

GAS PKG. GEN SET (I)
LAFAYETTE, INDIANA

Ship Weight
lbs

List Price
At Factory

Product Consist:

PRICING INFORMATION

These prices are manufacturer suggested resale prices and are subject to change without notice. Shipment will usually be made from source of manufacture, or at factory discretion. Attachment prices are for attachments installed as original equipment unless otherwise specified.

Net price items are subject to no further discounts.

All prices are installed list prices unless otherwise specified.

SHIPMENT DATE SPECIFIC PRICING IS BEST FOUND THROUGH THE CSQ QUOTING TOOL.

AVAILABILITY

For product availability go to Power Net at <https://engines.cat.com>
Under the quick links, select Engine Availability Letters.

GLOSSARY OF TERMS

For product abbreviations go to Power Net at <https://engines.cat.com>
Under the quick links, select TMI Web. Once in TMI select Abbreviations, listed under TMI Definitions.

DESIGN TO ORDER (DTO)

Orders requiring special engineering (referred to as DTO) will require additional process time. This time is over and above normal order processing or product availability.

Attachments listed in the price list are NOT interchangeable between sales models or applications. If attachments are required for a particular model or configuration but are not listed as compatible for this model in a specific price list, the order will require a DTO. This is true even when the same attachment or configuration has been ordered in the past.

A DTO will require an application and installation (A & I) marketing quote. For further information contact the Application Support Center.

Requests for special ratings not listed in the Price List should also be sent to the Application Support Center. If the special rating is possible, it may also require a DTO and could require additional processing time if the appropriate details have not yet been established.

Please keep this information in mind when discussing or quoting approximate availability to your customers.

DTO quotes are typically valid for six (6) months. If the quote expires, regardless if it has been ordered or not, a new DTO quote will be required before an order can be placed.

DEALER SPECIFIC PRICING TERMS

To obtain the latest specific conditions from Caterpillar to individual Cat dealers please use Engine Order Management Process (EOMP) quoting and order tools like ISA or PSQ. For questions or

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DEALER SPECIFIC PRICING TERMS (CONT.)

special requests, please contact your Caterpillar representative.

TECHNICAL PERFORMANCE DATA

Technical performance data and Engine rating information is available in Power Net at <https://engines.cat.com>. Under the quick links, select TMI Web. Once in TMI select TMI Performance Definitions.

To request dealer specific authorization, please follow links to Engine Order Management Process (EOMP) at Caterpillar Power Net (<https://engines.cat.com>). CWS logon id is needed to access Power Net.

RATINGS GUIDE

The EPG Ratings Guide may be ordered through Media Logistics by calling + 1 (800) 566-7782 or + 1 (309) 266-0942. The current EPG Ratings Guide media number for Cat Generator Sets is LEXE7582 or LEXE7581 for Olympian Generator Sets.

Current EPG ratings are also available by accessing the Electronic Media Center at <https://emc.cat.com> and on Power Net at <https://engines.cat.com>, select Electric Power then select References/Sales Tools.

GENERAL INFORMATION

Engine
Low Emissions Engine
"C" Series electronics
Caterpillar Gas Engine Control Module (ECM)
(Based upon ADEM III Module)
Features include:
Fuel/air ratio control
Start/stop logic:
Gas purge cycle
Staged shutdown
Engine Protection Systems:*
Detonation Sensitive Timing
High exhaust temperature
High jacket water temperature
Low oil pressure
Failure to start (overcrank)
Overspeed
High oil temperature
Emergency stop
*For a complete listing, check sales technical or service literature
Governor (see Governor below)
Transient richening and Turbo bypass control
Ignition (see Ignition below)

AIR INLET SYSTEM

Air cleaner, two-element single-stage air cleaner with enclosure, service indicator (shipped loose)
Does not include any enclosure mounting brackets or piping from air cleaner to turbo(s).

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CONTROL SYSTEM

Low voltage and medium voltage packages contain a package mounted EMCP II+ controller that includes:

- Mandatory Option-choice of 2E or 3E transducer (shipped loose)
- Customer-supplied wiring is needed to connect the kW transducer.
- 24-volt DC control.
- NEMA12, IP44 dust-proof enclosure:
- Lockable hinged door.
- Generator terminal box (mounted rear facing).
- Single-location customer connection.
- Panel illuminating lights.
- Auto start/stop control switch.
- Voltage adjustment potentiometer.
- True RMS AC metering, 3 phase.
- Purge cycle and staged shutdown logic.
- Digital indication for:
 - Rpm.
 - Operating hours.
 - Oil pressure.
 - Coolant temperature.
 - DC volts.
 - L-L volts, L-N volts, phase amps, Hz,
 - ekW, kVA, kVAR, kWhr, %kW, PF.

- Engine initiated shutdowns with discreet codes displayed for:
- Low oil pressure.
 - High coolant temperature.
 - Overspeed.
 - Emergency stop.
 - Failure to start (overcrank).
 - High oil temperature (for a complete listing, check technical sales or service literature).

- Programmable protective relaying functions:
- Under and over voltage.
 - Under and over frequency.
 - Reverse power.
 - Over current (phase and total).
 - 3 spare indicator LEDs (programmable).
 - 4 spare alarm/shutdown inputs.

High voltage packages contain a wall mount EMCP4.3 controller that includes:

- 24-volt DC operation
- Environmental sealed front face
- Text alarm/event descriptions
- Kilowatt transducer output

- Controls:
- Speed/ Voltage adjust
 - Auto/start/stop control
 - Alarm acknowledge
 - Emergency stop pushbutton

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CONTROL SYSTEM (CONT.)

Customer Warning/Shutdown Lamp test
True RMS AC metering, 3-phase, +/-2% accuracy
Remote monitoring and Control capability

Warning/shutdown with common LED indication of shutdowns
with indicating lights for:

- Low oil pressure
- High/Low coolant temperature
- High engine oil temp
- Low, High and weak battery voltage
- Overspeed
- Failure to start (Overcrank)
- Emergency stop
- Loss of sensing
- Air filter restriction
- Impending shutdown

Digital indication for:

- RPM
- DC volts
- Operating hours
- Oil pressure (psi, kPa or bar)
- Volts (L-L & L-N), frequency (Hz)
- Amps (per phase & average)
- Two (2) dedicated digital inputs
- Twelve (12) Programmable digital inputs
- Two (2) dedicated digital outputs
- Sixteen (16) programmable digital outputs

Environmental:

- Control module operating temperature:-40C to 70C
- Display operating temperature: - 20C to 70C
- Humidity: 100% condensing 30C to 60C
- Storage temperature: -40C to 85C
- Vibration: Random profile, 24-1000Hz, 6.0G rms

Generator protection:

- Generator phase sequence
- Over/Under voltage
- Over/ Under frequency
- Reverse power(kW)
- Over current
- Current balance
- Over/Loss of Excitation
- Generator temperature detectors

The Quick Starting Guide will be provided with the package
documentation. Additional copies may be ordered through

Media Logistics by calling + 1 (800) 566-7782 or + 1 (309) 266-0942.
The quick starting guide media number for Cat Generator Sets
is LEXE0187-00. The Quick starting guide is also available
by accessing the Electronic Media Center at <https://emc.cat.com>
and on Power Net at <https://engines.cat.com>, select Electric

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CONTROL SYSTEM (CONT.)

Power then select References/Sales Tools.

COOLING SYSTEM

See TMI for heat rejection date and pump performances.

Units WITH engine driven pumps:

- JW and SCAC engine-driven pumps and bypass lines.
- JW and SCAC thermostats.
- Flange connections: JW inlet - ANSI 6 in/DN150, JW outlet - Cat 2nd stage SCAC - Cat flanges.

Units WITHOUT engine driven pumps: 516GE5Q and 516GE5S

- No JW and SCAC engine-driven pumps or bypass lines.
- JW thermostat and housing included.
- No SCAC thermostats.
- Flange connections; JW inlet and outlet - Cat Flange.

EXHAUST SYSTEM

Dry exhaust manifold

CAT flanged faced outlets

Integrated Sensing Module (ISM):

Provides exhaust port temperatures and stack temperature to customer supplied screen via CCM.

FUEL SYSTEM

FUEL FILTER IS REQUIRED: Customer may provide or see Optional Fuel Filters.

Sized for 31.5 to 47.2 MJ/Nm³ (800 to 1200 btu/cu ft) dry pipeline natural gas.

Engine installed electronic fuel metering valve.

Throttle plate, electronically controlled by ECM, 24V DC actuator.

Not included as standard but required - gas shutoff valve (24V DC energized-to-run (ETR) and gas regulator; customer to supply 3.5-34.5 kPa (0.5 to 5 psi) gas pressure to engine fuel control valve.

Cat flange connection.

GENERATORS AND GENERATOR ATTACHMENTS

Generator

SR4B

3-phase brushless, salient pole

Permanent magnet excited

6 lead

Caterpillar's Digital Voltage Regulator (CDVR)

3 phase sensing, includes KVARIPF control

Class H insulation;

Class F temperature rise @ 40 C (105 C Cont)

Reactive droop

Bus bar connections

Winding temperature detectors

Anti-condensation space heaters

GOVERNING SYSTEM

Electronic speed governor with 4 to 20 ma (0V to 5V) input (governor is part of GECM)

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GOVERNING SYSTEM (CONT.)

