

**POWERING YOUR
PRODUCTIVITY.**

CAT® DIESEL GENERATOR SETS



ABOUT CATERPILLAR

For more than 90 years, Caterpillar Inc. has been making sustainable progress possible and driving positive change on every continent. Caterpillar is the world's leading manufacturer of diesel and natural gas engines, construction and mining equipment, industrial gas turbines and diesel-electric locomotives. Caterpillar's global reach and presence is unmatched in the industry. We serve in more than 180 countries around the globe with more than 300 products.

In India, Caterpillar has been manufacturing diesel engines and generator sets from its world-class facility located in Hosur, Tamil Nadu. These products are built to the highest Quality and Safety standards that are consistent across all Caterpillar worldwide manufacturing facilities.

Caterpillar's innovative portfolio of electric power products, including diesel and gas generator sets, paralleling switchgear, controls, Automatic Transfer Switches (ATS), Uninterruptible Power Supply (UPS) and Cat® Microgrid system consisting of photovoltaic panels, energy storage and monitoring & control systems, provide an integrated and seamless power solution.



WHAT'S YOUR APPLICATION?

SEVERAL DECADES OF IMPROVING HOW YOU POWER IT.

AREAS OF APPLICATION

- Banking & Finance
- Construction
- Data Center
- Defence
- Healthcare
- Hospitality
- Infrastructure
- Manufacturing
- Mining
- Nuclear
- Realty
- Recreation
- Retail
- Telecommunication
- Utilities

and many more critical applications, wherever and whenever you need backup power.

POWER NEED

Chhatrapati Shivaji International Airport is one of the fastest-growing and busiest airports on the Indian Subcontinent. In order to accommodate the projected growth and improve passenger handling capabilities, the Mumbai International Airport Pvt. Ltd., (MIAL) embarked on a project to build a new, modern Terminal Two Passenger Complex.

The new international terminal covers 21,000 square meters and handles up to 40 million passengers annually. Power outages could greatly affect the security of passengers and impair proper cooling in the terminal. To support a smooth operation and ensure the safety of planes using the new terminal, MIAL sought out a reliable backup power source supplying dependable power.

SOLUTION

- Six high power density, small footprint Cat C175-16 diesel generator sets.
- Compliance to local noise and emissions regulations.
- Customized intake and exhaust ductwork to meet the space restrictions without affecting the performance of the generator sets.
- Backed by the dealer expert team.

RESULTS

- Reliable standby power around the clock.
- The power source helps keep passengers cool and comfortable.
- The management team can focus their efforts on maintaining the safety, security and comfort of all passengers.



WHAT'S YOUR DEMAND?

DISCOVER A GENERATOR SET – MADE TO TAKE IT ON.

Cat diesel generator sets are powered by the Cat four-stroke diesel engines that provide industry leading performance capabilities. Our power systems and solutions are built to your industry's crucial conditions, critical applications & demands, emissions standards and footprint. Every installed generator set is backed by our trusted Caterpillar warranty and supported by worldwide Cat dealer network with genuine parts, superior after-sales service support and a wide range of on-site services.

PROVEN PERFORMANCE

Caterpillar has 70+ years of experience in electric power generation with over 500,000 diesel and gas installations and more than 300,000 MW installed worldwide. With our completely integrated generator sets and power systems solutions, Caterpillar offers a single-source support for all your power generation needs.

RELIABLE POWER

Every Cat generator set is built, inspected and tested to Caterpillar's stringent reliability and durability standards to ensure your generator set continues to provide reliable power when needed.

FLEXIBLE CONFIGURATIONS

Caterpillar ensures that your needs are met with our custom engineered packages to cater to the unique application demands. You may select from a range of output voltages – low, medium and high as well as optional attachments – cooling systems, air cleaners, on-package paralleling controls and remote monitoring systems.

