











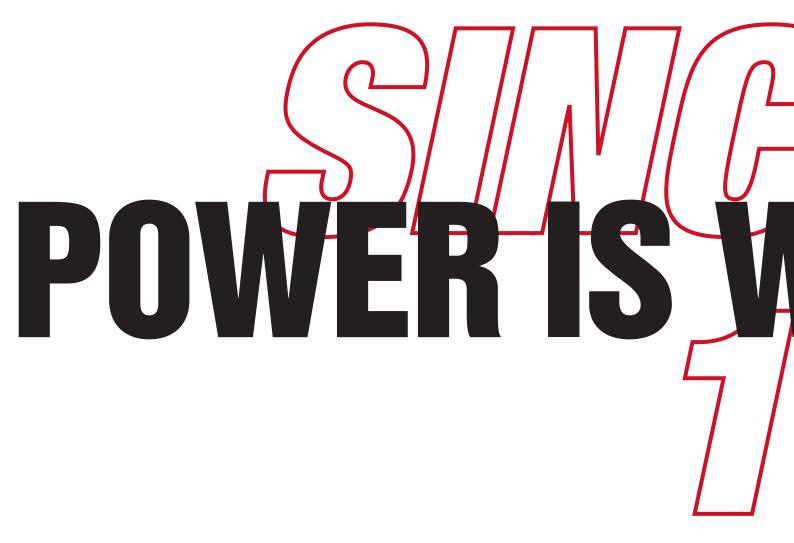


Power Generators
Soundproofing Solutions
Power Transfer Switches
Paralleling Systems
Switchgears
Controls

Generator Maintenance Services Agreements Control System Upgrade Battery Chargers Spareparts Consumables







WHY ELECTRONIL!

We are a group of fearless thinkers, driven to empower people all over the nation – with reliable, revolutionary generators, power systems and power solutions.

We are nearly 30 years in the Egyptian markets, and only getting better. For the last two decades, we have engineered and shaped the future, redefining what power means to people's lives, careers and lifestyles.

We exist for one reason: to move you forward.



HAT WE DO

لم تختار منتجات إلكترونيل!

نحن مجموعة من المفكرين لا يخافون الإبتكار، مدفوعون بشغف تمكين عملائنا في جميع أنحاء البلاد - بمحطات توليد طاقة إعتمادية وموثوقة، بالإضافة إلى أنظمة وحلول متكاملة للطاقة.

لدينا ما يقرب من ٣٠ عاماً من الخبرة في الأسواق المصرية، ونعمل في تقدم دائم. على مدار العقدين الزمنيين الماضيين، قمنا بتصميم وصياغة المستقبل، وإعادة صياغة المعنى الحقيقي للطاقة الكهربية لحياة عملائنا وأعمالهم وأنماط حياتهم.

نعمل بجهد لسبب واحد: للحفاظ على تقدمكم.

WE ARE ELECTRONIL.

Our Capabilities



Power Generation Systems Design and Supply



Complex Standby Systems, Synchronization and Load Sharing Including Multiple Utility Grid



Parallel with Utility Grid Operation



Power Stations



Mains, Feeder and Load Shedding Control Systems



BMS, SCADA and Remote Monitoring Systems



Low-Voltage Panel Building



Engine Driven Compressors and Pumps



Marine Certified Systems



Water Pump and Dredging Control Systems



Design, Supply, Install, Commissioning, Startup and Service



Standard, Sophisticated and Bespoke Control Systems



Design



Engineering



Training and Technical Support





OUR STORY

A Magnificent force in power solutions since 1995, **ELECTRONIL POWER SOLUTIONS** is committed to reliable, intelligent products, advanced engineering and responsive after-sale support.

Over the years, we have amplified our well-known reputation to be a leader known for its premium range of generator-sets and control systems. Together, with building on the legacy of a leading brand, to create one of the largest generator-set and control systems providers in Egypt - and continued an unwavering focus on reliable power systems and innovation.

We deliver integrated industrial power systems for emergency, prime and continuous applications throughout whole Egypt—from data centers and hospitals to water treatment and hospitality facilities. With a deep understanding of your industry, we excel in designing customized power systems that simplify your most complex challenges.





TOTAL SYSTEM INTEGRATION

Everything works together, Just as it should.

