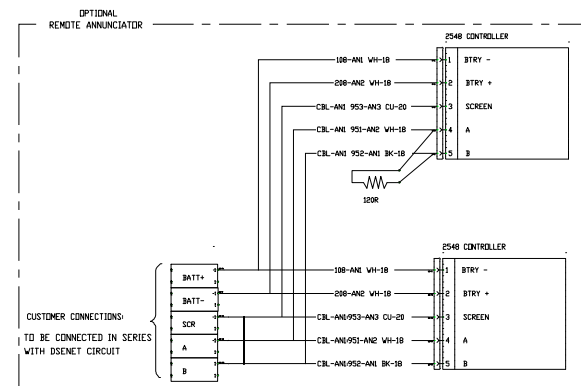
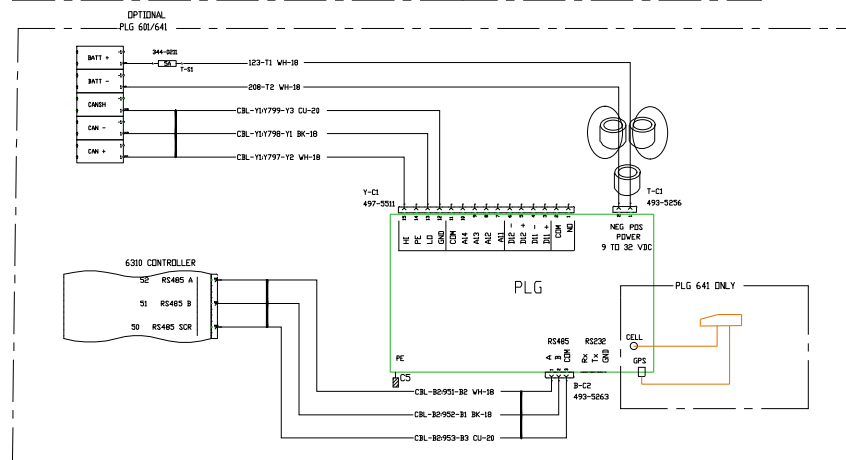
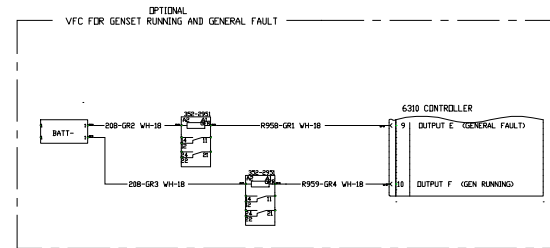
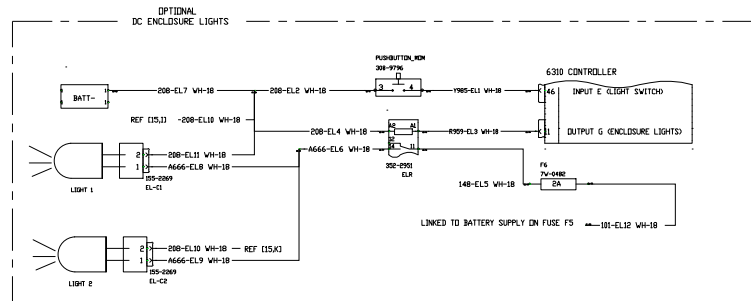
[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

CONTROL SCHEMATIC (GCCP 1.2)

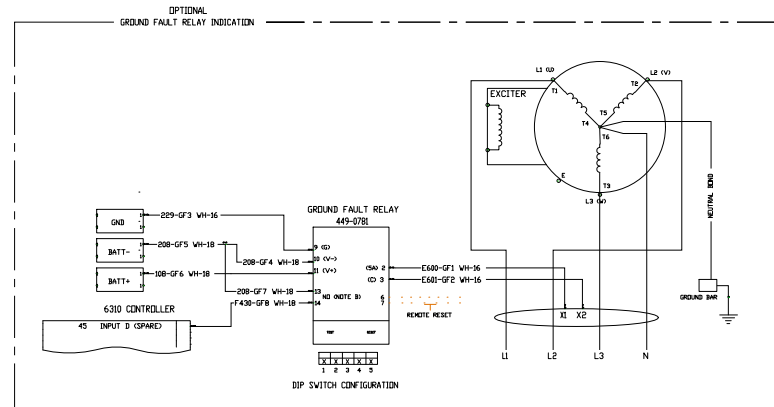
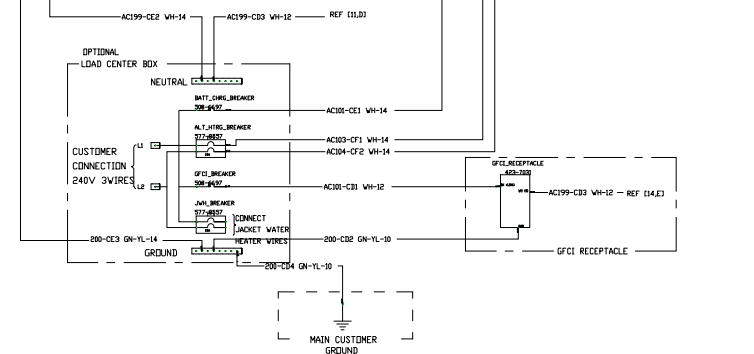
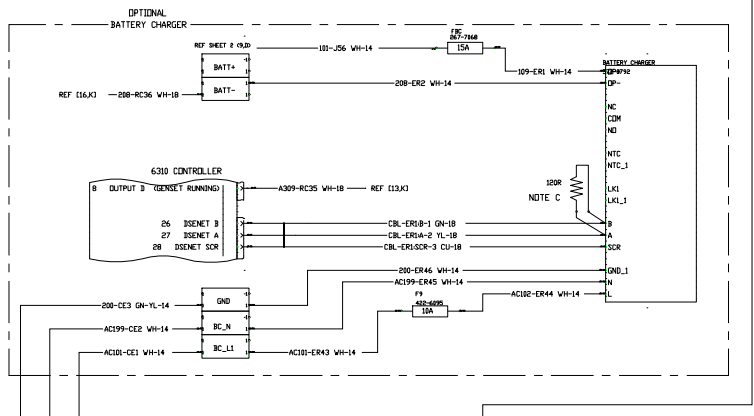
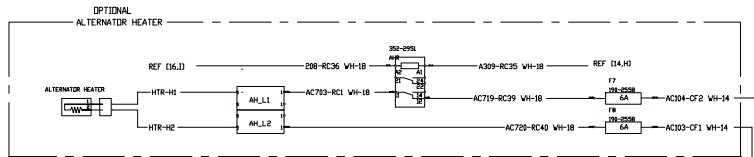


POWER SCHEMATIC

[illegible]

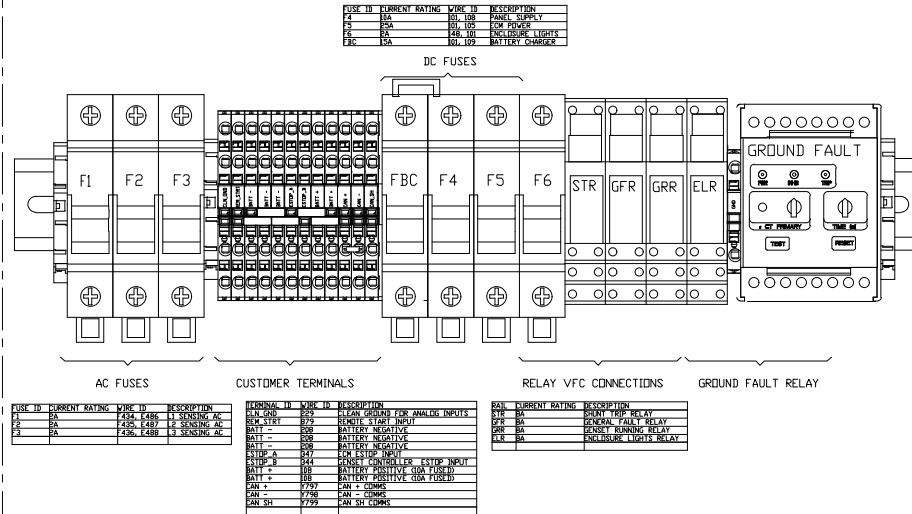
[illegible]