CAT® DIESEL GENERATOR SETS				
MODEL	SPEED (rpm)	APPLICATION	GENERATOR SET RATINGS*	
			50 Hz, 0.8 pf	
			kVA	eKW
C13	1500	Prime	400	320
C15	1500	Prime	500	400
C18	1500	Prime	600	480
C32	1500	Prime	1010	808
C32	1500	Prime	1100	880
C32	1500	Standby	1250	1000
3512B	1500	Prime	1500	1200
3516B	1500	Prime	2000	1600
3516B	1500	Standby	2250	1800
3516B	1500	Prime	2275	1820
3516B	1500	Standby	2500	2000
3516C	1500	Prime	2500	2000
3516C	1500	Standby	2750	2200
3516E	1500	Standby	3000	2400
C175-16	1500	Prime	2725	2180
C175-16	1500	Standby	3000	2400
C175-20	1500	Prime	3500	2800
C175-20	1500	Standby	3900	3120
3612	1000	Prime	4850	3880
3612	1000	Standby	5375	4300
3616	1000	Prime	6500	5200
3616	1000	Standby	7150	5720

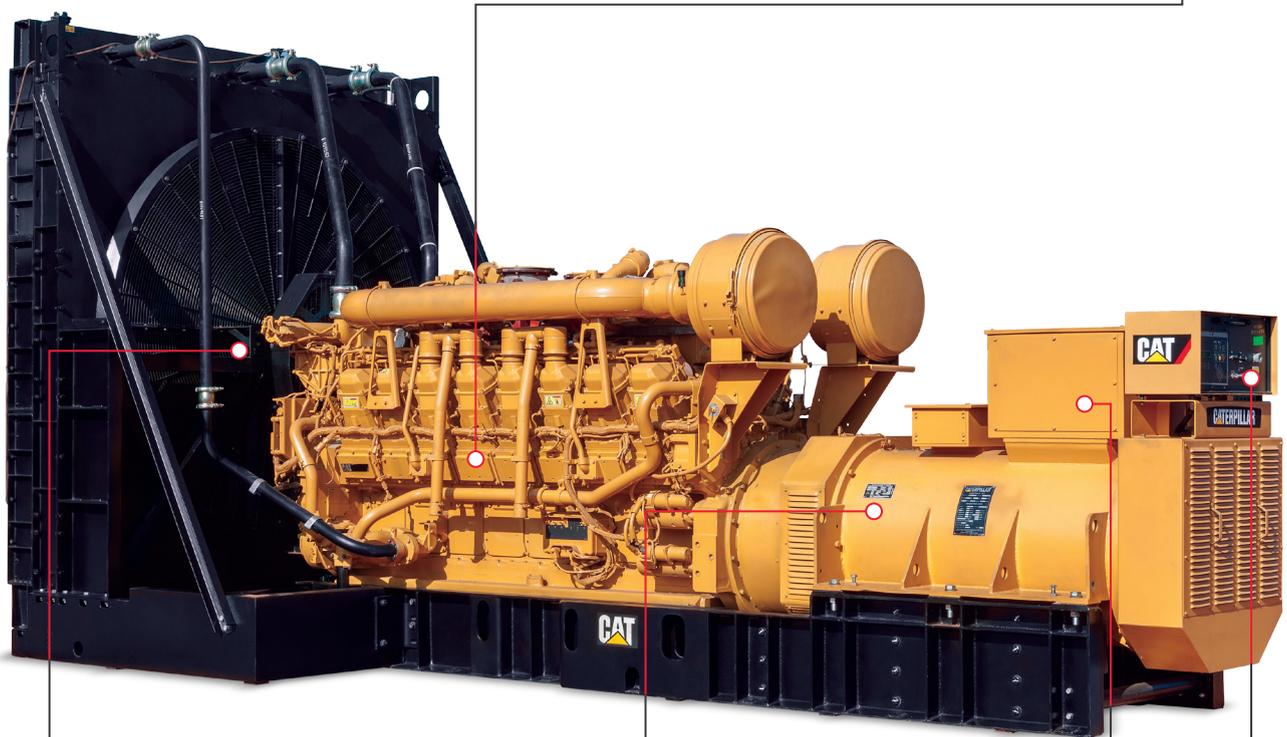
* Please consult your Cat dealer for the detailed product options

ENGINEERING EVERY COMPONENT FOR THE MOST CRITICAL POWER NEEDS.