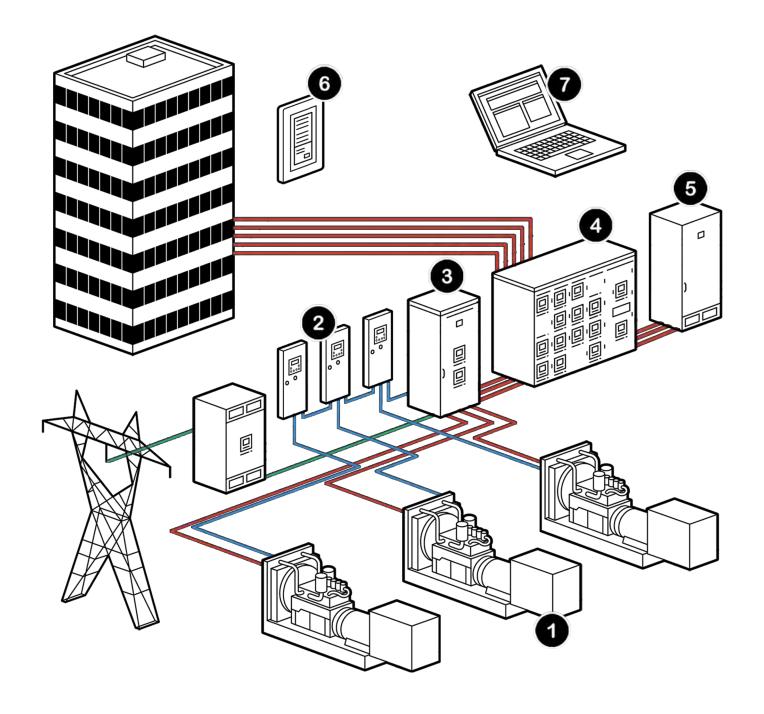
A Power System is only as good as the parts that define it. That's why we engineer every detail down to the last bolt. From generators and power transfer switches to paralleling systems and switchgear and controllers, everything works together seamlessly. Because we design, engineer and test it that way.

And that's the **ELECTRONIL** Difference.

Good news: There is more, behind that power system, there is a team of dedicated engineers that focuses on every element-generators, power transfer switches, switchgears and control systems — to be sure that the system you get is the system you need. You will know that your project is supported by an expert team, customized to your exact needs, brought in on budget and on time.



From spec to start-up to service, WE DO IT ALL.



TOTAL SYSTEM INTEGRATION

- ED SERIES DIESEL GENERATORS
 Powered by Perkins, Volvo-Penta, or Cummins
 Diesel Engines, 9 3000 kVA
- 2-32 Generator set paralleling system with automatic power management and automatic engine run-hour balancing.
- **ENCP 9.3/ENCP 6.x TRANSFER SWITCH**40-4000 A Power transfer switches, available in standard, bypass-isolation and service entrance switch configurations.
- **ELECTRONIL POWER DISTRIBUTION PANEL** MCB, MCCB and ACB, Up to 6000 Amps.

- **ELECTRONIL POWER FACTOR CORRECTION SYSTEMS**Up to 15 steps.
- 6 REMOTE ANNUNCIATOR
 Optional remote system monitoring.
- 7 THE SUPERVISOR MONITORING SOFTWARE

Monitors generators and control systems from a PC and Smart Phones (Optional) Modbus or Ethernet.