ADDITIONAL OPTIONS

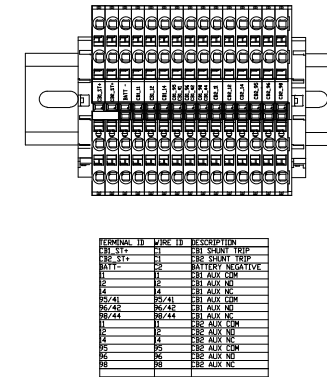


ADDITIONAL INFORMATION - COMPONENT DETAILS & CUSTOMER CONNECTIONS

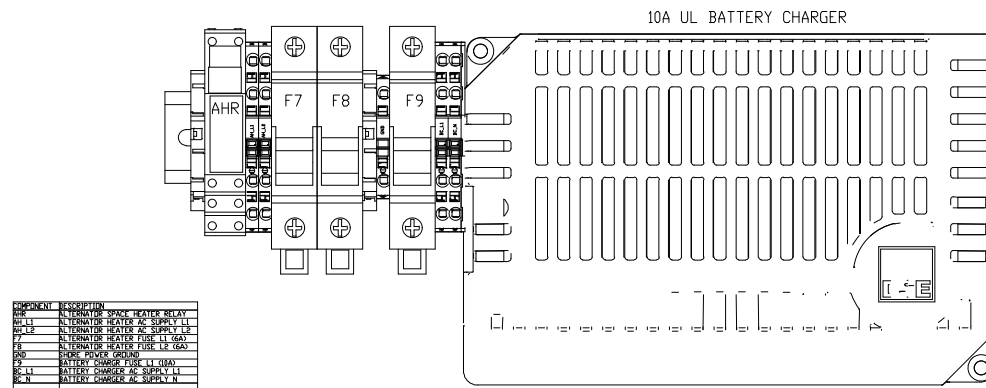
MAIN CUSTOMER RAIL (OPTIONS INCLUDED)



CIRCUIT BREAKER RAIL (OPTIONS INCLUDED)



SHORE POWER RAIL (OPTIONS INCLUDED)



WIRE ID	DESCRIPTION
100_100	PANEL SUPPLY
100_100	FOR FUSE
100_100	ENCLOSURE LIGHTS
100_100	BATTERY CHARGER

Circuit Breakers [C9, C13, C15, C18]

D250 GC, D300 GC, D350 GC, D400 GC, D450 GC, D500 GC, D550 GC, D600 GC

Manually Operated Circuit Breakers

Current (A)	Frame	Number of Poles	Interrupting Ratings (kA ms)			Trip Unit	(Lugs) Cable Size Range / Phase	Auxilliary Options
			240V	480V	600V			
100	XT2	3	65	25	18	Electronic LS/I or LSI	14-1/0 AWG	1 Form C + 1 Bell Alarm Shunt Trip 24VDC
250	XT4	3	65	25	18	Electronic LS/I or LSI	14-1/0 AWG	1 Form C + 1 Bell Alarm Shunt Trip 24VDC
400	XT5	3	65	35	18	Electronic LS/I or LSI	2/0 – 500 kcmil	1 Form C + 1 Bell Alarm Shunt Trip 24VDC
600	XT6	3	65	35	20		(3) 2/0 – 400 kcmil	
800	XT6	3	65	35	20		(3) 2/0 – 400 kcmil	
1200	XT7	3	65	50	25		(4) 4/0 – 500 kcmil	1 Form C + 1 Bell Alarm Shunt Trip 24VAC/VDC

1st Breaker Options (400 – 1200A)

Model	Current (A)	Operation
C9, C13, C15	400	Manually Operated
C9, C13, C15, C18	600	Manually Operated
C9, C13, C15, C18	800	Manually Operated
C9, C18	1200	Manually Operated

1st Breaker FLC Capacity or one frame less than FLC capacity except when 1st breaker is 400 A.

2nd Breaker Options

Model	Current (A)	Operation
C9, C13, C15, C18	100 / 250	Manually Operated

2nd Breaker either 100A or 250A.

Trip Curves for Circuit Breakers with Electronic Trip Units

XT2 Ekip LSI L-S-I Functions

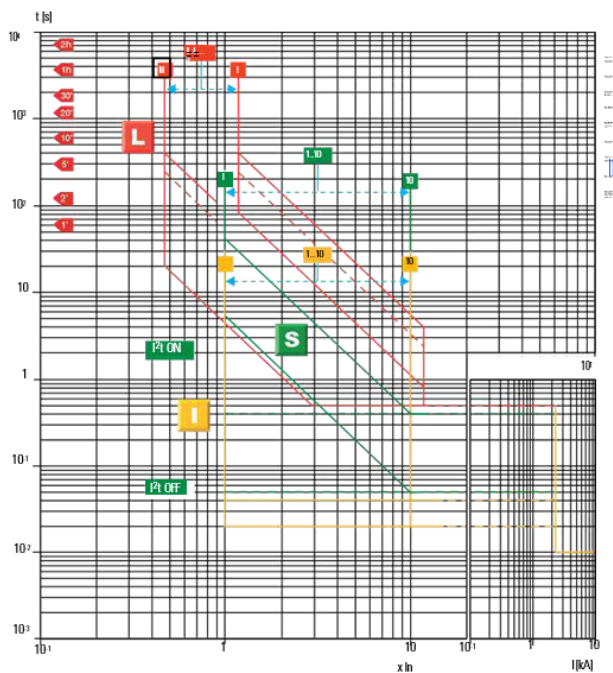
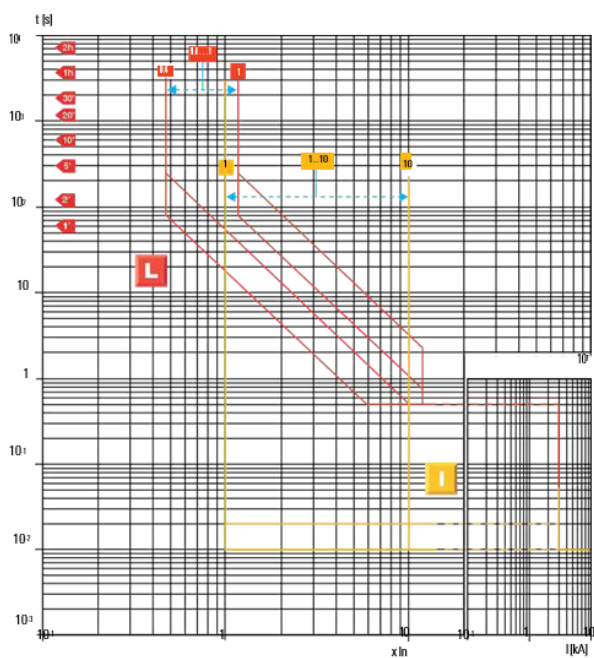