Provides transient richening and turbo bypass control
EMCP II on customer's load signal (0V to 5V) is needed
to operate these controls.
Electronically controlled 24V DC actuator to throttle shaft

IGNITION SYSTEM

Electronic Ignition System (control by ECM)
Individual cylinder Detonation Sensitive Timing (DST)

LITERATURE

English

LUBE SYSTEM

Lubricating oil option.
Gear type lube oil pump
Oil filter, filler, and dipstick
Integral lube oil cooler
Oil drain valve
Crankcase breather

MOUNTING SYSTEM

330 mm structural steel rails
Spring-type anti-vibration mounts (shipped loose)

STARTING/CHARGING SYSTEM

JACKET WATER HEATER IS REQUIRED:
Customer can provide or see Jacket water heater options
in the Starting/Charging System section
24-volt starting motor(s)
Battery with rack and cables (shipped loose)
Battery disconnect switch

GENERAL

"Stationary Use Only Label": Effective January 2004, the US EPA
Nonroad Mobile SI rule restricts the use of SI gas engines within
the United States. Caterpillar's Gas Engines are not certified for
mobile applications within the US and are to be used in "stationary
use only" applications. All gas engines will have this label attached
regardless of the dealer placing the order.
Paint; Caterpillar Yellow except rails & radiators are Gloss Black
RH service

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50 HERTZ, 1500 RPM, 3 PHASE, 400/230 VOLT, PM EXCITED

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I	516GE5Q	1500RPM PKG JW-99C 5Q 0 1988 kVA, JW Temp = 99 C, AC Temp 1st/2nd = 94C/54C Generator Argt = 144-1826, Frame = 826, Pitch = 0.7143 Winding = Form Wound, No. of Leads = 6, No. of Bearings = 2 Ratings are w/o fan or radiator and WITHOUT engine driven water pumps. NOTE: THIS GEN SET HAS NO ENGINE-DRIVEN WATER PUMPS. FACTORY APPROVAL IS REQUIRED BEFORE SUBMITTING ORDERS FOR APPLICATIONS NOT PARALLELED TO THE UTILITY GRID.	\$778,082
I	516GE5X	1500RPM PKG JW-99C 5X 0 1944 kVA, JW Temp = 99 C, AC Temp 1st/2nd = 94C/54C. Generator Argt = 144-1826, Frame = 826, Pitch = 0.7143. Winding = Form Wound, No. of Leads = 6, No. of Bearings = 2. Ratings are w/o fan or radiator, engine driven water pumps are included. NOTE: FACTORY APPROVAL IS REQUIRED BEFORE SUBMITTING ORDERS FOR APPLICATIONS NOT PARALLELED TO THE UTILITY GRID.	\$790,645
I	516GE5Y	G3516C 1500RPM PKG JW-99C 5Y. 0 1944 kVA, JW Temp = 99 C, AC Temp 1st/2nd = 94C/54C. Generator Argt = 144-1826, Frame = 826, Pitch = 0.7143. Winding = Form Wound, No. of Leads = 6, No. of Bearings = 2. Ratings are w/o fan or radiator, engine driven water pumps are included. NOTE: This product has Island Mode capability. It is the dealer's responsibility to carefully apply this product's capability with the customer's needs.	\$806,965

**50 HERTZ, 1500 RPM, 3 PHASE, 10,000(WYE), 10,500(WYE) or
11,000(WYE) VOLT, PM EXCITED**

I	516GE5S	G3516 HV 1500 RPM PKG JW-99C. 0 1988 kVA, JW Temp = 99 C, AC Temp 1st/2nd = 94C/54C Generator Argt = 219-4092, Frame = 2620, Pitch = 0.667 Winding = Form Wound, No. of Leads = 6, No. of Bearings = 2 Ratings are w/o fan or radiator and WITHOUT engine driven water pumps. NOTE: THIS GEN SET HAS NO ENGINE-DRIVEN WATER PUMPS. FACTORY APPROVAL IS REQUIRED BEFORE SUBMITTING ORDERS FOR APPLICATIONS NOT PARALLELED TO THE UTILITY GRID.	\$831,034
I	516GE5T	1500 RPM PKG JW-99C 0 1944 kVA, JW Temp = 99 C, AC Temp 1st/2nd = 94C/54C. Generator Argt = 219-4092, Frame = 2620, Pitch = 0.667. Winding = Form Wound, No. of Leads = 6, No. of Bearings = 2. Ratings are w/o fan or radiator, engine driven water pumps are included. NOTE: FACTORY APPROVAL IS REQUIRED BEFORE SUBMITTING ORDERS FOR APPLICATIONS NOT PARALLELED TO THE UTILITY GRID.	\$843,601

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I 516GE5V 1500 RPM PKG JW-99C 0 1944 kVA, JW Temp = 99 C, AC Temp 1st/2nd = 94C/54C. Generator Argt = 219-4092, Frame = 2620, Pitch = 0.667. Winding = Form Wound, No. of Leads = 6, No. of Bearings = 2. Ratings are w/o fan or radiator and WITH engine driven water pumps. NOTE: This product has Island Mode capability. It is the dealer's responsibility to carefully apply this product's capability with the customer's needs.	\$859,916
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60 HERTZ, 1800 RPM, 3 PHASE, 480 VOLT, PM EXCITED

I 516GE5Z 480V 1800RPM PKG JW-99C 5Z. 0 1660 eKW, JW Temp = 99 C, AC Temp 1st/2nd = 94C/54C. Generator Argt = 163-8544, Frame = 825, Pitch = 0.667. Winding = Form Wound, No. of Leads = 6, No. of Bearings = 2. Ratings are w/o fan or radiator. NOTE: FACTORY APPROVAL IS REQUIRED BEFORE SUBMITTING ORDERS FOR APPLICATIONS NOT PARALLELED TO THE UTILITY GRID.	\$814,222
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**60 HERTZ; 1800 RPM; 3 PHASE; 12,400(WYE), 13,200(WYE) OR
13,800(WYE) VOLT; PM EXCITED**

I 516GE5U 1800 RPM PKG JW-99C 0 1650 eKW, JW Temp = 99 C, AC Temp 1st/2nd = 94C/54C. Generator Argt = 219-4088, Frame = 2620, Pitch = 0.667. Winding = Form Wound, No. of Leads = 6, No. of Bearings = 2. Ratings are w/o fan or radiator. NOTE: FACTORY APPROVAL IS REQUIRED BEFORE SUBMITTING ORDERS FOR APPLICATIONS NOT PARALLELED TO THE UTILITY GRID.	\$885,711
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USE	REF NO.	MANDATORY ATTACHMENTS	Ship Weight lbs	List Price At Factory
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VOLTAGE INDICATORS

Voltage Indicators

All package gen set orders REQUIRE a voltage be specified. Choose the appropriate voltage feature code from the following list based on frequency and generator arrangement being ordered.

50 Hertz Voltage Indicators

I	50H0380	380V, Wye Connection, 50Hz TECHNICAL: Wye connection.	0	NC
I	50H0400	400V, WYE CONNECTION, 50HZ TECHNICAL: Wye connection.	0	NC
I	50H0415	415V, WYE CONNECTION, 50HZ TECHNICAL: Wye connection.	0	NC
I	50H3300	VOLTAGE INDICATOR 3300V (WYE) TECHNICAL: Wye connection.	0	NC
I	50H6300	VOLTAGE INDICATOR 6300V (WYE) TECHNICAL: Wye connection.	0	NC
I	50H6600	VOLTAGE INDICATOR 6600V (WYE) TECHNICAL: Wye connection.	0	NC
I	50H6900	VOLTAGE INDICATOR 6900V (WYE) TECHNICAL: Wye connection.	0	NC
I	50H10K0	VOLTAGE INDICATOR 10000V (WYE) TECHNICAL: Wye connection.	0	NC
I	50H10K5	VOLTAGE INDICATOR 10500V (WYE) TECHNICAL: Wye connection.	0	NC
I	50H11K0	VOLTAGE INDICATOR 11000V (WYE) TECHNICAL: Wye connection.	0	NC

60 Hertz Voltage Indicators

I	60H0480	480V, Wye Connection, 60Hz TECHNICAL: Wye connection.	0	NC
I	60H2400	VOLTAGE INDICATOR 2400 VOLT TECHNICAL: Delta connection. REQUIRES: SR4B 4160 volt wye generator. Delta connection or Custom Quote.	0	NC
I	60H4160	VOLTAGE INDICATOR 4160V (Wye) TECHNICAL: Wye connection.	0	NC
I	60H6300	VOLTAGE INDICATOR 6300V (Wye) TECHNICAL: Wye connection.	0	NC
I	60H6600	VOLTAGE INDICATOR 6600V (Wye) TECHNICAL: Wye connection.	0	NC
I	60H6900	VOLTAGE INDICATOR 6900V (Wye) TECHNICAL: Wye connection.	0	NC
I	60H12K4	VOLTAGE INDICATOR 12470V (Wye) TECHNICAL: Wye connection.	0	NC
I	60H13K2	VOLTAGE INDICATOR 13200V (Wye) TECHNICAL: Wye connection.	0	NC
I	60H13K8	VOLTAGE INDICATOR 13800V (Wye) TECHNICAL: Wye connection.	0	NC

USE	REF NO.	MANDATORY ATTACHMENTS	Ship Weight lbs	List Price At Factory
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VOLTAGE INDICATORS (CONT.)