CAT DIESEL ENGINES

The core design of the diesel engine components combined with advancements in electronics, air management and fuel delivery provides an optimum engine performance to meet the critical demands and offers better application synergy.

- Core components are designed for higher strength, durability and compactness.
- Steel forged crankshafts are capable of handling higher loads.
- The engine blocks are lightweight and helps in improving the power to weight ratio.
- Lube systems help maintain optimum oil pressure at all speeds, loads and throughout the life of the engine.
- Cat ADEM™ fuel systems offer full control of fuel delivery and fuel pressure at any load or speed, superior transient response, block load acceptance, shorter recovery time, improved fuel efficiency and lower exhaust emissions.



COOLING SYSTEMS

The cooling system design has been matched to the performance characteristics of the engine and ensures optimum performance for the life of the generator set. Cooling systems are designed to minimize heat rejection.

GENERATORS

The generators have been specifically designed to work with each rating of the generator sets. Generators are available in a wide range of voltages.

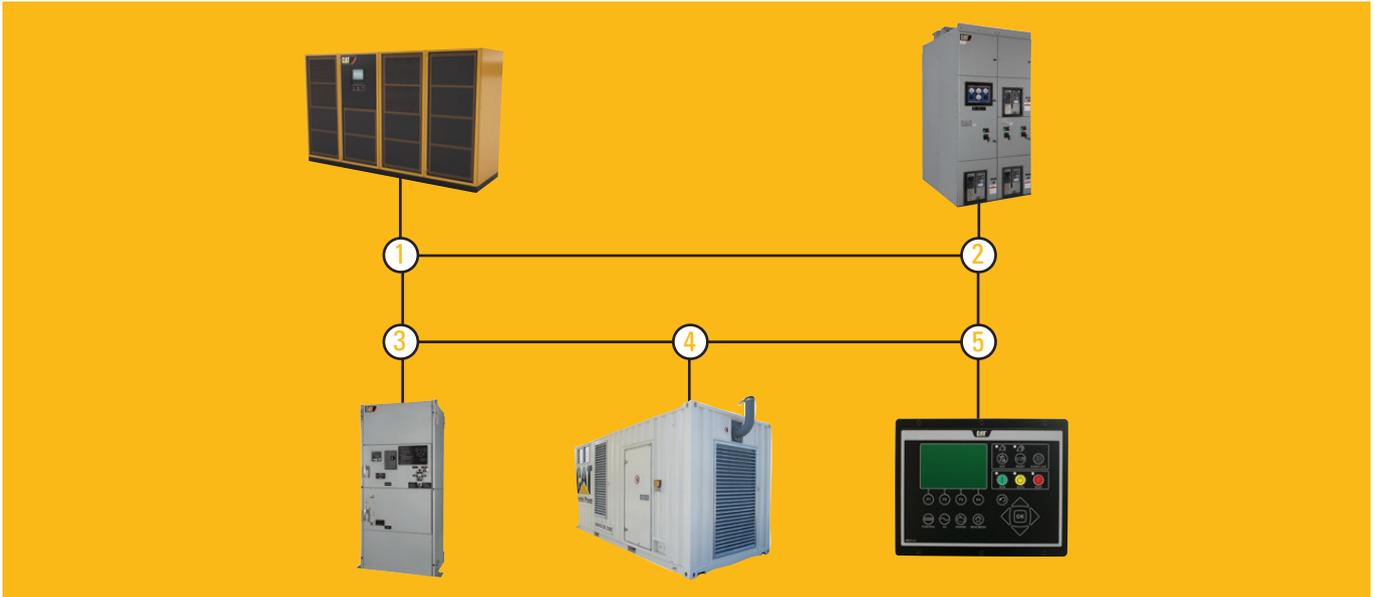
GENERATOR TERMINAL BOX

The terminal box allows a variety of options for the cable and bus duct entry.

EMCP 4 CONTROL PANEL

Cat generator sets feature the EMCP 4 series of control panels. EMCP 4 controllers provide engine and generator monitoring, control and protection. Multiple generator set paralleling options can also be provided.