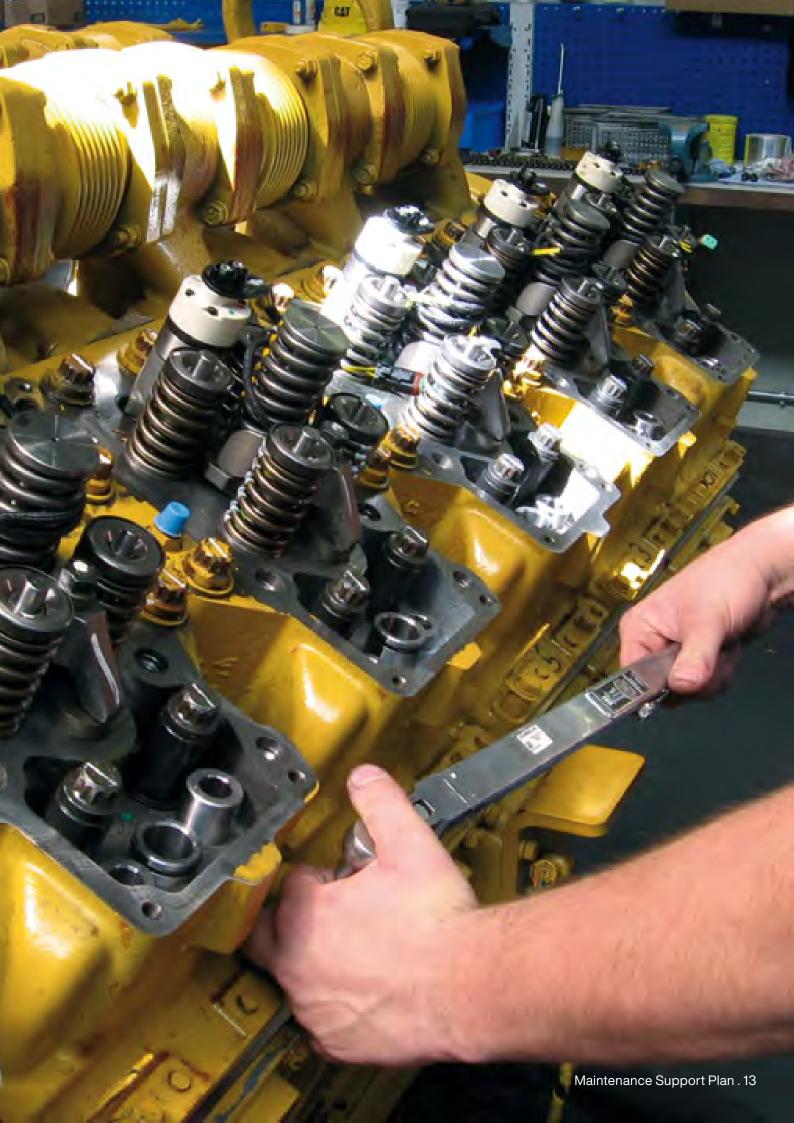


ELECTROCARE MAINTENANCE SUPPORT PLAN.

Ensure power is always there when you need it with the **ELECTROCARE** Maintenance Support Plan. Our service experts continually monitor and maintain your equipment through a comprehensive maintenance schedule which keeps your generator in peak working condition. We are always available to provide the level of service support you need.

Choose from one of four **ELECTROCARE** Maintenance Support Plans options to give your equipment the highest possible service care and maintenance cover, giving you total peace of mind.





ELECTROCARE Maintenance Support Plan.

OVERVIEW

ELECTRONIL Will Perform an initial site survey, which will enable us to fully evaluate your generator and ensure that we offer you the correct service plan to suit your business needs.

The survey will cover the following:

- Initial assessment of set condition.
- Set type and serial number.
- Set location on site.
- Accessibility to and from the set and parking requirements.
- Set usage (Standby, Continuous, Prime Power / Peak Lop), etc.
- Any other site-specific factors we need to be aware of.

The **ELECTROCARE** Maintenance Support Plan is focused on providing onsite maintenance with an effective, high quality condition monitoring and scheduled maintenance service.

We offer a fixed menu of service giving our customer the opportunity of not only ensuring that their generator set is working to its potential, but also that faults are identified and corrected before they develop into component failures, which are costly and time consuming to repair. This is achieved by the inclusion in all our products of **ELECTROCARE** Maintenance Support Plan critical function monitoring.

Critical Functions Monitored by **ELECTROCARE**

Much like a human body, today's engines have critical systems that need monitoring to maintain their health. These include the lubrication, coolant, fuel, air and management control systems.

ELECTROCARE Measures the trends and vital signs of these systems, frequently monitoring for faults or other areas requiring additional attention.

The **ELECTROCARE** Report highlights any component changes we recommend and gives guidance on the optimum time to action possible faults and maximize uptime.

ELECTROCARE Benefits

- Total support when you need it, giving you total peace of mind.
- Confidence that your generator will start when you need it.
- Highest standards of maintenance and quality assurance.
- Scheduled servicing provides validation of warranty coverage.
- Cost-effective solution.
- ELECTRONIL Highly Trained engineers and technicians providing specialist expertise.
- Maximize uptime and save costs.
- Total added value package.

ELECTROCARE Maintenance Support Plan.