Special Voltage Indicator

I	VLIND1	VOLTAGE INDICATOR - SPECIAL 0 TECHNICAL: Non-standard voltage, frequency & connection to be specified in custom quote on order.		NC
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CERTIFICATIONS

GRID CODE COMPLIANCE

Select One

I	GDCDNRE	GRID CODE COMPLIANCE NOT REQ 0 Dynamic grid codes, also known as electrical network codes, provide conditions under which a generator connected to the public electrical grid must meet to help ensure safe, secure operation of the grid. These codes can vary depending on the regional, national, or international grid authority. If you have a project with a specific electrical grid code requirement not currently available, and you anticipate quoting Electric Power Gas genset products from the price list of a US source facility, please contact the ASC for assistance. By working with the ASC, we can evaluate the project requirements and quote products that will meet specific electrical network codes.		NC
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I	GDCDGER	GERMANY GRID CODE COMPLIANCE 0 This provides a genset, with the proper components, that has been verified to be compliant with the German requirements as described in the guideline 'generating plants connected to the medium-voltage network' (BDEW Technical Guideline, issued June 2008, with a fourth amendment taking effect January 1 2013). Substitutions of the generator that has been verified to be with this grid code are not allowed and will void this certification. REQUIRES: 50H0400 or 50H0415 or 50H10K5 or 50H11K0 CANNOT BE USED WITH: OGNPMH8, OGNPMJ3, OGNPMJ4, OGNHV85, OGNHV86, OGNPMH9, OGNPMH6, OGNPMH7, OGNHV90, RPA0232, RPA0233, RPA0234, RPA0235		\$1,121 NET
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APPLICATION INDICATORS

Application Indicators

Provides power setting and name plate for use in specified applications.

I	CONTINU	CONTINUOUS POWER APPLICATION 0 For application at Continuous rating.		NC
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Operation Indicators

I	PARGRID	PARALLEL-TO-GRID MODE 0 TECHNICAL: Application is paralleled to large utility grids. Caution: This product CURRENTLY has limited capability to accept load changes when not connected to the large utility grid (referred to as standby mode). Maximum load and unload steps are 5% in the no-load to 80% of full-load range and with a +/-25% frequency/voltage variation. It is the dealer's responsibility to match the customers' needs to the product's capability.		NC
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APPLICATION INDICATORS (CONT.)

Operation Indicators (Cont.)

I	ISLMODE	ISLAND MODE 0 TECHNICAL: Primary application is: 1) stand-alone without any connection to the utility grid; 2) parallel with other units not connected to the utility grid; 3) connected to a small utility grid which can experience frequency and voltage changes; OR 4) paralleled to grid, but when grid is "down", the gen set must operate stand-alone with minimum freq/voltage variation. If available, this option provides additional sensors, controls and software to permit improved transinet operation. Check the appropriate Sales Spec Sheet (if no form number here, Island Mode is not available yet) on the PowerNet for detailed transient information. Caution: Gas engine gen sets cannot accept transient conditions equal to a diesel gen set or a large utility grid. It is the dealer's responsibility to be sure the customers' needs are matched to this product's capability.		NC
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Market Segmentation

I	MSEPGGS	END USE: GENERAL EPG GAS 0 All gaseous fueled, spark ignited generator sets utilized in the generation of electrical power and or combined heat and power applications including cogen, trigen, and quadgen. These gas genset products are applied in, but not limited to commercial, industrial, agricultural, utility, public and civil service sectors. These products are often leveraged in utility applications, food processing plants, landfill sites, agriculture livestock facilities, wastewater treatment plants, biofuel manufacturing plants, communication sites, data centers, commercial/residential buildings, manufacturing plants, greenhouses, and mining sites. These gensets are often applied in base load, load management, and standby applications. This category should not be used for EP Rental, Petroleum, Locomotive, or Marine electric power applications.		NC
I	MSPMDXQ	END USE: RENTAL EPG 0 All Power Modules and Rental units, utilized in energy utilities, communications, commercial and residential buildings, agricultural, construction, mining, manufacturing, public and civil services. This category should not be used for Petroleum EPG, Locomotive EPG, or Marine Aux applications.		NC
I	MSPETDR	PETROLEUM LAND DRILLING 0 Engines, transmissions and packages used to drill oil and gas wells (including auxiliary GEN Sets mounted on drill rigs). This includes Petroleum, Industrial, EPG, and Marine price list products.		NC

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APPLICATION INDICATORS (CONT.)

Market Segmentation (Cont.)

I	MSPETPG	PETRO LAND PROD/PUMPING 0 All engines utilized in the generation of mechanical and electrical power for exploration, recovery and transmission of petroleum products including gathering, production, pumping, and refining, (but not gas compression or drilling). Applications include camp power, emergency gen sets (non-drilling), prime power at production and storage facilities, cranes, fire pumps, air compressors, primary or secondary recovery systems such as down hole pumps, water flood or disposal systems, etc. This includes rental products which fit Petroleum Production/Pumping market segment description. This includes industrial, marine, and EPG price list products.		NC
I	MSPETOD	PETRO OFFSHORE DRILLING 0 Engines and genset packages used as main sources of power for drilling duty or for emergency power on offshore oil & gas drill rigs (but not on production rigs, platforms, or facilities). Does not include firepumps or cranes for drilling or production rigs, platforms, or facilities.		NC

DISPLAY UNITS

Display Units

Select one of the following. Provides control panel and instrumentation displays in specified units.

I	EMCENGU	ENGLISH DISPLAY UNITS 0		NC
I	EMCMETU	METRIC DISPLAY UNITS 0		NC

ENGINE RATING AND SPEED

Engine Rating and Speed

Select one of the following ratings. Provides power settings and name plate for use in specified application.

I	PSTSPCL	SPECIAL SETTING REQUEST 0		NC
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50 Hertz @ 1500 rpm

I	KVA1988	1988 KVA W/O FAN 0 ONLY FOR USE WITH: 50 Hz		NC
I	KVA1944	1944 KVA W/O FAN 0 ONLY FOR USE WITH: 50 Hz		NC

60 Hertz @ 1800 rpm

I	KWW1650	1650 KW W/O FAN 0 ONLY FOR USE WITH: 60 Hz high voltage.		NC
I	KWW1660	1660 KW W/O FAN 0 ONLY FOR USE WITH: 60 Hz low & medium voltage.		NC

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MANDATORY ATTACHMENTS

Interconnect Wiring Harnesses for High Voltage Units

TECHNICAL: From ECM to EMCP 4.3 wall mount remote panel. Customer can choose from three various lengths below. Choose one:

I	HRNCN05	8 M HARNESS 0		\$609
		TECHNICAL: Ship loose 8 M (25 foot) interconnect wiring harness from ECM to EMCP 4.3 (40 pin Deutsch ECM connector to 70 pin Deutsch panel connector).		
I	HRNCN01	15 M HARNESS 0		\$980
		TECHNICAL: Ship loose 15 M (50 foot) interconnect wiring harness from ECM to EMCP 4.3 (40 pin Deutsch ECM connector to 70 pin Deutsch panel connector).		
		ONLY FOR USE WITH: 3500 B & C packages.		
I	HRNCN03	23 M HARNESS 0		\$1,046
		TECHNICAL: Ship loose 23 M (75 foot) interconnect wiring harness from ECM to EMCP 4.3 (40 pin Deutsch ECM connector to 70 pin Deutsch panel connector).		

FOR 50 Hz G3516C Island Mode

Kilowatt Transducer (KWT) Mandatory Options

Dealer must select a kW transducer option from below that is compatible with the current and potential transformers intended for use. Customer must supply CTs and PTs for input and power to kW transducer. See A&I guide for sizing details.

MANDATORY OPTION (Choose one of the following):

I	KWTRD09	KW TRANSUDCER 0		\$2,064
		TECHNICAL: Ship loose kW transducer. 50 Hz 3 phase, 3 wire (2 element) connection. PT secondary voltage range of 85-135 VAC; CT input range 0-5A. Mount isolated from vibration. Full output voltage = 10V. Full-scale Watts = 1000W.		
		REQUIRES: 50 Hz auxiliary ECM (Island Mode) genset.		
		ONLY FOR USE WITH: All voltages other than high voltage. Choose between KWTRD09 or KWTRD04.		
I	KWTRD04	KW TRANSUDCER 0		\$2,283
		TECHNICAL: Ship loose kW transducer. 50 Hz 3 phase, 4 wire (3 element) connection. PT secondary voltage range of 85-135 VAC, CT input range 0-5A. Mount isolated from vibration. Full output voltage = 5V. Full-scale Watts = 1500W.		
		REQUIRES: 50 Hz auxiliary ECM (Island Mode) genset.		
		ONLY FOR USE WITH: All voltages other than high voltage. Choose between KWTRD09 or KWTRD04.		

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MANDATORY ATTACHMENTS (CONT.)

Emissions Level

Select one.

50 Hertz

I	EMISS09	OPTIONAL LOW EMISSIONS - 50 HZ 0 TECHNICAL: TA Luft (500 mg/nm3 NOx) 1.2g/bhp hr	0	NC
I	EMISS10	OPTIONAL LOW EMISSIONS - 50 HZ 0 TECHNICAL: 1/2 TA Luft (250mg/nm3 NOx) 0.6g/bhp hr	0	NC

60 Hertz

I	EMISS11	OPTIONAL EMISSIONS - 60 Hz 0 TECHNICAL: 0.5 g/bhp hr NOx.	0	NC
I	EMISS12	STANDARD EMISSIONS - 60 Hz 0 TECHNICAL: 1 g/bhp hr NOx.	0	NC

Jacket Water Outlet Temperature

I	JWTEMP2	99C OUTLET JW TEMPERATURE 0	0	NC
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SCAC Outlet Temperature

Select one.

I	ACTEMP2N	94C/54C SCAC TEMPERATURE 0	0	NC
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COOLING SYSTEM

Cooling Systems Connections

Select One.

I	CLIO1RH	OUTLET CONNECTION/JW 0 Right Hand Connections for jacket water outlet.	0	NC
I	CLIO1LH	OUTLET CONNECTION/JW 0 Left Hand Connections for jacket water outlet.	0	NC

Connection Flanges

Select One.