PROVIDING A SEAMLESS POWER SUPPLY.



① UNINTERRUPTIBLE POWER SUPPLY (UPS)

Surges, sags, spikes and failures aren't options, because when it comes to your business, every second counts. The Cat UPS technology provides immediately available power to ride through disturbances and conditions power from the source. When integrated with other electric power generation products – including generator sets, Automatic Transfer Switch (ATS) and switchgear – you can be assured of the cleanest, most reliable source of power protection.

② PARALLELING SWITCHGEAR

The amount of control you need changes depending on the demand. That's why, for simple or complex applications, Cat switchgear provides paralleling capability for multiple generator sets, with single or multiple points of utility connection.

Our switchgear also provides a single point of monitoring and control of your complete solution, including Cat ATS and Cat UPS. When you combine Cat switchgear with Cat generator sets, you get an integrated solution that meets your unique requirements.

③ AUTOMATIC TRANSFER SWITCH (ATS)

To ensure you have the power you need, a fully integrated system designed to operate together is crucial. If your first indicator – the ATS – isn't reliable, your entire system can be compromised. Caterpillar offers you a broad range of transfer solutions and ATS products designed for critical applications. These transfer schemes can be arranged to suit any application from simple to highly complex multiple ATS/generator set switchgear systems.

④ SOUND ATTENUATED ENCLOSURES

Sound-attenuated enclosures are available on select ratings of generator sets. They are designed to provide easy access to the generator sets and reduce operational noises without compromising on the performance of the generator set. The enclosures are constructed with materials to endure the harshest environments.