Figure 1

XT4 Ekip LS/I L-I Functions



XT4 Ekip LS/I L-S Functions

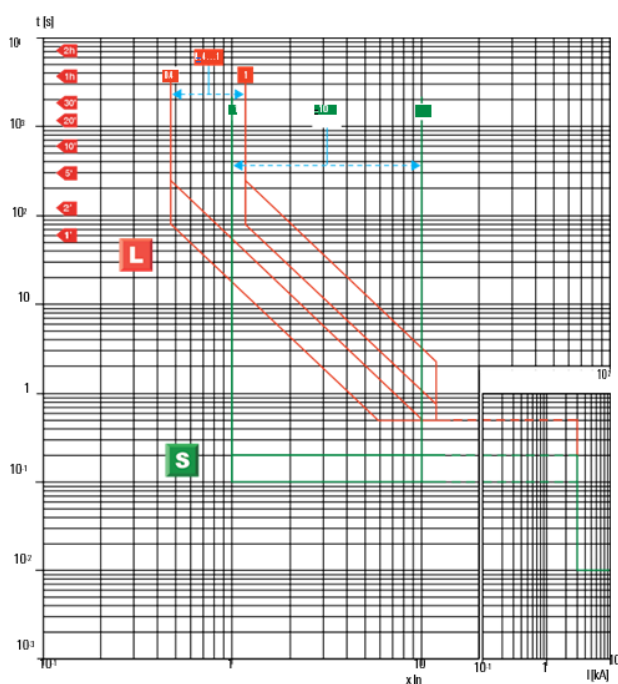
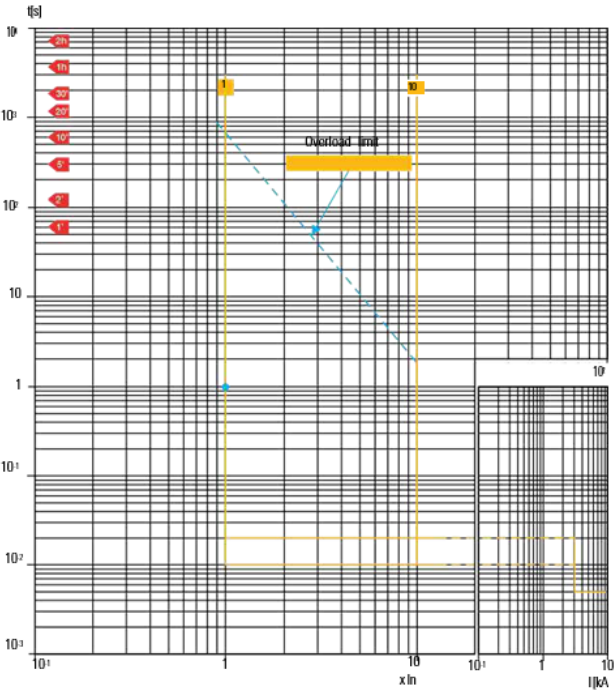