I	ADPFLG1	STANDARD CAT FLANGE 0 Provides the Standard Cat Flange for a 128 mm (5 in) pipe ID for the Cooling System Connections	0	\$296
I	ADPFLG2	ANSI/DIN ADAPTER FLANGE 0 Provides an ANSI/DIN Adapter Flange for a 152.4 mm (6 in) pipe ID For the Cooling System Connections.	0	\$1,202

USE	REF NO.	MANDATORY ATTACHMENTS	Ship Weight lbs	List Price At Factory
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EUROPEAN CERTIFICATIONS

European Union Certifications

I	EUDGDOI	EUROPEAN DIRECTIVE GENSET DOI 0 TECHNICAL: Provides Declaration of Incorporation document per 2006/42/EC (Machinery Safety Directive), and 2006/95/EC (Low Voltage Safety Directive). The Declaration of Incorporation allows free movement of goods in the EU per the Machinery Safety Directive, 2006/42/EC, and references demonstrated compliance to other applicable directives. This is required by OEM manufacturers when the subject product is installed in a more complex installation. CANNOT BE USED WITH: ELEPAC1 or JWH0022.		\$271 NET
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NOTE: Not for use with Hazardous Location engines.

I	NOEUCRT	EC CERTIFICATION NOT REQUIRED 0 TECHNICAL: If full CE certification (Declaration of Conformity, complete gensets) or Declaration of Incorporation (partially completed gensets) is not selected then this product cannot be legally placed on the market in the EU/EEA or any country where the product would otherwise be subject to national legislation implementing the requirements of the machinery directive (2006/42/EC) (collectively "the Region"). If shipped to an address in the Region without the necessary certification/ documentation, the buyer has undertaken that the product will then be exported from the Region.		NC
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LANGUAGE OPTIONS

Language Options - select ONE.

Provides nameplate, decals, and operator's manual in specified language. For other Language Options contact your Marketing Profit Center. Additional literature available through Corporate Literature System.

I	LANENGO	LANGUAGE MARKINGS-ENGLISH 0		NC
I	LANFREQ	LANGUAGE MARKINGS-FRENCH 0		NC
I	LANPORO	LANGUAGE MARKINGS-PORTUGUESE 0		NC
I	LANSPAO	LANGUAGE MARKINGS-SPANISH 0		NC
I	LANDUTO	LANGUAGE MARKINGS-DUTCH 0		NC
I	LANDANO	LANGUAGE MARKINGS-DANISH 0		NC
I	LANGERO	LANGUAGE MARKINGS-GERMAN 0		NC
I	LANITAO	LANGUAGE MARKINGS-ITALIAN 0		NC
I	LANRUSO	LANGUAGE MARKINGS-RUSSIA 0		NC

USE	REF NO.	MANDATORY ATTACHMENTS	Ship Weight lbs	List Price At Factory
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LANGUAGE OPTIONS (CONT.)

Language Options - select ONE. (Cont.)

I	LANTURO	LANGUAGE MARKINGS-TURKISH	0	NC
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LUBE SYSTEM

Lubricating Oil

I	LUBOILU	LUBRICATING OIL TECHNICAL: Cat NGE0, ULTRA 40 Wt, 416 L (110 gal).	0	\$2,359
I	NOLUB01	NO LUBRICATING OIL DESIRED TECHNICAL: Engine shipped dry.	0	NC

Prelube Pumps
Continuous

I	ELEPAC7	ELECTRIC PRELUBE PUMP AC TECHNICAL: Requires 110-240 VAC 50 Hz or 115-230 VAC 60 Hz power source.	0	\$2,557
I	ELEPP11	ELECTRIC PRELUBE PUMP AC TECHNICAL: Requires 110-240 VAC 50 Hz or 115-230 VAC 60 Hz power source.	0	\$4,663
I	ELEPP12	PRELUBE PUMP AC	0	\$4,663
I	NOPLPMP	NO PRELUBE PUMP	0	\$31

MANDATORY OPTIONS

Mandatory Options -- NSPS Emission Rule

US EPA SI (Spark Ignited) Stationary NSPS (New Source Performance Standard) Regulations:

Effective July 2007, the US EPA will enforce the new Spark Ignited New Source Performance Standard (SI NSPS) for gas stationary engines operating in the United States equal to or above 500 bhp. Effective January 1, 2008 this standard will apply to all gas engines rated below 500 bhp. This rule will affect all continuous applications including landfill and ag biogas. Effective Jan 1, 2009 this rule will apply to all Standby units. For more information see Cat Power Net website: Product News dated April 2007, Media Number LEXE7149.

I	NSPSNUS	NON-U.S. GENSET Application - gas generator sets used outside of the United States of America. The SI NSPS rule does not apply.	0	NC
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USE	REF NO.	MANDATORY ATTACHMENTS	Ship Weight lbs	List Price At Factory
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MANDATORY OPTIONS (CONT.)

Mandatory Options -- NSPS Emission Rule (Cont.)

I	NSPSCOM	U.S. NSPS COMPLIANT 0		NC
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Application - gas generator sets to be used in continuous power applications in the United States (all gasses including digester, landfill and ag bio-gas).

These gas products are not certified, but can be made field compliant through on-site emissions testing. It is the customer's responsibility to coordinate and complete site emissions testing and submit for an EPA certificate of compliance. Some products may require an air/fuel ratio-control and a 3-way catalyst (Note: For rich burn products the catalyst rating must be used). Some low emission products might need an oxidation catalyst to meet CO2 or VOC limits (Note: Catalysts cannot be used with corrosive fuels such as digester, landfill and ag bio-gas).

EXTENDED SERVICE COVERAGE

ESC (Extended Service Coverage)

New procedures must be followed to purchase ESC with the gensets offered in this price list. The new procedures are:

Complete the ESC Special Quote Request Form found at dealer.cat.com/EPESC. Please submit the completed form to engineesc@cat.com.

Contact engineesc@cat.com if you have any questions.

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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AIR INLET SYSTEM

Air Cleaners

I	ACLDE02	AIR CLEANER - DUAL ELEMENT 0 Vertical, dual element air cleaner. Shipped loose in housing.		\$5,025
I	ACLDE03	AIR CLEANER - DUAL ELEMENT 0 Horizontal, dual element air cleaner with precleaner. Shipped loose as one unit.		\$6,488
I	ACLMNT1	AIR CLEANER MOUNTING 0 Accessory Mounting Stand - Shipped loose. For mounting vertical air cleaner only. CANNOT BE USED WITH: Air cleaners with precleaner.		\$4,203
I	ACLMNT2	AIR CLEANER MOUNTING 0 Accessory Mounting Stand. Shipped loose. For mounting horizontal air cleaner only. CANNOT BE USED WITH: Air cleaners with precleaner.		\$5,860

Air Cleaner Removal

I	ACLRM06	AIR CLEANER REMOVAL 0 Removes standard, ship loose air cleaner.		\$-4,643
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CIRCUIT BREAKERS

3 Pole UL 489 Listed

Circuit Breaker with Shunt Trip and Auxiliary Contacts.

I	CBK0033	CIRCUIT BKR W/ST 1200 A 0 TECHNICAL: 80% Rated.		\$4,052
I	CBK0035	CIRCUIT BKR W/ST 1600 A 0 TECHNICAL: 80% Rated w/Auxiliary contacts.		\$7,193
I	CBK0037	CIRCUIT BKR W/ST 2000 A 0 TECHNICAL: 80% Rated w/Auxiliary contacts.		\$7,545

3 Pole IEC 947-2 Rated

Circuit Breaker with Shunt Trip and Auxiliary Contacts.

I	CBK0039	CIRCUIT BKR W/ST 2500 A 0		\$9,372
I	CBK0041	CIRCUIT BKR W/ST 3200 A 0		\$11,965

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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CONTROL PANELS

Local Alarm Modules

I	EMCAM03	CUSTOM ALARM MODULE - 8 LIGHTS 0 TECHNICAL: Provides 4 red and 4 amber LEDs which can be individually controlled by customer provided switches. without alarm horn. Polycarbonate labels of typical functions are provided along with mounting template, thus providing an easy to customize alarm module. Will be mounted in EMCP II along with selected alarm module. REQUIRES: Low or medium voltage generator. ONLY FOR USE WITH: Other alarm modules. CANNOT BE USED WITH: Synchronizing module EMCSM01.		\$615
I	EMCAM06	ALARM MODULE - NFPA99 0 TECHNICAL: Provides flashing LEDs and horn to annunciate: high coolant temperature alarm, low coolant temperature alarm, low oil pressure alarm, low DC volts alarm, system not in automatic. Two spare LEDs for customer switch inputs. No other contactors needed. This panel meets requirements of NFPA 99. REQUIRES: Low or medium voltage generator.		\$929
I	EMCAM07	ALARM MODULE - NFPA110 0 TECHNICAL: Provides flashing LED's and horn to annunciate: high coolant temperature alarm, low coolant temperature alarm, low oil pressure alarm, low DC volts alarm, system not in automatic; plus the following which require customer provided switches: low fuel level, battery charger malfunction, engine inlet air damper closed. This panel meets requirements of NFPA 110. REQUIRES: Low or medium voltage generator.		\$1,090

Remote Annunciator Modules (RAM)

Shipped loose.

