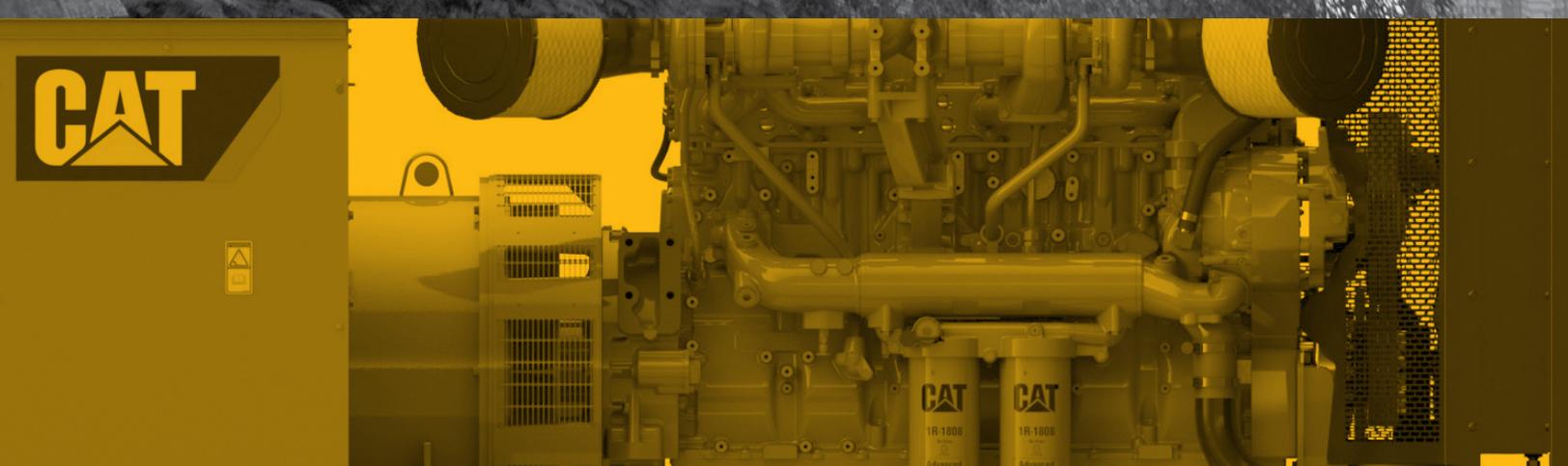


# CAT<sup>®</sup> C18 ACERT<sup>™</sup> DIESEL GENERATOR SETS

FOR INDUSTRIAL APPLICATIONS



**CAT**

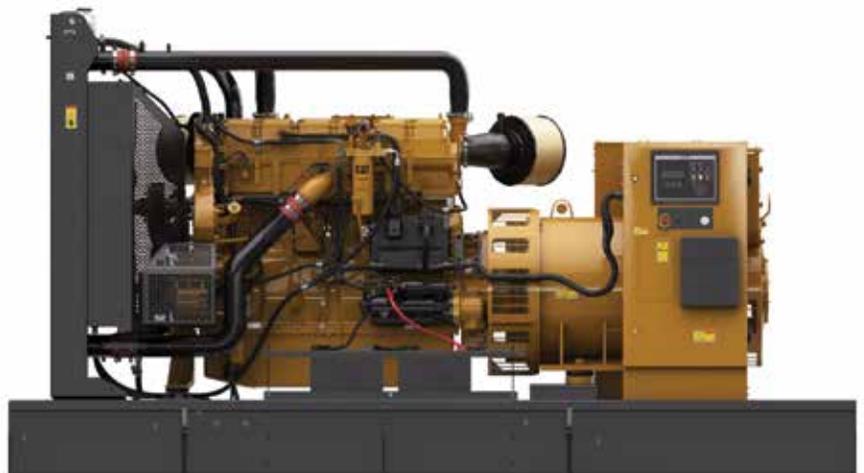
**CAT<sup>®</sup>**

# SMALLER FOOTPRINT; REDUCED INSTALLATION COSTS.

Cat® C18 ACERT™ engines are now available in ratings with industry-leading power density. Based on existing, proven platforms, these engines have been re-engineered to provide our customers with a solution precisely sized to balance power availability and reliability with lighter weight and easier handling. Benefits include lower overall site preparation, transportation, installation, and maintenance costs, with reduced fuel consumption and lower emissions.