Figure 2

XT4 Ekip LS/I
I Functions



XT4 Ekip
L-S-I Functions

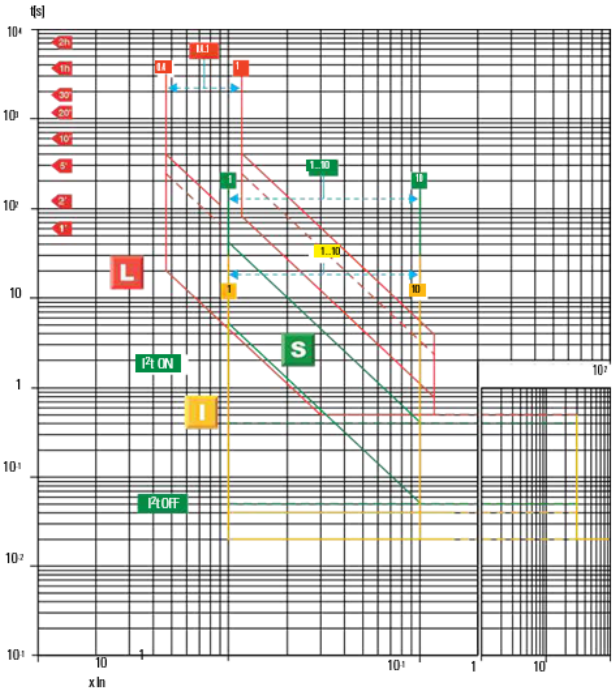


Figure 3

XT5 Ekip Dip LSI L-S-I Functions

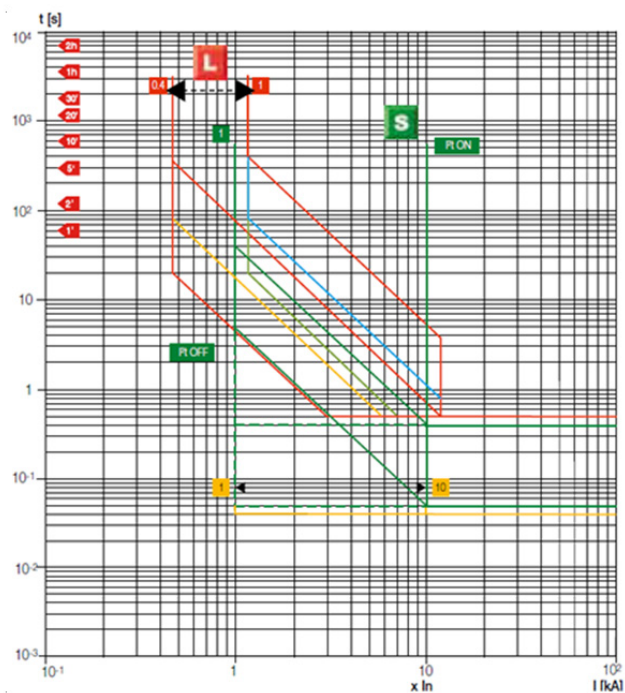


Figure 4

XT6 Ekip Dip LSI L-S-I Functions

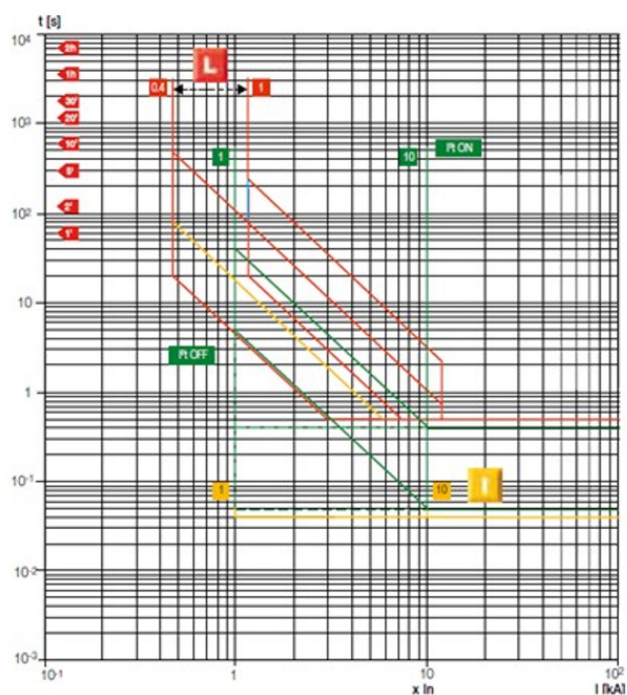


Figure 5

XT5 – XT6 Ekip Dip LS/I L-S-I Functions

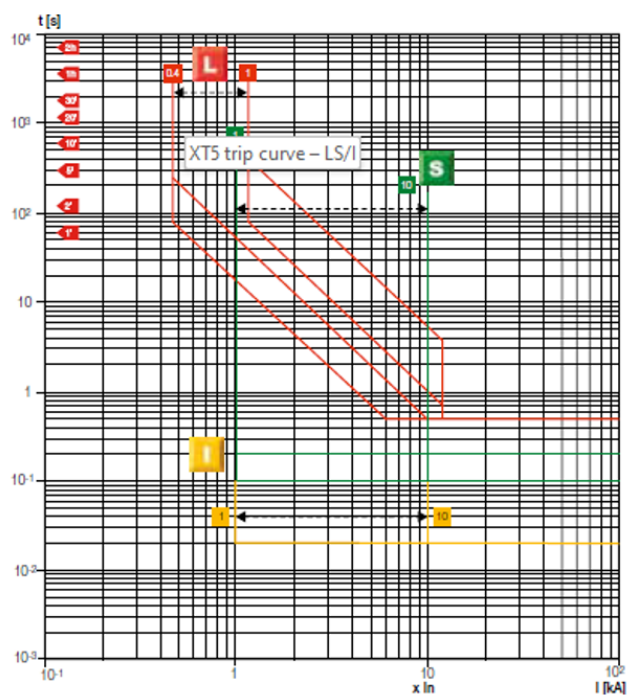


Figure 6

XT7 – XT7 M Ekip Dip LSI L-S-I Functions

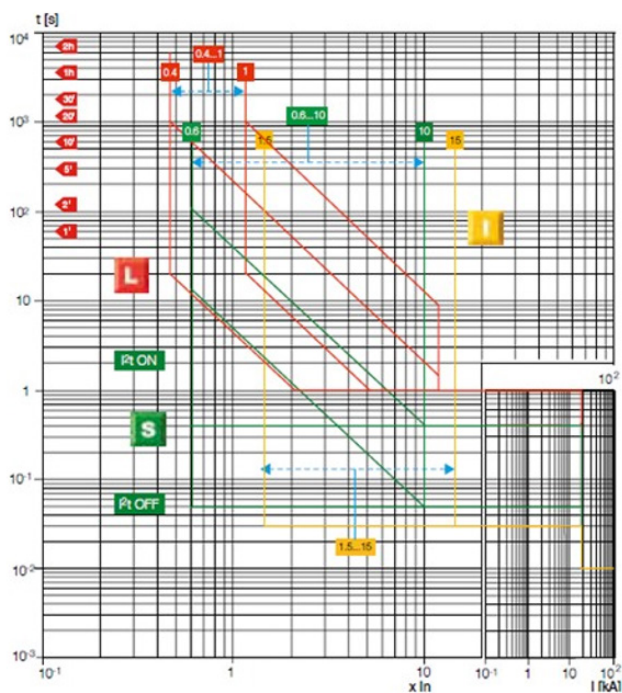
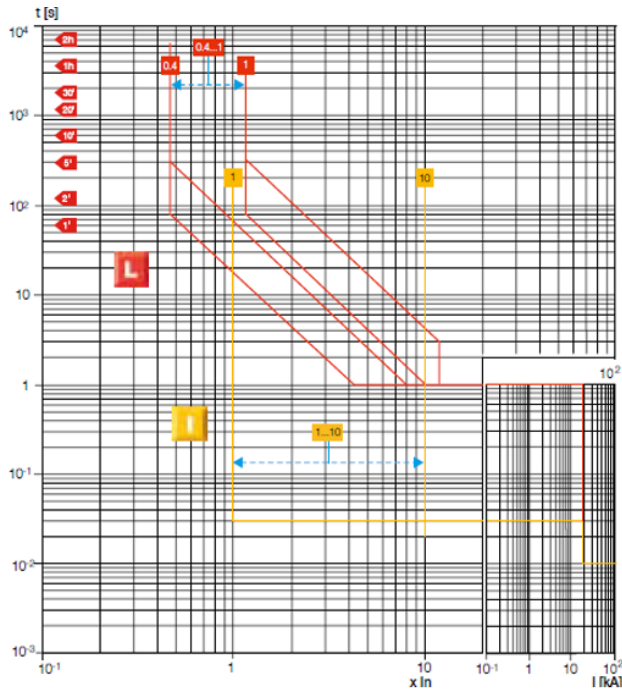


Figure 7

XT7 – XT7 M Ekip Dip LS/I

L-I Functions



L-S Functions

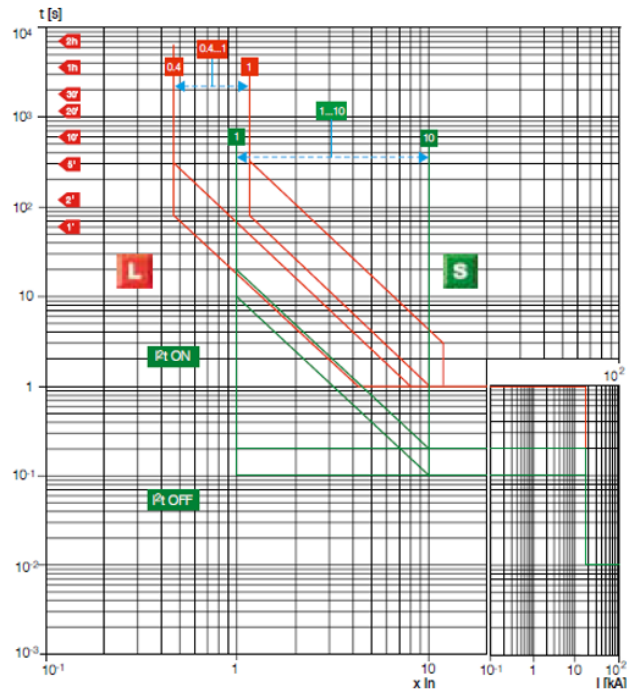


Figure 8

LET'S DO THE WORK.™

ANCILLARY EQUIPMENT



Image shown might not reflect actual configuration

BATTERY CHARGER

The intelligent battery charger has been developed with safety, usability, optimised battery performance and maximum battery lifetimes in mind.

A comprehensive range of input and output protections ensures a continued safe charging environment also enabling the use of the charger as a power supply.

FEATURES

- Intelligent two, three and four stage charging profiles
- Configurable to suit most battery types (12V/24V)
- Adjustable current limit
- Can be used as a battery charger, power supply or both at the same time
- Automatic or Manual boost and storage charge functions to help maintain battery condition
- Digital Microprocessor Technology
- Temperature compensation for battery charging
- Low Output Ripple and superb line regulation
- Three LED Indicators
- AC input Under voltage
- AC input Over voltage
- Battery charger output Over voltage
- Battery charger output Over current
- Optional battery temperature compensation with over temperature protection
- Output short circuit and Inversion polarity with auto recovery
- Configurable charge termination
- UL1236 /UL1564 Compliant

Automatic Boost Mode

- Boosts and equalises cell charge improving battery performance and life

Power Save Mode

- Once the battery is fully charged the chargers switch to Eco-Power to save energy

Communication

- Can be integrated into external systems through MODBUS RTU using RS485
- Fully configurable via PC Software

BENEFITS

- Fully flexible to maximise the life of the battery
- Suitable for a wide range of battery types
- Switched mode design
- Minimum 86% efficiency throughout full operating range
- No external intervention for boost mode
- Multiple chargers can be linked together to provide larger current output
- Can be permanently connected to battery and mains (utility) supply. No need to disconnect through high load conditions.