I	EMCAM04	REM 8-LIGHT CUSTOM ANNUNC 0 TECHNICAL: 24 volts DC, 8 lights. Remote mounted. Provides one custom alarm module for use as a remote annunciator. Provides alarm horn and 4 red and 4 amber LEDs which can be individually controlled by customer provided switches. Polycarbonate labels of typical functions are provided along with mounting template, thus providing an easy-to-customize remote annunciator module. Includes 254 x 305 x 102 mm (10 x 12 x 4 in) deep steel box and cover suitable for mounting one module. Flush mount kit is included.		\$914
I	EMCAM05	REM 16-LIGHT CUSTOM ANNUNC 0 TECHNICAL: 24 volts DC, 16 lights. Remote mounted. Provides two custom alarm modules for use as a remote annunciator. Provides alarm horn and 8 red and 8 amber LEDs, which can be individually controlled by customer-provided switches. Polycarbonate labels of typical functions are provided along with mounting template, thus providing an easy-to-customize remote annunciator module. Includes 254 x 305 x 102 mm (10 x 12 x 4 in) deep steel box and cover suitable for mounting two modules. Flush mount kit is included.		\$1,476

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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CONTROL PANELS (CONT.)

Remote Annunciator Modules (RAM) (Cont.)

I	EMCRMP1	REM 8-LIGHT ANNUNCIATOR 0 Shipped loose. TECHNICAL: 24-32 volts DC. Remote mounted. Provides flashing LEDs and horn to annunciate: low coolant temperature alarm, high coolant temperature shutdown, low oil pressure shutdown, overcrank, overspeed shutdown, generator on load (via customer switch), and charger malfunction (via customer switch).		\$636
I	EMCRMP3	REM 16-LIGHT NFPA99 ANNUNC 0 Shipped loose. TECHNICAL: 24 volts DC, 16 lights. Remote mounted. Combines alarm module with same function as EMCRMP1 and custom alarm module to provide a total of 16 LEDs in a single remote annunciator. Provides flashing LEDs and horn to annunciate: low coolant temperature alarm, high coolant temperature shutdown, low oil pressure shutdown, overcrank, overspeed shutdown. The following require customer-provided switches: generator on load, battery charger malfunction, and 4 red and 4 amber LEDs which can be individually controlled by customer-provided switches. Polycarbonate labels of typical functions are provided along with mounting template, thus providing an easy-to-customize alarm module. Includes 254x305x102 mm (10x12x4 in) steel box and cover suitable for mounting two modules. Flush mount kit is included.		\$1,369

Panel Options

I	EMCSM01	SYNCHRONIZING MODULE 0 Includes lights only for parallel operation. CANNOT BE USED WITH: High voltage.		\$626
I	EMCEFR1	ENGINE FAILURE RELAY 0 TECHNICAL: Provides 3-pole double-throw 10-amp relay contacts for customer use. Relay activates on any oil pressure, coolant temperature, (optional) coolant loss, overspeed, overcrank, emergency stop or EMCP II diagnostic shutdowns.		\$48

Customer Management Device

I	CMOD003	COMMUNICATIONS MODULE-PL1000T 0 TECHNICAL: Shipped loose. Communications Management Device; replacement product for the CCM. Provides ability for customer to monitor and control engine function and diagnostic parameters. Provides an interface between Engine ECM and remote computer or other RS-232, RS-422, RS-485, or J1939 device. Can be configured for extension of J1939 connection and Cat Data Link. Can be used with Hayes compatible modem. Provides the capability to remotely start or stop engine. Not intended for high speed control systems. Data throughput rate varies with application. Includes PC software and harness assembly.		\$1,554
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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CONTROL PANELS (CONT.)

Customer Management Device (Cont.)

I	CMOD006	COMMUNICATIONS MODULE-PL1000E 0 TECHNICAL: Shipped loose. Enhanced Communications Management Device. Provides ability for customer to monitor and control engine function and diagnostic parameters. Built-in Web Server, MODBUS RTU/TCP, and Ethernet device port for increased versatility and capability. Provides an interface between Engine ECM and remote computer, Ethernet, or other RS-232, RS-422, RS-485, or J1939 device. Web Server provides capability to view Status and Configuration web pages stored on ECM. Supports Cat Data Link and J1939 to MODBUS RTU and MODBUS TCP. CDL Boost allows extension of CDL harness up to 1000 feet without compromising data integrity. Not intended for high speed control systems. Data throughput rate varies with application. Provides the capability to remotely start or stop the engine. Includes software and harness assemblies. software and harness assemblies.		\$1,456
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COOLING SYSTEM

Aftercooler Cores

I	AFTCL16	AFTERCOOLER AIR LINES 0 TECHNICAL: Replaces standard aftercooler cores with cores made from stainless steel. Also includes changes associated with aftercooler piping. Engine performance is unchanged with these stainless steel cores. REQUIRES: 516GE5Q or 516GE5S ONLY FOR USE WITH: Pipeline natural gas having trace amounts of H2S up to 20 ppm.		\$5,225
I	AFTCL17	AFTERCOOLER AIR LINES 0 TECHNICAL: Replaces standard aftercooler cores with cores made from stainless steel. Also includes changes associated with aftercooler piping. Engine performance is unchanged with these stainless steel cores. ONLY FOR USE WITH: Pipeline natural gas having trace amounts of H2S up to 20 ppm. CANNOT BE USED WITH: 516GE5Q or 516GE5S		\$5,385

EXHAUST SYSTEM

Elbow

I	EXCEL09	EXHAUST ELBOW KIT 0 Shipped loose.		\$1,130
I	EXCEL13	ELBOW - 406 MM (16 IN) 0 Shipped loose.		\$1,965

Flanges

I	EXCFE06	FLANGE AND EXHAUST EXPANDER 0 Shipped loose. TECHNICAL: 356mm-406mm (14 in-16 in) expander.		\$2,611
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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EXHAUST SYSTEM (CONT.)

Flanges (Cont.)

I	EXCFL08	14 IN FLANGE KIT 0 Shipped loose. TECHNICAL: One oversize of turbo outlet.		\$352
I	EXCFL10	FLANGE - 406 MM (16 IN) 0 Shipped loose. TECHNICAL: Two oversizes of turbo outlet.		\$786

Flexible Fittings

I	EXCFF15	FLEXIBLE FITTING 0 Shipped loose. TECHNICAL: 50 and 60 Hz. 1800 rpm - 356mm x 305mm (14in x 12in) long with 12-bolt flanges at both ends.		\$1,275
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Mufflers

I	MUF0030	MUFFLER - 15 dBA Attenuation 0 Shipped loose. TECHNICAL: Industrial Grade 15 dBA Attenuation		\$5,495
I	MUFIN15	MUFFLER - 18 dBA Attenuation 0 Shipped loose. TECHNICAL: Industrial Grade 18 dBA Attenuation comes with ANSI style companion flanges.		\$7,325
I	MUFIN16	MUFFLER - 25 dBA Attenuation 0 Shipped loose. TECHNICAL: Industrial Grade 25 dBA Attenuation comes with ANSI style companion flanges.		\$9,058
I	MUFSA01	16" MUFFLER - SPARK ARRESTING 0 Shipped loose. TECHNICAL: 406mm (16in.) spark-arresting muffler with straight in and out ends, ANSI style companion flanges, clean out box, and spark box.		\$5,038

FUEL SYSTEM

Fuel System

If optional fuel filter is not selected, customer must provide. Fuel system components are sized to supply fuel to a single generator set. Use of single system components for multiple units may result in adequate fuel flow. For design and sizing guidelines refer to Gaseous Fuel Systems A&I Guide.

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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FUEL SYSTEM (CONT.)

Fuel Filter

I	FULFL14	FUEL FILTER 0 Shipped loose. Remote mounted gas filter for use upstream of engine fuel inlet. Filter selected to provide no greater than 2 kPa (0.3 psi) initial pressure differential with new element for 10.3 kPa (1.5 psi) or greater gas supply at rated flow. Maximum working pressure of 450 kPa (65 psi). Comes with one element designed to filter 1 micron particle size. DN100 (4") flanged filter inlet/outlet connections with taps for pressure gages. Manufactured in accordance with European Pressure Equipment Directive (PED). ONLY FOR USE WITH: Dry pipeline natural gas.	0	\$9,431
I	FULFL13	GAS FILTER 0 Shipped loose. Remote mounted gas filter for use upstream of engine fuel inlet. Filter selected to provide no greater than 2 kPa (0.3 psi) initial pressure differential with new filter element for 85 kPa (12 psi) or greater gas supply at rated flow. Maximum working pressure of 450 kPa (65 psi). Comes with one element designed to filter 1 micron particle size. 3" NPT filter inlet/outlet connections. Manufactured in accordance with PED directive. Shipped loose. ONLY FOR USE WITH: Dry pipeline natural gas. Not recommended for use with gas pressures less than 83 kPa (12 psi) at filter inlet connection.	0	\$3,298

Gas Shutoff Valve

I	SOV2403	GAS SHUTOFF VALVE 0 Shipped loose. For use on high pressure side. TECHNICAL: Maximum gas pressure of 276 kPa (40 psi). 24V, ETR (Energized-To-Run) Solenoid	0	\$562
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Regulator

Shipped loose.

I	FSREG02	GAS KNOCKDOWN REGULATOR 0 TECHNICAL: Remote knock down regulator for use with max inlet gas pressure of 275.8 kPa (40 psi). 2" NPT inlet/outlet connections.	0	\$1,218
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HIGH VOLT GENERATORS & ATTACHMENTS

Cross-Current Compensation Current Transformers (CCCT), 15 kV Class

One CT installed on Phase B lead in generator terminal box.
ANSI Class: T200, Knee Point: 135 V, Error @ 25 VA: 0.14%.
Used for cross current compensation for parallel operation.
Refer to "FULL LOAD AMPERES AT 0.8 POWER FACTOR AND RECOMMENDED CT RATIO" Table in the rating section for recommended CT ratio.
Requires 2600 Frame Generator - 10000/10500/11000 Volts 50 Hz.