SUMMARY

ELECTROCARE Support Plan Options Menu

DESCRIPTION	ELECTROCARE			
	Standard	Extra	Premium	Premium +
Routine inspection and report (see details in Appendix 1 below)	[S]	[S]	[S]	[S]
Critical functions monitored (see details in Appendix 2 below)	[0]	[0]	[S]	[S]
Diagnostic analysis and recommendation reports	[0]	[0]	[S]	[S]
All work undertaken by highly trained and equipped technicians	[S]	[S]	[S]	[S]
Transport and travel expenses included on scheduled visits	[S]	[S]	[S]	[S]
Scheduled maintenance visits to meet your service requirements	[0]	[S]	[S]	[S]
Out of hours call out facility	[0]	[0]	[S]	[S]
Oil and filter change to meet your needs	[0]	[0]	[S]	[S]
PLAN FREQUENCY	Annual	Biannual	Quarterly	Monthly

Appendix 1

Routine Inspection and Report

ENGINE SECTION

- Air filter inspect and advise.
- Oil, coolant and fuel level check and advise.
- Intake and exhaust system check.
- Fuel, coolant and oil pipe work check.
- Drive-belt condition check.
- Battery voltage drop check.
- Static battery charge check.
- Functional control panel test (offload).
- Radiator matrix check and advise.

ALTERNATOR SECTION

- AVR check.
- AVR performance check off load.
- Condition of load cabling check.

Appendix 2

Critical Functions Monitored

CONTROL SECTION

- Alarm history/event log check (dependent on control system).
- Circuit breaker inspect and check.
- Switches, Fuses and MCB check.
- Indication lamps & sounder function check.
- Relays and bases check.
- Timing devices check.
- Control wiring inspection check.
- Engine protection check.

ANCILLARIES CHECK

- Block heater check.
- Battery charger check.
- Louvres and fans check.

ELECTROCARE Maintenance Support Plan.

OPTIONAL EXTRAS

Additional Options Available

The following additional options are available with each **ELECTROCARE** Maintenance Support Plan:

Standby Application

- Site load test attendance including documented results.
- Battery voltage drop test.
- Visits can be undertaken out of office hours.

Prime / Continuous

- Battery voltage drop test.
- Visits can be undertaken out of office hours.
- Oil and filter service every 200 hours or 6 months.
- Annual radiator clean and coolant replacement.

Optional Extras Benefits

- Genuine Filters and Spare Parts.
- Engineers attendance while site load testing is being carried out, load results from generator will be recorded.
- Resistive load bank test will be carried out with load results will be recorded and documented.
- Visits can be undertaken out of normal hours to suit your site requirements.
- ELECTRONIL Recommends 6 months or 200 hour service interval, this can be incorporated and worked round your site requirements.
- If working in a harsh environment regular cleaning will aid in cooling and performance.





PARTS Genuine Parts.

We provide genuine/aftermarket parts and service support through a nationwide network of field-based service engineers and specialist service center workshops.

If you are a genset owner or operator, you have found the best place to get your genuine parts.

When you buy genuine parts, you buy peace of mind and the knowledge that the product you are getting is supported by our Service and Support team.

We want to provide you with the best parts for your genset, whether you own a new engine or an older one.

Our goal is to minimize your downtime and maximize your profits, with parts and service that deliver real value.

ELECTRONIL CONTROL PANELS.

The Smart Choice in Backup Power Systems.

Control Systems are the brains of a power system. They continuously monitor and manage operating conditions to ensure the reliability, flexibility and performance of the equipment as well as protect it from damage. We design and manufacture every detail of all ENCP Series Control Systems to ensure dependability, ease-of-use, safety and seamless integration with the rest of our equipment.

Our power equipment is used in a wide variety of applications, each of which places unique demands and challenges on its power systems, so we design our controllers to be extremely versatile and customizable.

Each one features programmable I/O modules to support customization and is designed to communicate and interoperate with these advanced building management systems (BMS).

ENCP SERIES CONTROL SYSTEMS

Available to support either single generator or parallel operation, our ENCP Control Systems are easy to operate and provide dependable engine and alternator control, operating information and system diagnostics.

GENSET CONTROLS

ENCP 3 Series | Single manual and remote start genset control systems. **ENCP 7 Series** | Single genset automatic mains failure control systems.

ENCP 9 Series | Single/multiple synchronizing and load sharing genset control systems.

POWER TRANSFER SWITCH CONTROLS

ENCP 6 Series Automatic transfer switch control systems to communicate with the genset

controllers to bridge the gap from utility to standby power, and back again,

ensuring a smooth, seamless transition and minimal disruption.