## **More power, lower costs, and better reliability**

Every major component must pass inspections before the entire unit is tested at and above 100 percent of the rated load for safety and operation. From a fast delivery to scheduled maintenance, your Cat dealer is at your service for the life of your genset.



*Image shown may not reflect actual configuration.*

**BUILT FOR IT.™**

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**C18 ACERT (60 HZ): 550 – 750 ekW**

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# C18 ACERT

SMALLER  
**FOOTPRINT**



**HIGHER  
POWER**

## C18 ACERT STANDARD MODELS

eKW		FREQUENCY	EMISSIONS
Prime	Standby		
500	550	60 Hz	Tier II
545	600	60 Hz	Tier II
<b>600</b>	<b>650</b>	<b>60 Hz</b>	<b>Tier II</b>
<b>635</b>	<b>700</b>	<b>60 Hz</b>	<b>Tier II</b>
<b>680</b>	<b>750</b>	<b>60 Hz</b>	<b>Tier II</b>

### STANDARD FEATURES\*

- Engine lubricating oil
- Antifreeze/corrosion inhibitor coolant fill
- Steel tank base with drip tray, lifting and dragging points
- Vibration isolators between engine/generator mounts and tank base
- Battery charging alternator
- Enlarged battery rack and cables, installed on tank base
- Exhaust silencer
- 3- and 4-pole 100 percent rated, IEC compliant circuit breaker
- EMCP 4.2 control panel
- Factory tested to full load specifications
- Full protective guarding with access hatches
- Oversized electrical stub-up area directly below circuit breaker
- Emergency stop
- ADEM™ A4
- Coolant and lube drains piped to edge of base

### OPTIONAL FEATURES\*

- Enclosures, high ambient and sound-attenuated, with common key
- Static battery chargers
- Jacket water heater
- Engine lubricating oil drain pump
- Higher-level exhaust silencers
- Generator anti-condensation heater
- Generator excitation: permanent magnet
- Control systems, remote monitoring, digital metering, multiple alarms/shutdowns, auto-start to utility
- Remote monitoring and control
- 3- and 4-pole circuit breaker options, including motorized
- Power terminal strips
- Coastal insulation protection
- Cat digital voltage regulator

\*Not all features and options listed



*Image shown may not reflect actual configuration.*

## ENGINE

Reliable Cat ACERT diesel engines power these generator sets that deliver industry-leading fuel efficiency and product life. Industrial capacity (approximately 10, 25 and 35 dBA reduction) engine silencer is supplied loose. Service points are positioned for safe, easy access. All generator sets are shipped with engine oil and coolant.

## GUARDS

Features complete heavy-gauge steel guarding with access hatches to all rotating parts, including cooling fan, charging alternator and drive belts. Optional exhaust manifold and turbocharger guards are also available, if required.

## STARTER MOTOR, ALTERNATOR, BATTERIES, AND CABLES

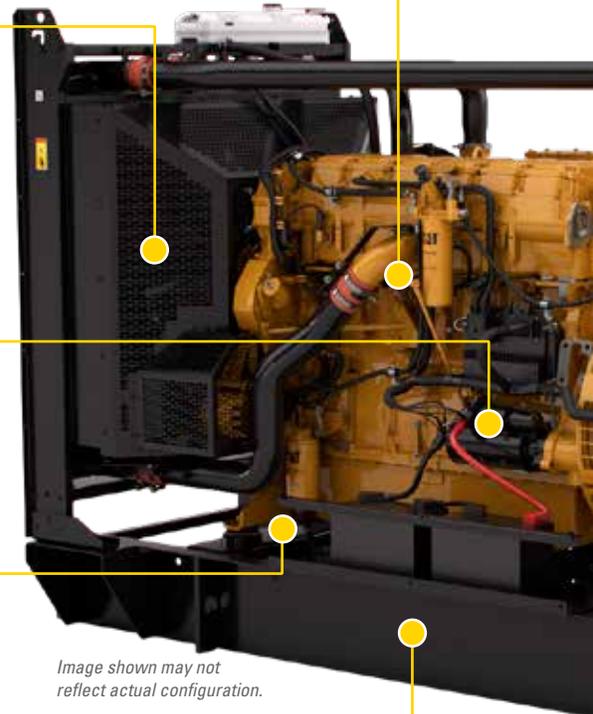
All generator sets include industry-leading, high-capacity, maintenance-free batteries, battery rack (mounted on the tank base) and heavy-duty interconnecting cables with terminations.