I	CCT1510	CCCT, 100:5 RATIO 0 TECHNICAL: FLA Range 76-100.	0	\$1,745
I	CCT1511	CCCT, 150:5 RATIO 0 TECHNICAL: FLA Range 101-150.	0	\$1,745

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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HIGH VOLT GENERATORS & ATTACHMENTS (CONT.)

Cross-Current Compensation Current Transformers (CCCT), 8.7 kV Class

One CT installed on Phase B lead in generator terminal box.
 ANSI Class: T100, Knee Point: 100 V, Error @ 25 VA: 0.18%.
 Used for cross current compensation for parallel operation.
 Refer to "FULL LOAD AMPERES AT 0.8 POWER FACTORY AND RECOMMENDED CT RATIO", Table in the rating section for recommended CT ratio.
 Requires 2600 Frame Generator; 6300/6600/6900 Volts 50 Hz.

I	CCT8709	CCCT, 200:5 RATIO 0 TECHNICAL: FLA Range 151-200.		\$1,423
I	CCT8710	CCCT, 300:5 RATIO 0 TECHNICAL: FLA Range 201-300.		\$1,423

Differential Current Transformers (DCT), 15 kV Class

Three sets of two Cts, one of each set installed in generator terminal box and one shipped loose for customer installation.
 ANSI Class: T200, Knee Point: 135 V, Error @25 VA: 0.14%.
 Used for differential protection.
 Refer to "FULL LOAD AMPERES AT 0.8 POWER FACTOR AND RECOMMENDED CT RATIO" Table in the rating section for recommended CT ratio.
 Requires 2600 frame generator - 10000/10500/11000 50 Hz.

I	DCT1510	DIFF CURR TRANS, 100:5 RATIO 0 TECHNICAL: FLA Range 76-100		\$9,115
I	DCT1511	DIFF CURR TRANS, 150:5 RATIO 0 TECHNICAL: FLA Range 101-150		\$9,115

Differential Current Transformers (DCT), 8.7 kV Class

Three sets of two Cts, one of each set installed in generator terminal box and one shipped loose for customer installation.
 ANSI Class: T100, Knee Point: 100 V, Error @25 VA: 0.18%.
 Used for differential protection.
 Refer to "FULL LOAD AMPERES AT 0.8 POWER FACTOR AND RECOMMENDED CT RATIO" Table in the rating section for recommended CT ratio.
 Requires 2600 frame generator; 6300/6600/6900 Volts 50 Hz.

I	DCT8709	DIFF CURR TRANS, 200:5 RATIO 0 TECHNICAL: FLA Range 151-200		\$7,106
I	DCT8710	DIFF CURR TRANS 300:5 RATIO 0 TECHNICAL: FLA Range 201-300		\$7,106

Current Transformers (CT), 15 kV Class

Shipped loose.
 Identical to installed CCCT or DCT having same ratio and voltage class. One transformer shipped loose.
 ANSI Class: T200, Knee Point: 135 V, Error @ 25 VA: 0.14 %.
 Refer to "FULL LOAD AMPERES AT 0.8 POWER FACTOR AND RECOMMENDED CT RATIO" Table in the rating section for recommended CT ratio.
 Requires 2600 frame generator - 10000/10500/11000 Volts 50 Hz.

I	CT15010	CURRENT TRANSF., 100:5 RATIO 0 TECHNICAL: FLA Range 76-100		\$1,322
I	CT15011	CURRENT TRANSF., 150:5 RATIO 0 TECHNICAL: FLA Range 101-150		\$1,322

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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HIGH VOLT GENERATORS & ATTACHMENTS (CONT.)

Current Transformers (CT), 8.7 kV Class

Shipped loose.

Identical to installed CCCT or DCT having same ratio and voltage class. One transformer shipped loose.

ANSI Class: T100, Knee Point: 100 V, Error @ 25VA: 0.18%.

Refer to "FULL LOAD AMPERES AT 0.8 POWER FACTOR AND RECOMMENDED CT RATIO" Table in the rating section for recommended CT ratio.

Requires 2600 frame generator; 6300/6600/6900 Volts 50 Hz.

I	CT87009	CURRENT TRANSF., 200:5 RATIO 0 TECHNICAL: FLA Range 151-200		\$965
I	CT87010	CURRENT TRANSF., 300:5 RATIO 0 TECHNICAL: FLA Range 201-300		\$965

High Voltage Generators, 6300V and Above

I	OVRDG17	CDVR INSTALLED 0 TECHNICAL: Installed on EMCP 4.3 wall mount panel.		NC
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Annunciator Modules

NOTE: Can order a maximum of three remote annunciators if no local annunciator is ordered. Can order a maximum of two remote annunciators if one local annunciator is ordered. Can order a maximum of one remote annunciator when two local annunciators are ordered.

I	EMGRAM5	PRE-PROGRAMMED. 0 TECHNICAL: Provides 16 point/32 light annunciator, mounted on package, with label NFPA 99-110/CSA 282 Configuration and label.		\$660
I	EMCCAM6	CUSTOM 0 TECHNICAL: Provides 16 point/32 light annunciator, mounted on package, with label kit shipped loose for customer installation.		\$528
I	EMGRAM6	1-PRE-PROGRAMMED & 1-CUSTOM. 0 TECHNICAL: Provides 16 point/32 light annunciator, mounted on package with NFPA 99-110/CSA 282 Configuration and label, and additional 16 point/32 light annunciator, mounted on package, with label kit shipped loose for customer installation.		\$875
I	EMGRAM7	2-CUSTOM 0 TECHNICAL: Provides two 16 point/32 light annunciators, mounted on package, with label kit shipped loose for customer installation.		\$935

Other High Voltage Options

I	AUMCT04	AUTO MANUAL CONTROL MCV112 0 Shipped loose. TECHNICAL: Allows generator output voltage to be controlled manually by a potentiometer or automatically by a voltage regulator. Has isolation feature for maintenance. REQUIRES: 2600 frame generator and DVR OVRDG14, OVRDG15, or OVRDG17.		\$2,520
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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HIGH VOLT GENERATORS & ATTACHMENTS (CONT.)

Other High Voltage Options (Cont.)

I	GNDIFD3	DIODE FAULT DETECTOR 0 Shipped loose. TECHNICAL: Senses open or short diodes. REQUIRES: 2600 Frame Generator.		\$5,166
I	SHKTHM1	THERMOSTAT FOR SPACE HEATER 0 TECHNICAL: For automatic control of space heater. REQUIRES: 2600 frame generator.		\$264
I	GNACL04	CLEANER GP-GEN AIR CLEANER 0 TECHNICAL: Has washable filter elements and a differential pressure switch. REQUIRES: 2600 Frame Generator.		\$6,762
I	CNVGP06	CONVERSION GP-6 LEAD,6 TERMINL 0 TECHNICAL: Three phase leads located on the opposite side of the generator as the three neutral leads. REQUIRES: 2600 frame generator.		\$5,086
I	CNVGP07	CONVERSION GP-LHSFEE 0 TECHNICAL: As seen from exciter end. Replaces standard RH side extension box. REQUIRES: 2600 frame generator.		NC
I	CNVGP08	CONVERSION GP-TOP CABLE ENTRY 0 TECHNICAL: As seen from exciter end. Replaces standard bottom cable entry. REQUIRES: 2600 frame generator.		NC

GENERATORS AND GENERATOR ATTACHMENTS

OPTIONAL GENERATORS COMPATIBILITY TABLE

ALL OPTIONAL GENERATORS REQUIRE A GENERATOR REMOVAL.

OVERSIZE GENERATORS--PREMIUM/PERMANENT MAGNET

50 HERTZ 1500 RPM, 415/400/380 VOLT

GENERATOR		GENERATOR
FRAME	ORDER #	REMOVAL
828	OGNPMH8	RPA0232

50 HERTZ 1500 RPM, 3300 VOLT

1 OVERSIZE GENERATOR			2 OVERSIZE GENERATOR		STD GENERATOR
CONT.	FRAME	ORDER #	FRAME	ORDER #	REMOVAL
2000	827	OGNPMJ3	828	OGNPMJ4	RPA0232

USE	REF NO.	OPTIONAL ATTACHMENTS		Ship Weight lbs	List Price At Factory
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GENERATORS AND GENERATOR ATTACHMENTS (CONT.)

50 HERTZ 1500 RPM, 6600 VOLT

CONT.	1 OVERSIZE GENERATOR FRAME	ORDER #	STD GENERATOR REMOVAL
2000	2630	OGNHV86	RPA0233

50 HERTZ 1500 RPM, 11,000 VOLT

CONT.	1 OVERSIZE GENERATOR FRAME	ORDER #	STD GENERATOR REMOVAL
2000	826	OGNPMH9	RPA0233

60 HERTZ 1800 RPM, 480 VOLT

CONT.	1 OVERSIZE GENERATOR FRAME	ORDER #	2 OVERSIZE GENERATOR FRAME	ORDER #	STD GENERATOR REMOVAL
1660	826	OGNPMH9	827	OGNPMH7	RPA0234

60 HERTZ 1800 RPM, 4160 VOLT

CONT.	1 OVERSIZE GENERATOR FRAME	ORDER #	2 OVERSIZE GENERATOR FRAME	ORDER #	STD GENERATOR REMOVAL
1660	826	OGNPMH6	827	OGNPMJ3	RPA0234

60 HERTZ 1800 RPM, 13,200 VOLT

CONT.	1 OVERSIZE GENERATOR FRAME	ORDER #	STD GENERATOR REMOVAL
1635	2630	OGNHV90	RPA0235

NOMINAL FRAME SIZE GENERATORS--PREMIUM/PERMANENT MAGNET

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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GENERATORS AND GENERATOR ATTACHMENTS (CONT.)