SPECIFICATION

AC SUPPLY

VOLTAGE RANGE 90 V to 305 V (L-N)

FREQUENCY RANGE

48 Hz to 64 Hz (L-N)

DC OUTPUT RATING

10 A DC at 24 V DC

RIPPLE AND NOISE

<1%

EFFICIENCY

>86%

REGULATION LINE

<0.5%

LOAD

2%

TEMPERATURE SENSOR INPUT

PT1000

PROTECTIONS

Short Circuit
DC Over Voltage
DC Over Current
Reverse Polarity
Over Temperature
AC Under & Over Voltage

CHARGE FAILURE RELAY

3 A at 30 V DC volt free relay

DIMENSIONS OVERALL

70 mm x200 mm x 130 mm
2.7" x 7.9" x 5.1"

WEIGHT

0.75 kg

OPERATING TEMPERATURE RANGE

-30 °C to +80 °C
-22 °F to +176 °F

STORAGE TEMPERATURE RANGE

-40 °C to +70 °C
-22 °F to +158 °F

Cat® Batteries



Cat® Batteries – Greater Starting Power – Lower Maintenance – Longer Life

Cat® Heavy Duty (HD) batteries come initially installed in all Cat Machines and Engine GenSets. They are designed to meet stringent Caterpillar design specifications, which provide industry leading cold cranking amps (CCA) capability and maximum vibration resistance. Cat Heavy Duty Batteries were built specifically to help start your tough applications, every time.

The full Heavy Duty line-up includes wet maintenance-free and maintenance-free accessible flooded lead acid battery options.

You can get Cat quality and reliability that fit a range of applications and budgets in our Cat General Duty (GD) battery line. General Duty batteries offer wet maintenance-free and low maintenance flooded lead acid batteries. They also include valve regulated lead acid (VRLA) batteries in AGM (Absorbed Glass Mat) and Gel designs. This line of batteries covers all of your starting and cycling applications. Wide selections of BCI group sizes are available for automotive, light truck, bus, industrial, agricultural, marine, recreational and valve regulated applications.



Cat Batteries

World's Toughest Batteries



Cat Heavy Duty (HD) Batteries – Maximum Vibration Resistance

- Vibration Resistance...three to five times the Industry Standard
- Exclusive “flat top” BCI group 4D & 8D batteries are Maintenance-Free Accessible and have the industries highest cold cranking amps (CCA)
- Popular BCI group 31 Maintenance-Free Accessible batteries with industry leading cold cranking amps...up to 1000 (CCA), for electric power, machine or on-highway truck and bus applications. Deep cycle models are available for truck, marine or recreational usage

Specifications for Cat Heavy Duty Batteries – Available Worldwide

Cat Heavy Duty (HD) Batteries - Selection Guide: Global

BCI Group Size	Part No.	CCA ≈	RC Mins †	Volts	Amp Hr. Capacity @ 20 Hrs.	Construction Notes	Accessibility - Fluid Level Check Hours	BCI Overall Dimensions			
								Length In (mm)	Width In (mm)	Height In (mm)	Wet Lb (kg)
8D	153-5720	1500	465	12	210	C/MFA	A - 1000	20.5 (520)	10.8 (275)	9.8 (248)	132 (59.9)
4D	153-5710	1400	425	12	200	C/MFA	A - 1000	20.5 (520)	8.6 (218)	9.8 (248)	119 (54.0)
4D	153-5700	1125	305	12	145	C/MFA	A - 1000	20.5 (520)	8.6 (218)	9.8 (248)	101 (45.8)
31	175-4390 ³	1000	180	12	90	C/MFA/S	A - 1000	12.9 (329)	6.8 (172)	9.3 (236)	60 (27.2)
31	175-4370 ³	825	190	12	100	C/MFA/S**	A - 1000	12.9 (329)	6.8 (172)	9.3 (236)	61 (27.2)
31/30H	115-2422	1000	170	12	90	C/MFA (2)	A - 1000	12.9 (329)	6.8 (172)	9.5 (241)	63 (28.6)
31/30H	9X-3404	950	165	12	95/100	C/MF (1) ^{EB}	NA	13.0 (331)	6.8 (172)	9.5 (241)	58 (26.3)
31/30H	3T-5760	750	165	12	95/100	C/MF ^{EB}	NA	13.0 (331)	6.8 (172)	9.5 (241)	56 (25.4)
65	230-6368	850	140	12	70	C/MF	NA	11.9 (304)	7.5 (191)	7.5 (191)	46 (20.9)
24	153-5656	650	110	12	52	C/MF	NA	11.0 (279)	6.9 (174)	9.0 (229)	39 (17.7)

Construction Notes:

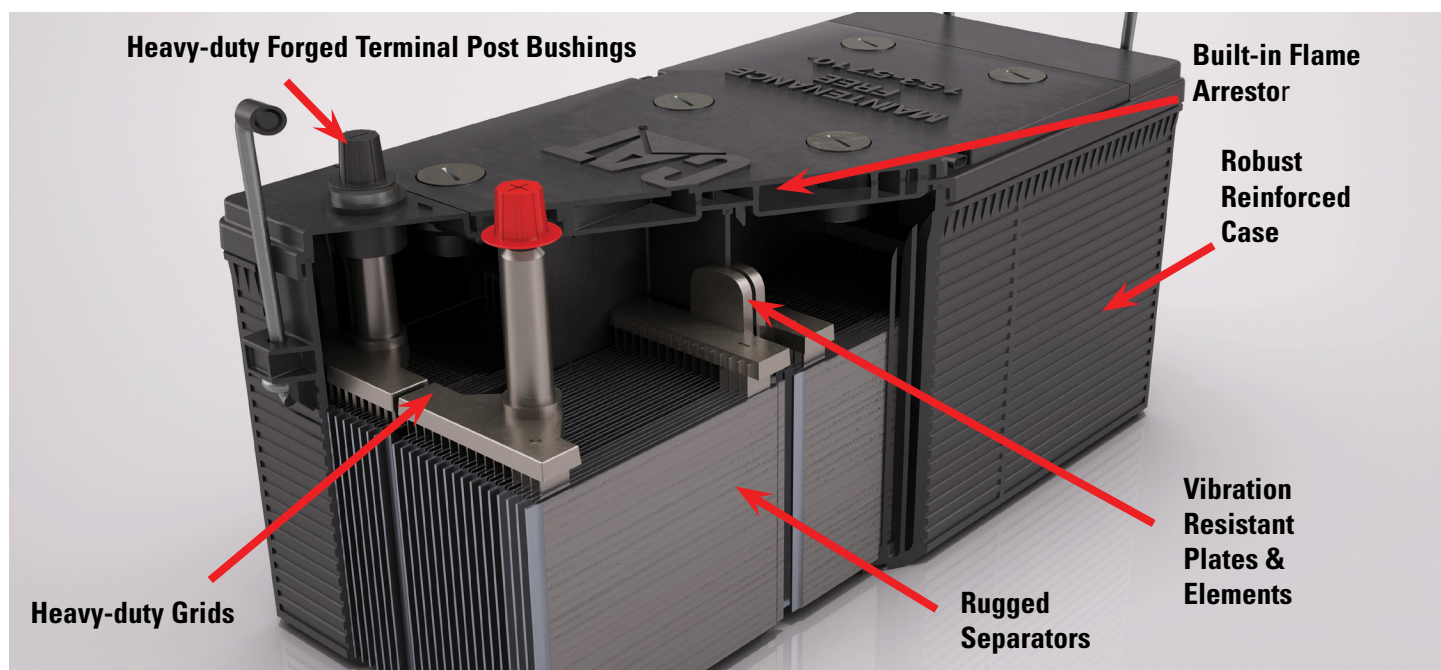
Batteries use SAE taper post design and are shipped wet except as:

- LAC = Low Maintenance - Hybrid Construction
 C = Calcium Lead Alloy Grid Design
 MF = Maintenance-Free Non-Accessible
 MFA = Maintenance-Free Accessible
 A = Accessible
 NA = Non-Accessible
 AV = Accessibly Varies - Accessibility varies depending on supplier used. If it has caps, it is accessible and fluid levels should be checked.
 S = Stud Terminals
 + = Shipped Dry Only
 * = Side Terminals Only
 ** = Starting and Deep Cycle Battery
 *** = Deep Cycle and Starting Battery
 ≈ = Cold Cranking Amps for 30 seconds at 0° F (-18° C)
 † = Reserve Capacity Minutes minimum of 25 amp output at 80° F (27° C)
 SDT = Dual, Top mounted Terminals - Stud and SAE Post. Marine Deep Cycle/ Starting Battery
 1 = Available everywhere outside of North/South America with the exception of Brazil
 2 = Available only in North/South America, excluding Brazil
 3 = Not available in EAME or APD (GD only)
 EB = Europe/Brazil
 AC = Asia/China

Rugged Design—Built Tough—Reliable Starting

- Positive and negative plates are anchored to container bottom and locked at the top of cell element for maximum vibration resistance.
- Heavy-duty forged terminal post bushings provide maximum strength and resistance to acid seepage.
- Hefty full-frame grids, no sharp edges, optimum acid/paste combination provides better charge acceptance after deep discharge.
- Manifold vented cover with built-in Flame Arrestor, a safety feature that directs corrosive gases away from the battery and hold-downs.
- Thick, robust container resists rugged treatment typical of heavy-duty commercial use. Embossed part number and descriptors for easy serviceability.

Cat Batteries



Robust Components = Long Life + Reliable Starts

- Heavy-duty forged terminal post bushings provide maximum strength and resistance to acid seepage that causes corrosion and black posts. Thicker internal terminal posts provide lower electrical resistance and higher cold cranking amp output.
- Rugged micro porous polyethylene envelope separators protect against “shorts” and vibration damage. Deep Cycle batteries utilize double insulated Glass mat separators for longer cycling life.
- Maintenance-Free Accessible batteries utilize calcium lead alloy on both positive and negative plates that reduces gassing and water consumption. Automotive batteries have Silver (Ag) Calcium Alloy Grids for resistance to high underhood temperatures.
- Heavy-duty, full frame battery grids with no sharp edges. An optimum acid/paste combination provides better charge acceptance after a deep discharge.
- Positive and Negative plates are anchored to the container bottom and the cell element is locked at the top for maximum vibration resistance. Straps are thicker, heavier and cast (not welded) into the plates.
- Manifold vented cover with built-in Flame Arrestor, a safety feature that directs corrosive gases away from the battery and hold-downs.
- Robust reinforced case provides extra strength in all temperature extremes. Brickwork design on sides reduces chance of punctures and case flexing. Embossed part number and descriptors for easy serviceability.

CAT DEALERS DEFINE WORLD-CLASS PRODUCT SUPPORT.

We offer you the right parts and service solutions, when and where you need them.

The Cat Dealer network of highly trained experts keeps your entire fleet up and running to maximize your equipment investment.



PEHJ0073-09
www.cat.com

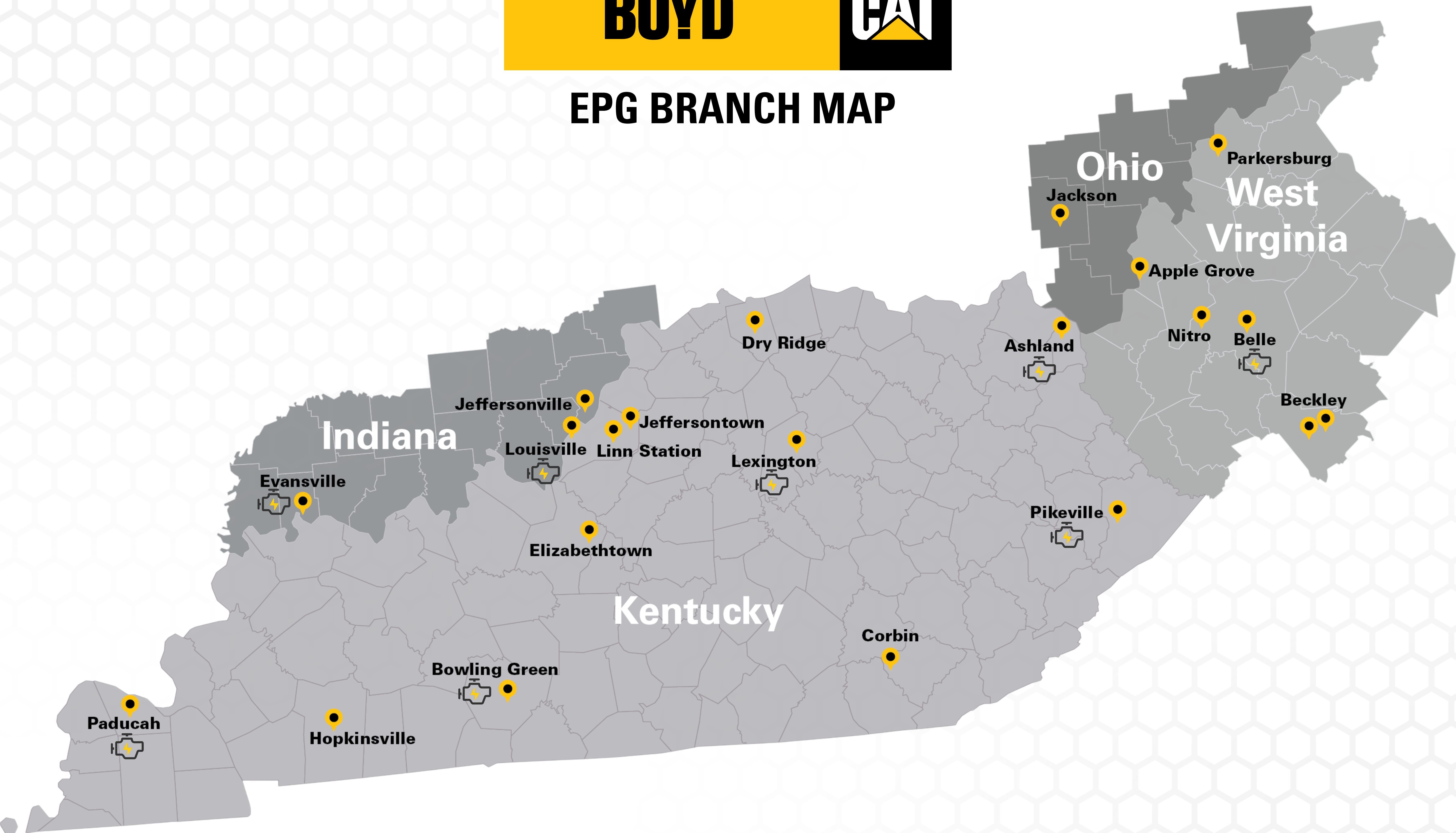
© 2024 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.