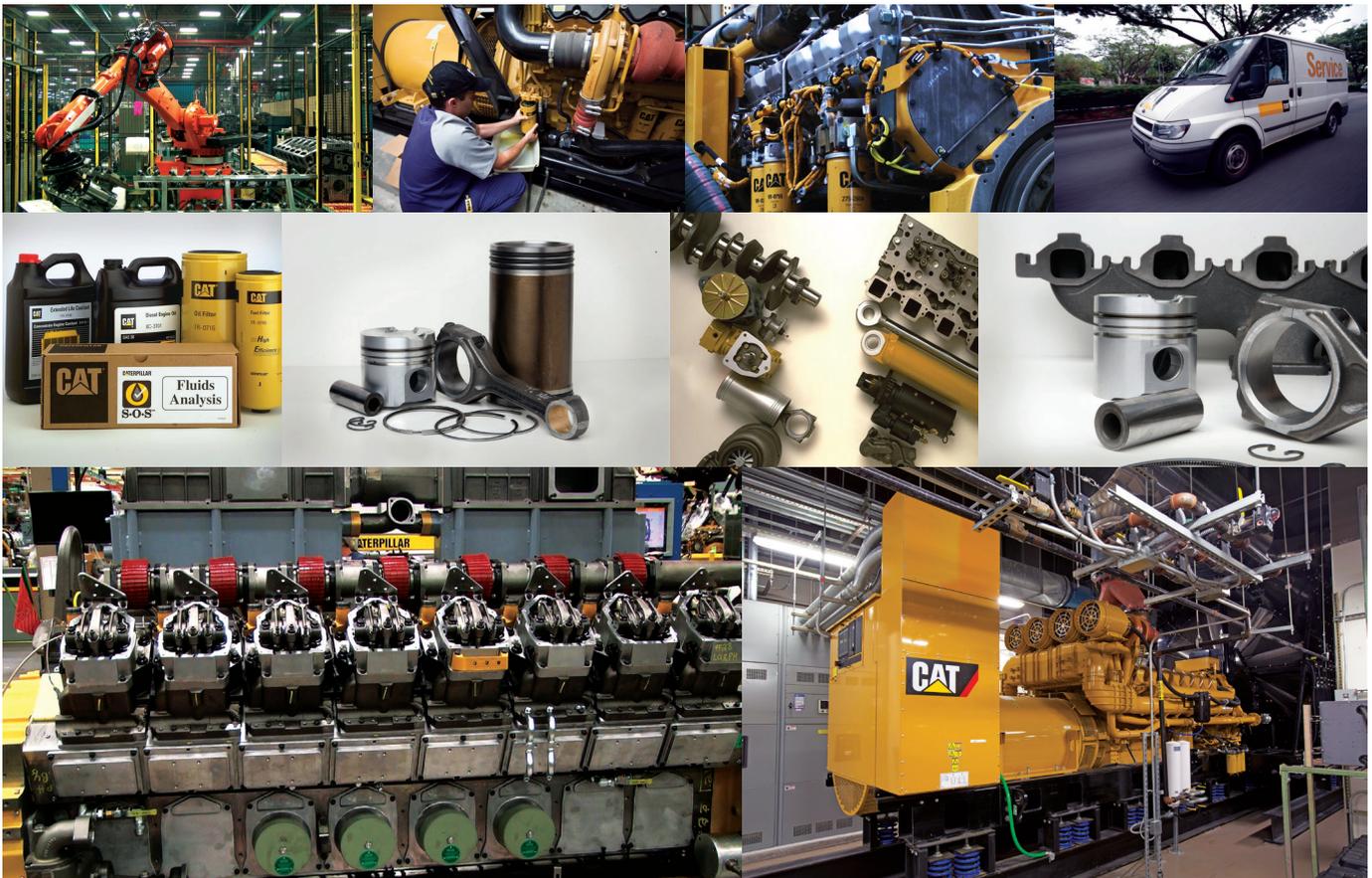
⑤ CONTROLS – EMCP 4

EMCP 4 is a scalable control platform designed to ensure reliable generator set operation, providing extensive information about power output and engine operation. These systems can be further customized to meet your needs through programming and expansion modules.

PROTECTING YOUR OPERATION WITH EXPERT SUPPORT.

Caterpillar has a well-established dealer network across India. Cat dealers offer a one-stop distribution and services network to meet our customer's needs, providing 24x7 product support, operation and maintenance and a broad array of other services to ensure that our customers and their businesses keep running smoothly.

- Installation and commissioning support
- Warranty administration and support for the complete generator set and integrated solution
- Genuine Cat parts
- Maintenance contracts – Annual, Operation & Maintenance, Repair
- Scheduled oil and coolant sampling and condition monitoring enables preventive & predictive maintenance of the generator sets
- Convenient locations offering wider reach and quicker coverage
- Fully-equipped local repair facilities and special tooling ensure quality rebuilds, salvage capabilities & component reusability expertise
- Training and technical support and audits to augment the customer's technical capabilities
- Rental options
- Cat® Connect combines technology and services to boost your business performance. Using the data from technology-equipped assets, you will get more information and insight into your equipment and operations than ever before thus helping you to Control Costs, Improve Performance and Reduce Risks.



WE ARE ALWAYS CLOSER TO YOU.

Gainwell Commosales Private Limited (GCPL)

Toll-free # 1-800-419-3356
www.gainwellindia.com

GCPL'S partnership with Caterpillar was established in 1944 and has only grown stronger over 70 years. Seven decades of experience and expertise make the dealership well placed to serve the customers. GCPL is Caterpillar's authorised dealer in North India, North-Center India, Eastern India, Nepal and Bhutan.



GMMCO Limited

Toll-free # 1-800-425-2546
www.gmmco.in

Established in 1967, GMMCO has been engaged in the sale and support of construction and mining equipment as well as complete range of gensets and engines. With over five decades of experience in the field and over 25 years of association with Caterpillar, GMMCO is well placed to serve the customers. GMMCO is Caterpillar's authorised dealer in South, West and Central India.

- ★ Corporate Headquarters
- Offices
- Retail Outlet
- ◆ Workshop
- GCPL
- ▲ Headquarters
- ◆ Project Offices
- Rental Store
- ◆ Packaging Facilities
- GMMCO

This map illustrates Caterpillar's dealer and service network only, and does not purport to be a cartographically accurate representation. Ratings, materials and specifications are subject to change without notice. Product images are for illustrative purposes only and may not depict the actual products.

For more information, visit www.cat.com/electricpower