GENERATORS PARALLELING SWITCHGEARS

ENCP iX | 2-3 Genset synchronizing and load sharing switchgear control systems. | 2-20 Genset synchronizing and load sharing switchgear control systems.

PARALLELING SWITCHGEAR CONTROLS

Each ELECTRONIL Paralleling Switchgear Solution is developed to meet your specific needs, and the control systems are programmed to your exact specifications. ELECTRONIL Deploys fault-tolerant programming and provides an intuitive user interface with real-time system information to enable better operational decisions.

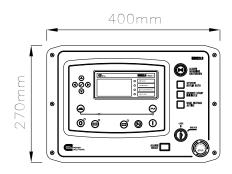


ENCP 3.3

AUTO START GENERATOR CONTROLLER.



Image for illustration purposes only, Depending on your application the actual product may vary.



Overall Size: 400x270mm

PRODUCT HIGHLIGHTS

- Independent fuel and start outputs
- Simultaneous use of RS485 & RS232 ports
- MODBUS RTU
- SCADA software
- Conventional engine support (MPU & Hz)
- CAN engine support (Tier 4F / Stage 5)
- Configurable front panel (PIN protected)
- Supports 7 languages
- Advanced protections
- Oil pressure disconnect delay
- Configurable icon screens
- Charge alternator disable functionality
- Dedicated inputs for ECU specific operations
- Advanced PLC editor
- SMS alerts & control
- Dual mutual standby

ADVANCED FEATURES

INPUTS/OUTPUTS

- (8) Configurable inputs.
- (6) Configurable analog/digital inputs.
- (6) Configurable DC outputs.
- (2) Configurable Volt-free outputs.

COMMUNICATIONS

- Simultaneous use of RS485 & RS23
- MODBUS RTU
- USB for PC configuration
- SCADA software

ENGINE COMPATIBILITY

- Conventional engine support (Hz)
- CAN engine support (Tier 4F / Stage 5)

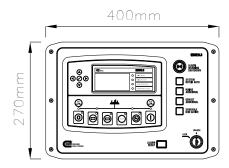
- Configuration Suite PC software
- Front panel (PIN protected)

ENCP 6.3

POWER TRANSFER SWITCH CONTROLLER.



Image for illustration purposes only, Depending on your application the actual product may vary.



Overall Size: 400x270mm

PRODUCT HIGHLIGHTS

- Configurable for RS232 or RS485.
- 3-phase monitoring of S1 and S2.
- Source 1 / source 2 control.
- Manual restore to S1.
- Load switching (load shedding outputs).
- Check sync feature.
- Power monitoring (kWh, kVAr, kVAh, kVArh).
- Start and load inhibit.
- Manual and automatic return.
- Supports multiple topologies.
- Rotary ATS configuration.
- Configurable timers and alarms.
- Multiple date and time scheduler.
- PLC editor.
- Real-time clock.
- SMS messaging.
- Configurable GenComm pages.

ADVANCED FEATURES

INPUTS/OUTPUTS

- (12) Configurable inputs.
- (6) Configurable Volt-free outputs.
- (6) Configurable DC outputs.

COMMUNICATIONS

- Configurable for RS232 or RS485
- USB for PC configuration

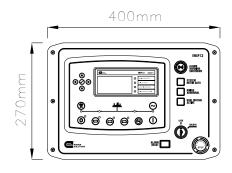
- Configuration Suite PC software
- Front panel (PIN protected)

ENCP 7.3

AUTO MAINS FAILURE GENSET CONTROLLER.



Image for illustration purposes only, Depending on your application the actual product may vary.



Overall Size: 400x270mm

PRODUCT HIGHLIGHTS

- Independent fuel and start outputs
- Simultaneous use of RS485 & RS232 ports
- MODBUS RTU
- SCADA software
- Conventional engine support (MPU & Hz)
- CAN engine support (Tier 4F / Stage 5)
- Mains (utility) supply monitoring
- Automatic transfer between mains & generator
- Supports 7 languages
- Crank disconnect on generator voltage
- Oil pressure disconnect delay
- Configurable icon screens
- Charge alternator disable functionality
- Dedicated inputs for ECU specific operations
- Advanced PLC editor
- SMS alerts & control
- Dual mutual standby

ADVANCED FEATURES

INPUTS/OUTPUTS

- (8) Configurable inputs.
- (6) Configurable analog/digital inputs.
- (6) Configurable DC outputs.
- (2) Configurable Volt-free outputs.