50 HERTZ 1500 RPM, 6600 VOLT

CONT.	1 OVERSIZE GENERATOR FRAME	ORDER #	STD GENERATOR REMOVAL
2000	2620	OGNHV85	RPA0233

ATTACHMENT GENERATOR ARRANGEMENT FOR PGS

Installed brushless SR4B generators. Includes generator, package length rails, and generator coupling.

1500 RPM 415/400/380 VOLT @ 50 HZ, 3 PHASE

I	OGNPMH8	GENERATOR 828 FRAME 2 BRG 0	\$173,946
		TECHNICAL: 415, 400 or 380 volts at 50 Hz Generator Argt = 144-1830 Winding = Form Wound, No. of Leads = 6 Excitation = Permanent Magnet, Pitch = .7778 CANNOT BE USED WITH: GDCDGER	

1500 RPM, 3300 VOLT @ 50 HZ, 3 PHASE

I	OGNPMJ3	GENERATOR 827 FRAME 2 BRG 0	\$153,935
		TECHNICAL: 3300 volts at 50 Hz. Generator Argt = 144-2004 Winding = Form Wound, No. of Leads = 6 Excitation = Permanent Magnet, Pitch = .6667 CANNOT BE USED WITH: GDCDGER	
I	OGNPMJ4	GENERATOR 828 FRAME 2 BRG 0	\$179,777
		TECHNICAL: 3300 volts at 50 Hz Generator Argt = 144-2006 Winding = Form Wound, No. of Leads = 6 Excitation = Permanent Magnet, Pitch = .6667 CANNOT BE USED WITH: GDCDGER	

1500 RPM, 6600 VOLT @ 50 HZ, 3 PHASE

I	OGNHV85	GENERATOR 2620 FRAME 2 BRG 0	\$192,111
		TECHNICAL: 6600 volts at 50 Hz Generator Argt= 219-4090 Winding= Form Wound, No. of Leads= 6 Excitation= Permanent Magnet, Pitch= .6667 CANNOT BE USED WITH: GDCDGER	
I	OGNHV86	GENERATOR 2630 FRAME 2 BRG 0	\$192,111
		TECHNICAL: 6600 volts at 50 Hz Generator Argt= 217-6614 Winding= Form Wound, No. of Leads= 6 Excitation= Permanent Magnet, Pitch= .6667 CANNOT BE USED WITH: GDCDGER	

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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GENERATORS AND GENERATOR ATTACHMENTS (CONT.)

1800 RPM, 480 VOLT @ 60 HZ, 3 PHASE

I	OGNPMH9	GENERATOR 826 FRAME 2 BRG 0 TECHNICAL: 480 volts at 60 Hz. Generator Argt = 144-1826 Winding = Form Wound, No. of Leads = 6 Excitation = Permanent Magnet, Pitch = .7143 CANNOT BE USED WITH: GDCDGER		\$129,963
I	OGNPMH7	GENERATOR 827 FRAME 2 BRG 0 TECHNICAL: 480 volts at 60 Hz. Generator Argt = 144-1828 Winding = Form Wound, No. of Leads = 6 Excitation = Permanent Magnet, Pitch = .6667 CANNOT BE USED WITH: GDCDGER		\$146,668

1800 RPM, 4160 VOLT @ 60 HZ, 3 PHASE

I	OGNPMJ3	GENERATOR 827 FRAME 2 BRG 0 TECHNICAL: 4160 volts at 60 Hz. Generator Argt = 144-2004 Winding = Form Wound, No. of Leads = 6 Excitation = Permanent Magnet, Pitch = .6667 CANNOT BE USED WITH: GDCDGER		\$153,935
I	OGNPMH6	GENERATOR 826 FRAME 2 BRG 0 TECHNICAL: 4160 volts at 60 Hz. Generator Argt = 144-2002 Winding = Form Wound, No. of Leads = 6 Excitation = Permanent Magnet, Pitch = .6667 CANNOT BE USED WITH: GDCDGER		\$138,552

1800 RPM, 13,800 VOLTS @ 60 HZ, 3 PHASE

I	OGNHV90	GENERATOR 2630 FRAME 2 BRG 0 TECHNICAL: 12,400, 13,200, or 13,800 volts @ 60 Hz. Generator Argt = 211-4892 Winding = Form Wound, No. of Leads = 6 Excitation = Permanent Magnet, Pitch = .6667 CANNOT BE USED WITH: GDCDGER		\$208,377
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Generator Removals

I	RPA0232	GENERATOR REMOVAL - 826 FRAME 0 Removes Generator 144-1826 and generator length rails. REQUIRES: Optional generator. ONLY FOR USE WITH: 50 Hz only. CANNOT BE USED WITH: GDCDGER		\$-129,963
I	RPA0233	GENERATOR REMOVAL - 2620 FRAME 0 Removes Generator 219-4092 and generator length rails. REQUIRES: Optional generator. ONLY FOR USE WITH: 50 Hz only. CANNOT BE USED WITH: GDCDGER		\$-199,733
I	RPA0234	GENERATOR REMOVAL - 825 FRAME 0 Removes Generator 163-8544 and generator length rails. REQUIRES: Optional generator. FOR USE WITH: 60 Hz only. CANNOT BE USED WITH: GDCDGER		\$-131,204

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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GENERATORS AND GENERATOR ATTACHMENTS (CONT.)

Generator Removals (Cont.)

I	RPA0235	GENERATOR REMOVAL - 2620 FRAME 0 Removes Generator 219-4088 and generator length rails. REQUIRES: Optional generator. FOR USE WITH: 60 Hz only. CANNOT BE USED WITH: GDCDGER		\$-208,389
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Low Voltage Generator Options

I	DVLTVC1	DELTA CONVERSION-2400V 0		\$59
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Optional Voltage Regulator

I	LVEXB01	LOW VOLTAGE EXTENSION BOX 0 TECHNICAL: Provides separate compartment for low voltage attachments and components for SR4B generators. Mounts on LH side as viewed rear of generator. ONLY FOR USE WITH: Low Voltage Only. CANNOT BE USED WITH: OGNPMJ3, OGNPMJ4, OGNPMH6.		\$1,558
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Cable Access Box

I	CAACBX2	CABLE ACCESS BOX 0 TECHNICAL: Gives more room for cable bending. Allows cable entry from the top or bottom. Mounts on RH side as viewed from rear of generator. CANNOT BE USED WITH: Circuit breakers.		\$1,847
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Air Filter

I	GNAIF04	AIR FILTER - GENERATOR 0 Includes unwired pressure switch. TECHNICAL: Raises generator temperature rise by 10 C. REQUIRES: 820 frame generator and Low voltage extension box.		\$4,608
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Bearing Temperature Detectors

I	RTD0003	BEARING TEMPERATURE RTD 0 TECHNICAL: Platinum RTD (100 ohm) 2 bearing; 820 Med voltage gens. REQUIRES: Two bearing generator.		\$808
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Manual Voltage Controls

I	MVC0003	MANUAL VOLTAGE CONTROL 0 Permanent Magnet excited generators		\$741
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European Bus Bars

I	EUROBB1	EUROPEAN BUS BARS 0 Converts generator to conform to IEC Standards for hole spacing. REQUIRES: SR4B generator, 600 volts or below.		\$189
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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GOVERNING SYSTEM

Load Share Module

I	LSMOD03	LOAD SHARING MODULE 0 Shipped loose. Woodward load sharing module. Provides load sharing functions compatible with electronic actuator and "C" series electronics.		\$1,545
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LUBE SYSTEM

Crankcase Ventilation - Oil Fumes

I	OILFUM2	POSITIVE CRANK VENTILATION 0 Shipped loose. TECHNICAL: Ingestive system to return crankcase fumes to air intake. 120-240 AC		\$8,114
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MOUNTING SYSTEM

Vibration Isolator Removal

I	VIBRM04	VIBRATION ISOLATOR REMOVAL 0		\$-1,635
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PROTECTION SYSTEM

Relief Valve

I	EXRVL17	EXPLOSION RELIEF VALVE 0 TECHNICAL: Requires 7 kpa (1.0 psi) per valve to open. Provides three pressure relief valves for crankcase protection.		\$462
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SPECIAL TESTS/REPORTS

Special Tests/Reports

Must be ordered prior to factory Start-on-line Date
Factory Witness Test - Consult Factory

I	TRSGEN2	PGS TEST REPORT @ 1.0 PF. 0 CANNOT BE USED WITH: PGS test report TRSGEN7.		\$324 NET
I	TRSGEN7	PGS TEST REPORT @ 0.8 PF. 0 CANNOT BE USED WITH: PGS test report TRSGEN2.		\$324 NET
I	TRSGEN1	GENERATOR TEST REPORT 0 Provides copy of generator test report, for orders when no engine is involved or when customer requires separate generator test report, even with gen set units.		\$324 NET

NOTE: Generators may be tested to a Frequency or Voltage that is higher than advertised on the price list. A passed test at 60Hz indicates the product will meet and exceed the requirements of a 50Hz rating. A passed test at a higher voltage indicates the product will meet and exceed the requirements of the lower voltage rating.

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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SPECIAL TESTS/REPORTS (CONT.)

Special Tests/Reports (Cont.)