## VIBRATION ISOLATORS

Rubber pad anti-vibration mountings isolate tank base and control tower from engine/generator assembly.

## TANK BASE

Tank base incorporates enhanced lifting and mounting points. Anti-vibration pads affixed between the engine/generator feet and base isolate rotating parts. Welded integral steel tank base is standard. Optional dual wall steel tank base for total fluid containment is available with enclosed sets and an optional narrow skid base is available for open sets.



*Image shown may not reflect actual configuration.*

**Built compactly and self-contained, Cat C18 ACERT generator sets are even easier to own and operate. Added features include a re-designed tank base with a spill containment system.**

### **RUNNING TIME**

Our redesigned fuel tank delivers improved performance, serviceability, and maintenance access with maximum generator set running time.

### **ADVANCED DESIGN**

We've made it easier to upgrade our generator sets with smaller, segmented modular power and control systems. We used preformed braided copper connections, standard length alternator and breaker options, and have given you flexibility in where you mount your breaker box. Our tower features a removable top section, the Automatic Voltage Regulator (AVR) is in the lower section for easy adjusting, and all Mate-n-Lock connections are standard.



#### **FILTERS**

Disposable air filter, optional canister type with single or dual element. All air filters incorporate a service indicator. Oil and fuel filters are replaceable canister-type.

#### **WIRING**

The loom terminates at control panel with industrial-grade multi-pin connector. Mechanically held plug and socket attachments provide fast, convenient inspection and replacement of systems. Looms are "keyed" to prevent incorrect installation.

#### **CONTROL PANEL**

Standard EMCP 4.2 control panel is fully equipped with all necessary engine gauges, AC meters, and warnings, providing expanded generator set protection and monitoring. Additional monitoring and expansion modules provide control and protection for critical installations and applications.

#### **CIRCUIT BREAKERS**

Fully rated mainline circuit breaker housed in vibration-isolated sheet steel enclosure, with removable cover plate, mounted integrally with generator set. Oversized electrical stub-up area is located directly below circuit breaker and can be terminated both vertically and horizontally.

#### **DOCUMENT HOLDER**

Durable plastic container provides a convenient location for manuals and maintenance documents for reference.

#### **VOLTAGE REGULATOR**

Improved load acceptance with R450; testing showed better performance than VR6 predecessor. Fully sealed regulator accurately maintains load voltage at +0.5 percent from no load to full load.

#### **GENERATOR/ALTERNATOR**

Advanced Cat self-exciting, self-regulating brushless generators are built for extended, dependable life. Features include fully interconnected damper windings, cooling systems, sealed bearings, Class H insulation and 2/3 pitch with THF <2% and TIF <50.

# ENGINEERING WITH YOU IN MIND.

High ambient and sound-attenuated enclosures reduce operational noises. And we've built our generators not just for peace and quiet but peace of mind, constructed with materials to endure the harshest environments. Generator sets consist of corrosion-resistant galvanized steel components and are finished with scratch- and rust-resistant powder-coated paint, along with robust thermoplastic corner posts. For added protection, the package has been designed with an all-round, overhanging base frame. Protect your power source with a locking control panel viewing window, and locking access doors for the fuel fill and battery.

## WATER INGRESS PROTECTION

Improved roof panel design seals lap joints with adhesive gasket strips on each side of the joint to prevent water ingress through roof.

## DOOR LATCHES

Rotational compression door latches providing positive door sealing by pulling the door inward to compress the seal.