COMMUNICATIONS

- Simultaneous use of RS485 & RS23
- MODBUS RTU
- USB for PC configuration
- SCADA software

ENGINE COMPATIBILITY

- Conventional engine support (Hz)
- CAN engine support (Tier 4F / Stage 5)

- Configuration Suite PC software
- Front panel (PIN protected)

ENCP 9.1

GENSET / GENSET PARALLELING CONTROLLER.



Image for illustration purposes only, Depending on your application the actual product may vary.

400mm

Overall Size: 400x270mm

PRODUCT HIGHLIGHTS

- Independent fuel and crank outputs
- 5 stage dummy load and load shedding outputs
- Independent RS485, RS232, CAN, USB and Ethernet
- MODBUS RTU / TCP IP
- SNMP
- SCADA software
- Conventional engine support (MPU & Hz)
- CAN engine support (Tier 4F / Stage 5)
- Generator load demand with sequential set start
- 0-10 V & 4-20 mA oil pressure sensor support
- Power monitoring
- RoCoF and vector shift monitoring
- Automatic hours run balancing
- Sophisticated fuel monitoring and alarms
- 3-phase generator voltage and current sensing
- Sophisticated bus sensing (3-phase)
- Direct governor and AVR control
- Advanced SMS messaging
- Advanced PLC editor
- Support for worldwide languages
- Extensive data logging & trending
- Start & stop via SMS messaging

ADVANCED FEATURES

INPUTS/OUTPUTS

- (12) Configurable digital inputs.
- (4) Configurable analog/digital inputs.
- (8) Configurable DC outputs.
- (2) Configurable flexible sender inputs.
- (2) Configurable Volt-free outputs.

COMMUNICATIONS

- Independent ports for RS485, RS232,
- CAN, USB and Ethernet
- MODBUS RTU
- USB for PC configuration
- SCADA software

ENGINE COMPATIBILITY

- Conventional engine support (Hz)
- CAN engine support (Tier 4F / Stage 5)

- Configuration Suite PC software
- Front panel (PIN protected)

ELECTRONIL PARALLELED POWER SYSTEMS

TOTAL INTEGRATION, *From Top To Bottom.*

When it comes to paralleling systems, we offer 100% integration.

Our **ELECTRONIL PARALLELED POWER SYSTEMS** Designed, Engineered and Factory-Tested as a complete system, rather than built from parts from multiple manufacturers like some competitive products.

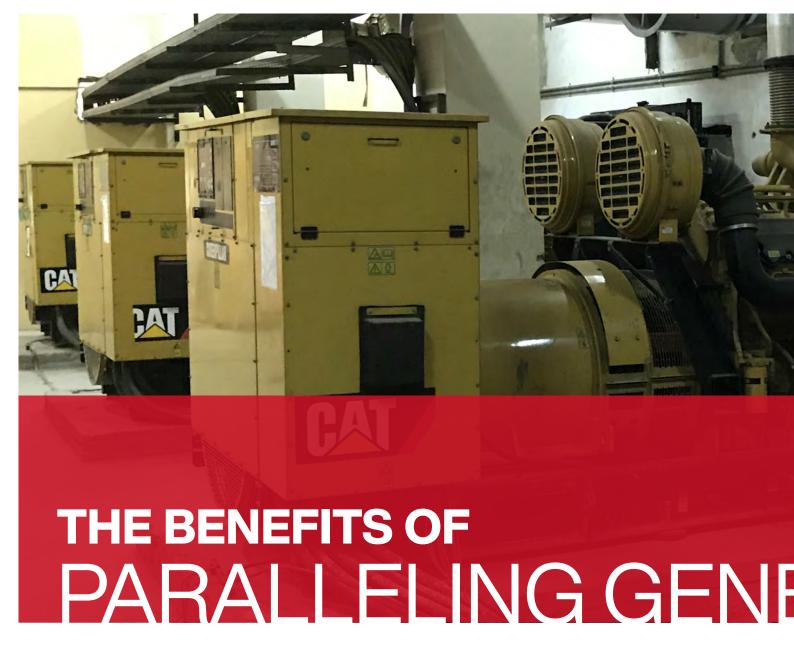
Comprised of our ED SERIES GENERATORS, ENCP 9 SERIES PARALLELING SYSTEMS and SWITCHGEARS, and EBC SERIES BATTERY CHARGERS. The ELECTRONIL PARALLELED POWER SYSTEMS delivers dependable power across multiple applications. Combine that with our extensive network of sales and service technicians, and you've got what everyone wants:

peace of mind

Discover more at electronil.com/paralleled_power_systems







Maximize Your System's Flexibility.

