



POWER TRANSFER SWITCHES



**Power Generators
Soundproofing Solutions
Power Transfer Switches
Paralleling Systems
Switchgears
Controls**

**Generator Maintenance
Services Agreements
Control System Upgrade
Battery Chargers
Spareparts
Consumables**





POWER IS WINNING

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.



WE WHAT WE DO

995

لم تختار منتجات إلكتروني! !

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 الزميين الماضيين، قمنا بتصميم وصياغة المستقبل، وإعادة صياغة المعنى الحقيقي للطاقة الكهربائية لحياة عملائنا وأعمالهم وأنماط حياتهم.

نعمل بجهد لسبب واحد: **للحفاظ على تقدمكم.**

WE ARE ELECTRONIL.

Our Capabilities



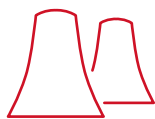
Power Generation Systems
Design and Supply



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



Parallel with Utility Grid
Operation



Power Stations



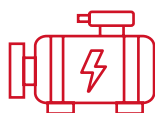
Mains, Feeder and Load
Shedding Control Systems



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.

من نحن

تُعد شركة إلكترونيال لحلول الطاقة قوة رائدة في مجالات حلول الطاقة الكهربائية منذ عام ١٩٩٥، ومنذ ذلك الحين ونحن نلتزم بإمداد عملائنا بمنتجات موثوقة وذكية ومتطورة هندسياً بالإضافة إلى دعم سريع الاستجابة لخدمة ما بعد البيع والصيانة.

على مر الأعوام، ضاعفنا من سمعتنا المعروفة لكوننا من أكبر الكيانات الرائدة والمعروفة بمنتجاتها المتميزة من وحدات توليد الطاقة الكهربائية وأنظمة التحكم والحماية والتشغيل. بالإضافة إلى، واستناداً إلى إرث علامة تجارية رائدة، قمنا بإنشاء واحد من أكبر مزودي الأسواق المصرية بأنظمة الطاقة المتكاملة وأنظمة تحكم وتشغيل وحماية إعتمادية وموثوقة على مستوى جمهورية مصر العربية - واستمر التركيز المستمر على إبتكار أنظمة طاقة متكاملة وموثوقة ومتطورة.

نقوم بتقديم أنظمة توليد طاقة صناعية متكاملة لتطبيقات الطوارئ والمحطات الرئيسية والطاقة المستمرة في جميع أنحاء جمهورية مصر العربية - من مراكز المعلومات والمستشفيات إلى محطات معالجة مياه الشرب والصرف الصحي والفنادق. بدراسة وفهم عميق لمجال عملك، نتميز في تصميم أنظمة طاقة متكاملة ومتخصصة والتي تعمل على تبسيط التحديات الأكثر تعقيداً التي يمكن أن تقابلك.