I	TVATRS1	STANDARD GENSET TVA REPORT 0 Provides Standard Gen Set Torsional Vibration Analysis (TVA) Report for a selected Caterpillar engine and Caterpillar generator combination. Not available for custom generators. For custom generator TVA reports use TVATRS2. See Engine Data Sheet 73.3 for the report number to be requested. Report number should be shown on the order request.		\$382 NET
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I	TVATRS2	CUSTOM GENSET TVA REPORT 0 NOTE: Consult factory on compound and tandem installations. There may be additional charges for analysis of applications where more than one engine drives a single load. A separate torsional analysis is required for each engine with different driven equipment in multiple engine installations. One complete set of technical data (see below) must be submitted to Caterpillar before calculations are undertaken. The report will include a mathematical determination of the natural frequency, critical speeds, relative amplitudes of angular displacement, approximate nodal locations of the complete elastic system (both engine and driven equipment).		\$1,047 NET
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NOTE: IF ALL TECHNICAL DATA REQUIRED IS NOT RECEIVED, ANALYSIS MAY BE DELAYED UNTIL THE MISSING INFORMATION IS PROVIDED.

TECHNICAL DATA REQUIRED:

1. The operating speed range.
2. Load demand curve on sets which have a load dependent variable rigidity coupling.
3. General arrangement drawing or sketch of complete system, including data on special crankshaft pulleys and equipment driven from front of engine.
4. With driven equipment on both ends of the engine, the horsepower demand of each end is required. In addition, simultaneous front and rear horsepower (maximum engine load) is required.
5. Make, model, WR2 and torsional rigidity on all couplings used between the engine and driven equipment.
6. WR2 of each rotating mass. Weight of each reciprocating mass. (Needed for all pumps, compressors, gears, pinions, propellers, generators).
7. Torsional rigidity and minimum shaft diameter or detailed dimensions of all shafting in the driven system whether separately mounted or installed in a housing.

ADDITIONALLY, if an order has not been placed, the following information must also be submitted:

1. Damper part number (not top level or pricing arrgt.)
2. Flywheel part number (not top level or pricing arrgt.)
3. Horsepower
4. Operating speed
5. Coupling part number; or indicate one or two-bearing

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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SPECIAL TESTS/REPORTS (CONT.)

Special Tests/Reports (Cont.)

I	TSP0001	FUEL CONSUMPTION TEST 0 Fuel rate and specific fuel consumption determined at 3 points at rated speed. (Full load, three quarters load and half load.) This 3L-0291 Test must be requested prior to factory build. This is a fuel consumption test and, as such, is not a substitute for and does not provide the kind of performance information provided by TRSENG1. NOTE: Test is run as basic engine before generator is attached. Order can include a generator but a generator is not part of unit when engine is tested. See TSP0002.		\$1,039 NET
I	TSP0002	GENSET FUEL CONSUMPTION TEST 0 Testing with Caterpillar generator-mounted switchgear or when no switchgear ordered. Test will be performed in accordance with 3L-0293 (electrical output (kW), current and voltage readings, engine speed, fuel rate, and specific fuel consumption are determined at 3 points at rated speed. (Full load, three quarters load, and half load.) Test must be requested prior to factory build. REQUIRES: Generator.		\$1,039 NET
I	TRSENG1	STD ENGINE TEST CHARGE 0 Test will be performed in accordance with 3L-0436 and must be requested prior to factory build. The test takes about one hour. There is no assurance that the engine will be tested at the rating specified in the order. Test results reported are: throttle position setting, full load BHP, turbocharger boost (if applicable), fuel rate at full load, lube oil pressure, RPM at rated speed and high idle.		\$324 NET

SPECIAL PACKING/INSPECTIONS FOR SHIPMENT

Export Boxing

I	EXB0010	BOX FOR EXPORT 0		\$1,695 NET
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Special Packing

I	SWP0001	SHRINK WRAP PROTECTION 0		\$315 NET
I	EXP0003	PACK FOR AIR FREIGHT 0 Provides labels and documents for air freight.		NC
I	EXP0004	SPEC MARKINGS ON EXPORT BOXING 0 REQUIRES: Dealer input as to special markings.		\$143 NET

Storage Preservation

I	SRP0014	PRESERVATION - CORROSION INHIB 0 Provides vapor corrosion inhibitor in all internal engine compartments and the cooling sytem. Protects engine and accessories from functional deterioration for a minimum of one year under inside storage conditions. Does NOT provide glycol solution.		\$939 NET
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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SPECIAL PACKING/INSPECTIONS FOR SHIPMENT (CONT.)

Domestic Pack for Export

I	DPX0001	DOMESTIC PACK-EXPORT CONTAINER 0 NOTE: CONTAINER SHIPMENTS - Charge per container added to inland freight. 40 ft. open top containers -- \$450 NET. 40 ft. standard containers -- \$360 NET. 20 ft. open top containers -- \$300 NET. 20 ft. standard containers -- \$240 NET. ONLY FOR USE WITH: Engines not boxed.		NC
I	DPX0002	DOMESTIC PACK FOR EXPORT 0 Does not include any packing. Only adds markings for export shipment. ONLY FOR USE WITH: Engines or miscellaneous parts and attachments (All models on rails or requiring skids).		NC

Inspection Charges

Caterpillar miscellaneous handling charges for customer requested inspection by a private agency for inspection of engines, generators, transmissions and miscellaneous material. Includes visual inspection before boxing. No special test involved. Import license number must be supplied to factory prior to inspection.
 NOTE: Available only for generator sets manufactured at Lafayette.

I	MISCHC1	S.G.S. INSPECTION 0 S.G.S. inspection covers all contents of a given order.		\$432 NET
I	MISCHC2	MISCELLANEOUS INSPECTION 0 All other inspection agencies. Specify agency name, address, contact, and phone number.		\$432 NET

STARTING/CHARGING SYSTEM

Starting/Charging System

Consult factory for air starter.

I	ALT2490	CHARGING ALTERNATOR 24V 60 AMP 0 TECHNICAL: Requires SCAC water pump to provide drive for alternator. REQUIRES: 516GE5X, 516GE5Y, 516GE5T, or 516GE5V. ONLY FOR USE WITH: 1500 rpm units only.		\$2,670
I	ALT2497	CHARGING ALTERNATOR 24V 60 AMP 0 ONLY FOR USE WITH: 1800 rpm units only.		\$2,411

Oil Pan Accessories

I	OLVLRG4	OIL LEVEL REGULATOR 0 Maintains safe oil level in pan from customer-provided, gravity-fed oil supply.		\$525
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USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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STARTING/CHARGING SYSTEM (CONT.)

Battery Charger

24-VDC output for use with lead acid or nicad batteries. Current limiting...need for crank disconnect relay. Not warranted or serviced by Caterpillar Inc.

I	BTC20A2	BATTERY CHARGER 20 AMP 0		\$1,486
		Includes high voltage, low voltage and AC failure alarm outputs. DC Ameter and Voltmeter, NEMA 1 enclosure. TECHNICAL: For 120-208-240 VAC input. 50/60 Hz. Regulated. Meets requirements for NFPA 99 and NFPA 110. UL 1564 and CSA C22.2 No. 107 listed 2-rate charging with automatic switching from equalize to float.		

Battery

Shipped loose.

I	BAT2417	24 VOLT BATTERY SET - DRY 0		\$2,536
		CCA rating 2600, 380 ampere hours. Includes 4 batteries. TECHNICAL: -30 to -12 C (-22 to 10 F). REQUIRES: Battery removal BATRM01		
I	BATRM01	BATTERY REMOVAL 0		\$-1,392
		TECHNICAL: Removes standard batteries. Rack and cables provided.		

Jacket Water Coolant Heaters

If optional JWH is not chosen, customer must provide.

I	JWH0018	JACKET WTR HTR-SINGLE W/PUMP 0		\$2,523
		TECHNICAL: 220 Volts, 50 Hz, single phase, 9 kw. CE compliant ONLY FOR USE WITH: 50 Hz, Package gensets.		
I	JWH0082	JACKET WTR HTR-SINGLE W/PUMP 0		\$3,040
		TECHNICAL: 480 Volts, 60 Hz, 3 phase, 9 kw. UL listed ONLY FOR USE WITH: 60 Hz, Package gensets.		

GENERAL

Barring Device

I	BARGP01	ENGINE BARRING GROUP 0		\$214
		Used to manually turn engine crankshaft.		

Aid Emblem

I	AIDEMB	US AID EMBLEM 0		NC
		Provides emblem to indicate Agency for International Development (AID) financing is involved. AID provides economic assistance to advance U.S. economic and political interests in countries located in Africa, Asia, Latin America, Central and Eastern Europe, and the New Independent States of the former Soviet Union. Only available for U.S. built products. Requires one emblem for each side of the engine.		

Paint

I	SPCNT1	SPECIAL PAINT - 3500 0		\$684 NET
		Colors (other than Caterpillar yellow) or high performance paints.		

USE	REF NO.	OPTIONAL ATTACHMENTS	Ship Weight lbs	List Price At Factory
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SVCE TOOLS/SHIP PROT/FACTORY SUPPORT

Commissioning

I	FACCOM1	FACTORY COMMISSIONING 0 Commissioning will be invoiced at \$1,400 per day, plus expenses, to the selling dealer. This \$7,000 Net charge will be deducted from the total cost of the commissioning.	0	\$7,575 NET
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LITERATURE

Kit, Serialized Technical Media

Includes Operation & Maintenance manual (in language of choice), parts book on Compact Disc (English only) and other required technical documents. One group shipped free of charge with each engine. Any additional media or translations not included in the literature kit, should be ordered through the CSS Media Online Ordering Site (<https://oos.midlandcorp.com/CAT/Default.aspx>).

PACKING

Shipping Protection

I	DPX0001	DOMESTIC PACK-EXPORT CONTAINER 0 ONLY FOR USE WITH: Engines not boxed.	0	NC
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NOTE: CONTAINER SHIPMENTS - Charge per container will be included in freight forwarding invoice.
 40 ft. open top container -- \$675.
 40 ft. enclosed container -- \$540.
 20 ft. open top container -- \$450.
 20 ft. enclosed container -- \$360.