While it may be common for a facility to install a single large generator to meet its power needs, paralleling two or more generators offers a number of practical benefits and advantages over a single-generator system.

REDUNDANCY

The redundancy provided by the paralleling of two or more generators delivers greater reliability and flexibility than a single generator can provide. In critical applications, having more than one generator connected to the bus at all times ensures continuous generator power in the unlikely event that a generator fails.

Discover more at electronil.com/paralleled_power_systems

EFFICIENCY

Instead of one large generator that might operate at an inefficiently low kW, several small generators can be paralleled together and turned on and off as necessary to efficiently support the varying demands of the load.

In situations where your load needs require one genset, you'll run more efficiently. And that kind of efficiency can result in big savings. Because our **ENCP 9 Series** control systems automatically turns off any generators in your system when needs are low, you'll benefit from immediate fuel savings and reduce running time for greater generator longevity.



COST-EFFECTIVE

In many cases, paralleling two or more gensets to produce the same output as a larger single unit results in significant cost savings.

For example: you can save up to 20% when paralleling three 500 kW units compared to one 1500 kW unit.

SPACE CONSTRAINTS

By using gensets with smaller footprints instead of one larger unit, the Paralleled Generators System provides greater location flexibility. The multiple units can be placed where a single genset won't fit, so space is used more efficiently. And because the weight of multiple units can be distributed, rooftop installation is even possible - something you simply can't do with many large single-generator sets.

POWER REQUIREMENTS

If the largest available generator is too small to meet your power requirements, two or more generators can be paralleled to provide the necessary power.

FUTURE GROWTH

A Paralleled Generators System can be designed to add additional generators as your facility's load requirements expand.

Purchase the Paralleled Generators System that fits your budget today. And, in the future, it can easily expand as your needs and budget allow. That way, you'll never have to worry about replacing a system you've outgrown.

EBC Series

AUTOMATIC ENCLOSED BATTERY CHARGERS.



Image for illustration purposes only, Depending on your application the actual product may vary.

RITTING CHARGE MODE CHARGE MODE SOUTH ON THE STATE OF THE STATE OF

Overall Size: 250x250mm

PRODUCT HIGHLIGHTS

FEATURES

- Constant current / constant voltage.
- Automatic float mode return.
- Low output ripple.
- Reverse polarity, short-circuit and current limiting protection.
- Auto recovery on fault condition removal.
- Cell charge boost and equalizing.
- Power save mode.
- No moving parts convection cooled.
- Charge fail indicator.
- 80% operating efficiency
- Manual Boost/Float Selection.
- Compatible with all common battery types.

Service Support.

ELECTRONIL Provide Comprehensive Support on All Types of Generators Across Egypt.

SUPPORT

Our Support Team provide specialist advice, technical support and assistance for:

- Generator service enquiries.
- Maintenance (planned and unplanned).
- 24/7 service and repair (subject to agreement).
- Parts and consumables.
- Customer service agreements.
- New equipment sales.
- Panel and system upgrades.

SERVICE

Our aim is to provide customers with service support that is fast and responsive, flexible and convenient, and minimizes equipment downtime and costs. We offer a range of services including:

- Generator service enquiries.
- Maintenance Scheduling specifically designed to meet the service needs of your business.
- Rapid Response 24hour emergency call out as required.
- General Servicing all major makes and models of generator supported.

LOCAL SERVICE

With a national fleet of mobile service engineers, our highly trained and skilled power generation service professionals have the capability, expertise and experience to support you, wherever you may be.

SERVICE AGREEMENTS

Each service agreement is tailor made to your specific requirements. Once the optimized schedule of activities has been established, our engineers will visit you via a pre-arranged appointment to undertake the required servicing.

A service agreement, including regular testing, preventative maintenance and routine servicing, will ensure that your generator continues to provide you with the vital power you need.

For a quotation for a maintenance agreement or to arrange a service visit, contact our Service Team who will be happy to assist.



PARTS

For specialist advice and assistance on all products, and to place your order for next day delivery on genuine parts and engine consumables, contact our Service Team.





ELECTRONIL POWER SOLUTIONS

ENGINEERING THE FUTURE Since 1995.

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