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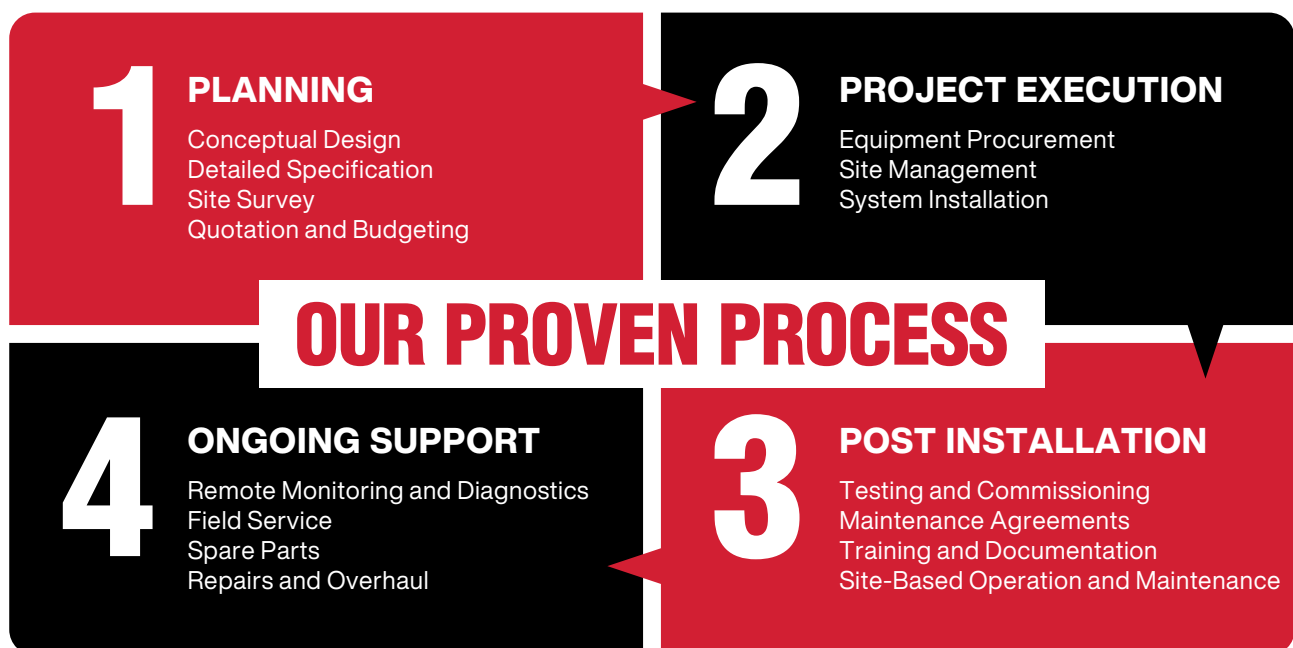
YOUR JOB IS COMPLEX.

WE MAKE IT EASY.

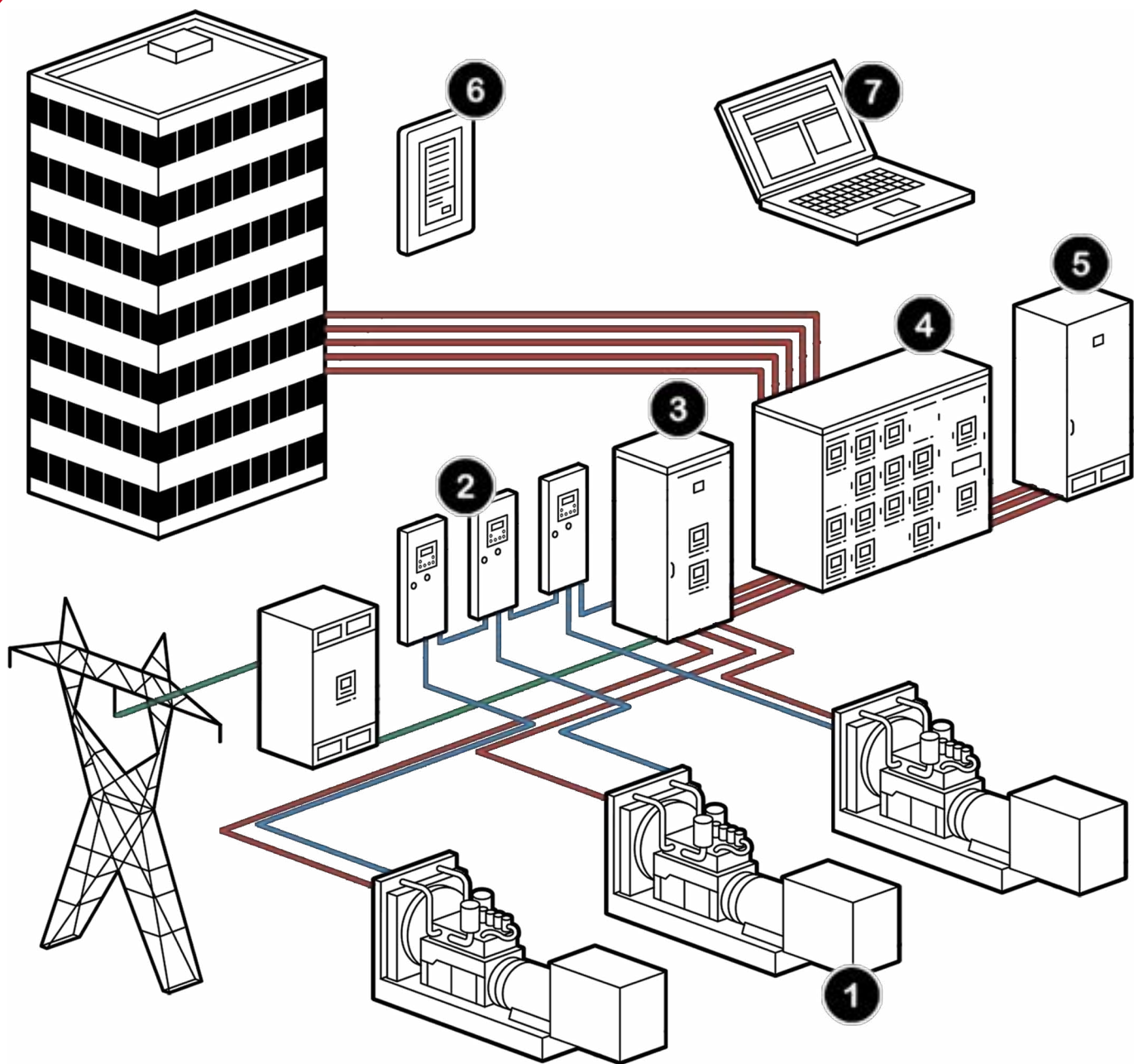
This is not your typical power system, and it is not your typical ATS. Because at the heart of your integrated power system is a quality **ELECTRONIL** Power Transfer Switch.