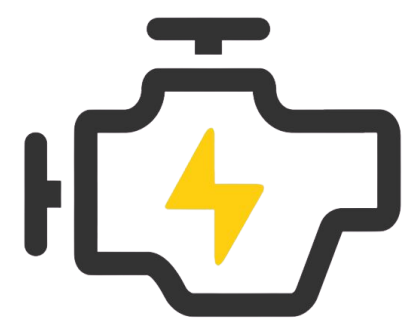
BOYD



EPG BRANCH MAP



Boyd CAT



Dedicated Electric Power Branch

CATERPILLAR LIMITED WARRANTY

Industrial, Petroleum, Locomotive, and Agriculture Engine Products and Electric Power Generation Products

Worldwide

Caterpillar Inc. or any of its subsidiaries ("Caterpillar") warrants new and remanufactured engines and electric power generation products (new and new with Cat® Reman Engines) sold by it (including any products of other manufacturers packaged and sold by Caterpillar), to be free from defects in material and workmanship.

This warranty does not apply to engines sold for use in on-highway vehicle or marine applications; engines in machines manufactured by or for Caterpillar; C175, 3500 and 3600 series engines used in locomotive applications; 3000 Family engines, C0.5 through C4.4 and ACERT™ (C6.6, C7, C7.1, C9, C9.3, C11, C13, C15, C18, C27, and C32) engines used in industrial, mobile agriculture and locomotive applications; or Cat® batteries; or Electric Power Generation products manufactured or assembled and sold in India except GC models, which are covered by this warranty. These products (except for GC models) are covered by other Caterpillar warranties.

This warranty is subject to the following:

Warranty Period

- For industrial engines, engines in a petroleum applications or Petroleum Power Systems (excluding petroleum fire pump application), or engines in a Locomotive application, the warranty period is 12 months after date of delivery to the first user.
- For engines used in petroleum fire pump and mobile agriculture applications the warranty period is 24 months after date of delivery to the first user.
- For standalone controls, configurable and custom switchgear products, (including modernized or retrofitted) and automatic transfer switch products, the warranty period is 24 months after date of delivery to the first user, but not to exceed 30 months from shipment from the Caterpillar place of manufacture.
- For new CG132, CG170 and CG260 series power generation products the warranty period is 24 months after date of delivery to first user, but not to exceed 36 months from shipment from the Caterpillar place of manufacture.
- For electric power generation products other than CG132, CG170 and

CG260 series in prime or continuous applications the warranty period is 12 months. For standby applications the warranty period is 24 months/1000 hours. For emergency standby applications the warranty period is 24 months/400 hours. All terms begin after date of delivery to the first user.

- For other manufacturer branded selective catalytic reduction systems (OMB-SCR) sold thru Caterpillar and installed by Caterpillar or a Cat dealer for use in select Cat 3500 generator sets sold and operating in the United States, the warranty period is 12 months beginning on the date of commissioning of the OMB-SCR. The maximum inventory or time the product is undelivered after receipt by the dealer or customer site is 6 months.
- For all other applications the warranty period is 12 months after date of delivery to the first user.

Caterpillar Responsibilities

If a defect in material or workmanship is found during the warranty period, Caterpillar will, during normal working hours and at a place of business of a Cat dealer or other source approved by Caterpillar:

- Provide (at Caterpillar's choice) new, Remanufactured, or Caterpillar approved repaired parts or assembled components needed to correct the defect.

Note: New, remanufactured, or Caterpillar approved repaired parts or assembled components provided under the terms of this warranty are warranted for the remainder of the warranty period applicable to the product in which installed as if such parts were original components of that product. Items replaced under this warranty become the property of Caterpillar.

- Replace lubricating oil, filters, coolant, and other service items made unusable by the defect.
- Provide reasonable and customary labor needed to correct the defect, including labor to disconnect the product from and reconnect the product to its attached equipment, mounting, and support systems, if required.

For new 3114, 3116, and 3126 engines and, new and Caterpillar rebuild electric power generation products (which includes the following: any new products of other manufacturers packaged and sold by Caterpillar)

- Provide travel labor, up to four hours round trip, if in the opinion of Caterpillar, the product cannot reasonably be transported to a place of business of a Cat dealer or other source approved by Caterpillar (travel labor in excess of four hours round trip, and any meals, mileage, lodging, etc. is the user's responsibility).

For all other products:

- Provide reasonable travel expenses for authorized mechanics, including meals, mileage, and lodging, when Caterpillar chooses to make the repair on-site.

User Responsibilities

The user is responsible for:

- Providing proof of the delivery date to the first user.
- Labor costs, except as stated under "Caterpillar Responsibilities," including costs beyond those required to disconnect the product from and reconnect the product to its attached equipment, mounting, and support systems.
- Travel or transporting costs, except as stated under "Caterpillar Responsibilities."
- Premium or overtime labor costs.
- Parts shipping charges in excess of those that are usual and customary.
- Local taxes, if applicable.
- Costs to investigate complaints, unless the problem is caused by a defect in Caterpillar material or workmanship.
- Giving timely notice of a warrantable failure and promptly making the product available for repair.
- Performance of the required maintenance (including use of proper fuel, oil, lubricants, and coolant) and items replaced due to normal wear and tear.
- Allowing Caterpillar access to all electronically stored data.

Limitations

Caterpillar is not responsible for:

- Failures resulting from any use or installation that Caterpillar judges improper.
- Failures resulting from attachments, accessory items, and parts not sold or approved by Caterpillar.

- Failures resulting from abuse, neglect, and/or improper repair.
- Failures resulting from user's delay in making the product available after being notified of a potential product problem.
- Failures resulting from unauthorized repairs or adjustments, and unauthorized fuel setting changes.
- Damage to parts, fixtures, housings, attachments, and accessory items that are not part of the engine, Cat Selective Catalytic Reduction System or electric power generation product (including any products of other manufacturers packaged and sold by Caterpillar).
- Repair of components sold by Caterpillar that is warranted directly to the user by their respective manufacturer. Depending on type of application, certain exclusions may apply. Consult your Cat dealer for more information.

PLEASE SEE IMPORTANT TERMS AND CONDITIONS ON PAGE 3 & 4

This warranty covers every major component of the products. Claims under this warranty should be submitted to a place of business of a Cat dealer or other source approved by Caterpillar. For further information concerning either the location to submit claims or Caterpillar as the issuer of this warranty, write Caterpillar Inc., 100 N.E. Adams St., Peoria, IL USA 61629, telephone 1 (309) 675-1000, or go to URL, www.cat.com, Find Your Dealer.

Caterpillar's obligations under this Limited Warranty are subject to, and shall not apply in contravention of, the laws, rules, regulations, directives, ordinances, orders, or statutes of the United States, or of any other applicable jurisdiction, without recourse or liability with respect to Caterpillar.

A) For products operating outside of Australia, Fiji, Nauru, New Caledonia, New Zealand, Papua New Guinea, the Solomon Islands, and Tahiti, the following is applicable:

NEITHER THE FOREGOING EXPRESS WARRANTY NOR ANY OTHER WARRANTY BY CATERPILLAR, EXPRESS OR IMPLIED, IS APPLICABLE TO ANY ITEM CATERPILLAR SELLS THAT IS WARRANTED DIRECTLY TO THE USER BY ITS MANUFACTURER.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EXCEPT CATERPILLAR EMISSION-RELATED COMPONENT WARRANTIES FOR NEW ENGINES, WHERE APPLICABLE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISION OF MATERIAL AND SERVICES, AS SPECIFIED HEREIN.

CATERPILLAR IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

CATERPILLAR EXCLUDES ALL LIABILITY FOR OR ARISING FROM ANY NEGLIGENCE ON ITS PART OR ON THE PART OF ANY OF ITS EMPLOYEES, AGENTS, OR REPRESENTATIVES IN RESPECT OF THE MANUFACTURE OR SUPPLY OF GOODS OR THE PROVISION OF SERVICES RELATING TO THE GOODS.