## BASE FRAME

Along with the addition of easier to use drag points, the base frame has been redesigned with a 1 degree slope to contain all accidental oil, coolant, and fuel spillages, as well as drain fuel.



*Image shown may not reflect actual configuration.*

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## NOISE ABSORPTION

Design ingenuity and noise absorbent materials have further improved the effectiveness of our sound attenuated enclosures, typically by 3 dBA at 1 meter (3 feet) and 7 meters (23 feet).

## INTERNAL EXHAUST SILENCER SYSTEM

The internal silencer system enhances generator set safety, aesthetics, and silencer life. We're keeping hot exhaust pipes out of reach and the silencer out of the elements.

## SOUND ATTENUATION

Sound attenuated enclosures, typically less than 73 dBA at 7 meters (23 feet), are available.

## CONVENIENT ACCESS

We've made the customer connection fully accessible with a hinged top section on the tower control panel and the AVR easy to get to with a lower access panel. Removable aluminum gland plates give you full cable access from vertical or horizontal locations with a bend radius eight times the outer diameter of the cable. Install fuel pipes through dedicated access holes, located on the same side as the optional fuel transfer pump, to connect to a remote bulk tank.

## CORROSION AND DAMAGE RESISTANCE

Our generator sets are built to last — and we believe their frame should be too. All are constructed from a highly corrosion-resistant, galvanized steel. The new generator sets also feature zinc phosphate and polyester powder coating. Even the corner posts are composed of high-grade UV stable engineering thermoplastic.

## AMBIENT CAPABILITY

High ambient enclosures are available for operation in up to 50°C (122°F) environments.

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### SEALS

Sloping door seals above doors prevent water collection and create a better seal against inclement weather.

### CONTROL PANELS

New generator sets are fitted with the latest EMCP 4 control panels, which provide additional capability to monitor generator set performance.

### ELECTRICAL CABLES

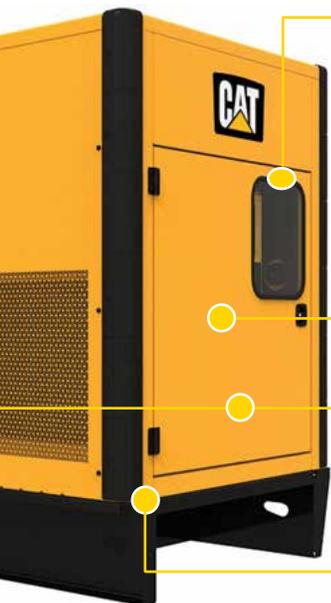
Cables have been reconfigured and rerouted to avoid any unnecessary cross routing. All cables are direct and double bolted to avoid double braiding and prevent braid turning.

### SERVICEABILITY

Removable front panel, large rear door and removable rear inlet ducts provide easier access to cooling system, silencer, control box, and alternator. These changes reduce the time necessary to maintain the unit and ensure proper performance.

### DAMAGE PROTECTION

Added base frame overhangs all around the enclosure protect during transit. Corner posts are made of high-grade thermoplastic, which is weather resistant and UV stable.