IF OTHERWISE APPLICABLE, THE VIENNA CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS IS EXCLUDED IN ITS ENTIRETY.

For personal or family use engines or electric power generation products, operating in the USA, its territories and possessions, some states do not allow limitations on how long an implied warranty may last nor allow the exclusion or limitation of incidental or consequential damages. Therefore, the previously expressed exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary by jurisdiction. To find the location of the nearest Cat dealer or other authorized repair facility, call (800) 447-4986. If you have questions concerning this warranty or its applications, call or write:

In USA and Canada: Caterpillar Inc, 100 N.E. Adams St., Peoria, IL USA 61629, Attention: Customer Service Manager, Telephone 1 (309) 675-1000. Outside the USA and Canada: Contact your Cat dealer, go to URL, www.cat.com, Find Your Dealer.

B) For products operating in Australia, Fiji, Nauru, New Caledonia, New Zealand, Papua New Guinea, the Solomon Islands, and Tahiti, the following is applicable:

THIS WARRANTY IS IN ADDITION TO WARRANTIES AND CONDITIONS IMPLIED BY STATUTE AND OTHER STATUTORY RIGHTS AND OBLIGATIONS THAT BY ANY APPLICABLE

LAW CANNOT BE EXCLUDED, RESTRICTED, OR MODIFIED ("MANDATORY RIGHTS"). ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED (BY STATUTE OR OTHERWISE), ARE EXCLUDED. WITHOUT LIMITING THE FOREGOING PROVISIONS OF THIS PARAGRAPH, WHERE A PRODUCT IS SUPPLIED FOR BUSINESS PURPOSES, THE CONSUMER GUARANTEES UNDER THE CONSUMER GUARANTEES ACT 1993 (NZ) WILL NOT APPLY.

NEITHER THIS WARRANTY NOR ANY OTHER CONDITION OR WARRANTY BY CATERPILLAR, EXPRESS OR IMPLIED (SUBJECT ONLY TO THE MANDATORY RIGHTS), IS APPLICABLE TO ANY ITEM CATERPILLAR SELLS THAT IS WARRANTED DIRECTLY TO THE USER BY ITS MANUFACTURER.

IF THE MANDATORY RIGHTS MAKE CATERPILLAR LIABLE IN CONNECTION WITH SERVICES OR GOODS, THEN TO THE EXTENT PERMITTED UNDER THE MANDATORY RIGHTS, THAT LIABILITY SHALL BE LIMITED AT CATERPILLAR'S OPTION TO (a) IN THE CASE OF SERVICES, THE SUPPLY OF THE SERVICES AGAIN OR THE PAYMENT OF THE COST OF HAVING THE SERVICES SUPPLIED AGAIN AND (b) IN THE CASE OF GOODS, THE REPAIR OR REPLACEMENT OF THE GOODS, THE SUPPLY OF EQUIVALENT GOODS, THE PAYMENT OF THE COST OF SUCH REPAIR OR REPLACEMENT OR THE ACQUISITION OF EQUIVALENT GOODS.

CATERPILLAR EXCLUDES ALL LIABILITY FOR OR ARISING FROM ANY NEGLIGENCE ON ITS PART OR ON THE PART OF ANY OF ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN RESPECT OF THE MANUFACTURE OR SUPPLY OF GOODS OR THE PROVISION OF SERVICES RELATING TO THE GOODS.

CATERPILLAR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES UNLESS IMPOSED UNDER MANDATORY RIGHTS.

IF OTHERWISE APPLICABLE, THE VIENNA CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS IS EXCLUDED IN ITS ENTIRETY.

C) For products supplied in Australia:

IF THE PRODUCTS TO WHICH THIS WARRANTY APPLIES ARE:

- I. PRODUCTS OF A KIND ORDINARILY ACQUIRED FOR PERSONAL, DOMESTIC OR HOUSEHOLD USE OR CONSUMPTION; OR**
- II. PRODUCTS THAT COST AUD 100,000 OR LESS,**

WHERE THOSE PRODUCTS WERE NOT ACQUIRED FOR THE PURPOSE OF RE-SUPPLY OR FOR THE PURPOSE OF USING THEM UP OR TRANSFORMING THEM IN THE COURSE OF PRODUCTION OR MANUFACTURE OR IN THE COURSE OF REPAIRING OTHER GOODS OR FIXTURES, THEN THIS SECTION C APPLIES.

THE FOLLOWING MANDATORY TEXT IS INCLUDED PURSUANT TO THE AUSTRALIAN CONSUMER LAW AND INCLUDES REFERENCES TO RIGHTS THE USER MAY HAVE AGAINST THE DIRECT SUPPLIER OF THE PRODUCTS: OUR GOODS COME WITH GUARANTEES THAT CANNOT BE EXCLUDED UNDER THE AUSTRALIAN CONSUMER LAW. YOU ARE ENTITLED TO A REPLACEMENT OR REFUND FOR A MAJOR FAILURE AND

COMPENSATION FOR ANY OTHER REASONABLY FORESEEABLE LOSS OR DAMAGE. YOU ARE ALSO ENTITLED TO HAVE THE GOODS REPAIRED OR REPLACED IF THE GOODS FAIL TO BE OF ACCEPTABLE QUALITY AND THE FAILURE DOES NOT AMOUNT TO A MAJOR FAILURE. THE INCLUSION OF THIS TEXT DOES NOT CONSTITUTE ANY REPRESENTATION OR ACCEPTANCE BY CATERPILLAR OF LIABILITY TO THE USER OR ANY OTHER PERSON IN ADDITION TO THAT WHICH CATERPILLAR MAY HAVE UNDER THE AUSTRALIAN CONSUMER LAW.

TO THE EXTENT THE PRODUCTS FALL WITHIN THIS SECTION C BUT ARE NOT OF A KIND ORDINARILY ACQUIRED FOR PERSONAL, DOMESTIC OR HOUSEHOLD USE OR CONSUMPTION, CATERPILLAR LIMITS ITS LIABILITY TO THE EXTENT IT IS PERMITTED TO DO SO UNDER THE AUSTRALIAN CONSUMER LAW TO, AT ITS OPTION, THE REPAIR OR REPLACEMENT OF THE PRODUCTS, THE SUPPLY OF EQUIVALENT PRODUCTS, OR THE PAYMENT OF THE COST OF SUCH REPAIR OR REPLACEMENT OR THE ACQUISITION OF EQUIVALENT PRODUCTS.

THE WARRANTY SET OUT IN THIS DOCUMENT IS GIVEN BY CATERPILLAR INC. OR ANY OF ITS SUBSIDIARIES, 100 N. E. ADAMS ST, PEORIA, IL USA 61629, TELEPHONE 1 309 675 1000, THE USER IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH MAKING A CLAIM UNDER THE WARRANTY SET OUT IN THIS DOCUMENT, EXCEPT AS EXPRESSLY STATED OTHERWISE IN THIS DOCUMENT, AND THE USER IS REFERRED TO THE BALANCE OF THE DOCUMENT TERMS CONCERNING CLAIM PROCEDURES, CATERPILLAR RESPONSIBILITIES AND USER RESPONSIBILITIES.

TO THE EXTENT PERMISSIBLE BY LAW, THE TERMS SET OUT IN THE REMAINDER OF THIS WARRANTY DOCUMENT (INCLUDING SECTION B) CONTINUE TO APPLY TO PRODUCTS TO WHICH THIS SECTION C APPLIES.

© 2026 Caterpillar. All Rights Reserved.

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.