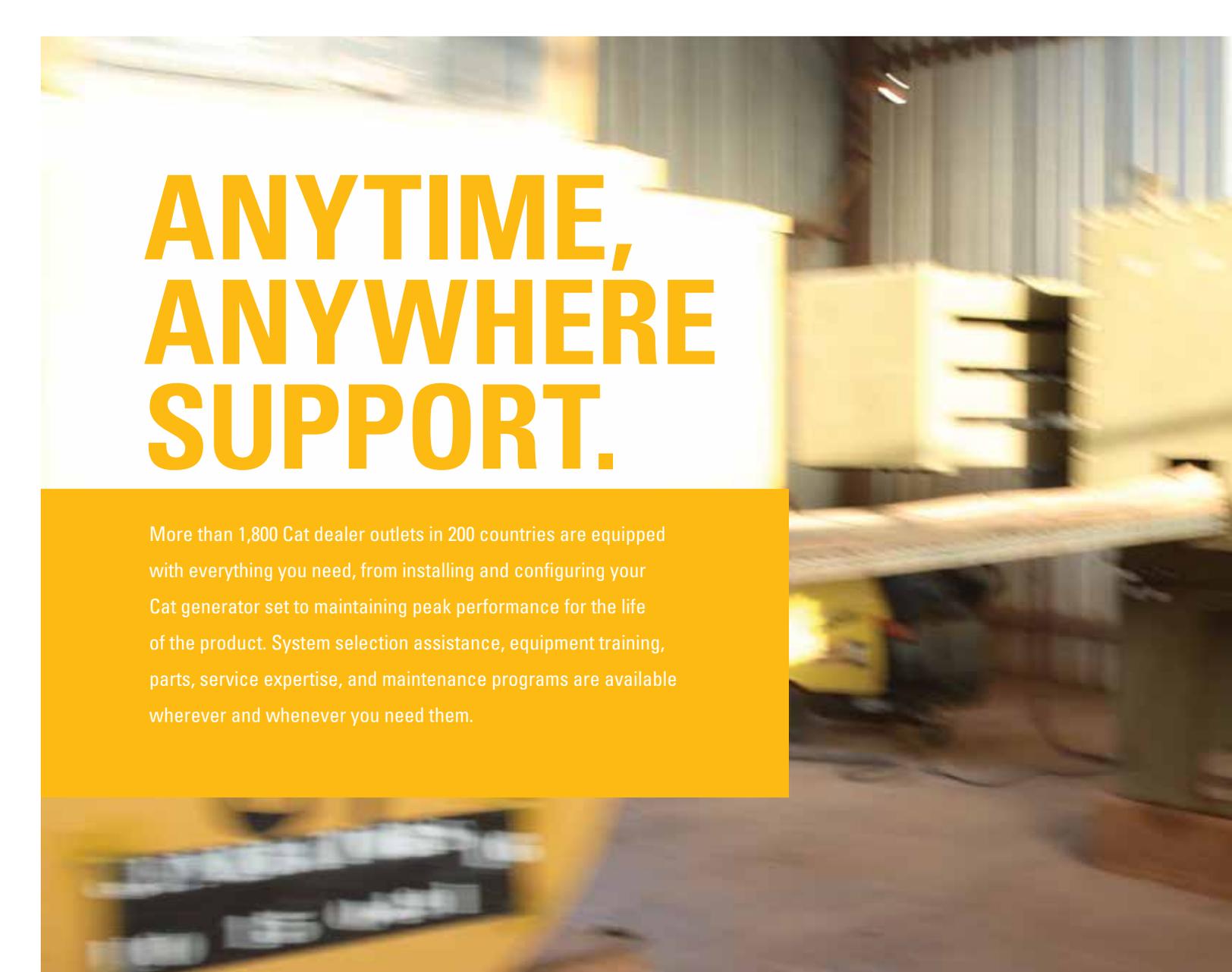
#### **EMCP 4.2**

Digital control panel with advanced protection and remote communications

## **CAT GENERATOR SETS OFFER A COMPLETE LINE OF CONTROL PANELS.**

Our EMCP control panels offer you optional instrumentation, shutdowns/alarms, and state-of-the-art communication for remote monitoring and control — commanding up to eight gensets with one virtual computer screen control panel.

Each has the modular flexibility of being easily interchanged, with similar dimensions and hardware. They also allow for open protocol communication to ensure remote monitoring compatibility with most building management or supervisory control systems.



# ANYTIME, ANYWHERE SUPPORT.

More than 1,800 Cat dealer outlets in 200 countries are equipped with everything you need, from installing and configuring your Cat generator set to maintaining peak performance for the life of the product. System selection assistance, equipment training, parts, service expertise, and maintenance programs are available wherever and whenever you need them.







We're dedicated to providing integrated solutions for all your electric power needs. Your Cat dealer is equipped with a full range of products, services and invaluable expertise to keep the generator set you trust today the one you trust 20 years from now.

To find your nearest dealer, go to [www.cat.com/dealer-locator.com](http://www.cat.com/dealer-locator.com)

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