A transfer switch that is designed by **ELECTRONIL**, built by **ELECTRONIL** and chosen specifically for your power requirements.

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

- 1 ED SERIES DIESEL GENERATORS**
 Powered by Perkins, Volvo-Penta, or Cummins Diesel Engines, 9 - 3000 kVA
- 2 ENCP 9.1 GENSETS PARALLELING SYSTEM**
 2-32 Generator set paralleling system with automatic power management and automatic engine run-hour balancing.
- 3 ENCP 9.3/ENCP 6.x TRANSFER SWITCH**
 40-4000 A Power transfer switches, available in standard, bypass-isolation and service entrance switch configurations.
- 4 ELECTRONIL POWER DISTRIBUTION PANEL**
 MCB, MCCB and ACB, Up to 6000 Amps.
- 5 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.

POWER TRANSFER SWITCHES

To Protect Your Power.
And Your Business.



THE ETS LINEUP

PEACE OF MIND STARTS HERE.

Bridging the gap between loss of utility and standby power is no small task. ELECTRONIL ETS Series Power Transfer Switches are designed to meet that challenge, distributing power to feed the critical loads of your facility.

Every power transfer switch needs a control system to ensure transfer of power from utility to generator and back again.

ELECTRONIL Power Transfer Switches, offer clear choices in matching function to application.

STANDARD FEATURES

Multiple Applications

Find the perfect option. ELECTRONIL Power Transfer Switches are available in standard, bypass, bypass-isolation and service-entrance configurations with open, closed and programmed transition operating modes, from 40 to 4000 amps.

Seamless System Integration

Everything works together. ELECTRONIL Power Transfer Switches are designed to interface perfectly with ELECTRONIL Generators and Paralleling Switchgears.

Advanced Communications

Every Power Transfer Switch comes fully loaded with the technology to do the job. Ethernet and Modbus communications capabilities are available.

ELECTRONIL TRANSFER SWITCHES

Whether you need to ensure the steady delivery of critical power or simply keep the lights on, **ELECTRONIL** is your one stop for transfer switch solutions.

Our breakthroughs in transfer switch technology and the recent addition of **ETS Series** enable us to offer one of the most comprehensive and advanced portfolios of transfer switch solutions in the world, from well established technologies to the latest in digital innovation.

You can choose the functionality and features that are just right for your facility, knowing that you'll get outstanding reliability, even in the most demanding conditions.

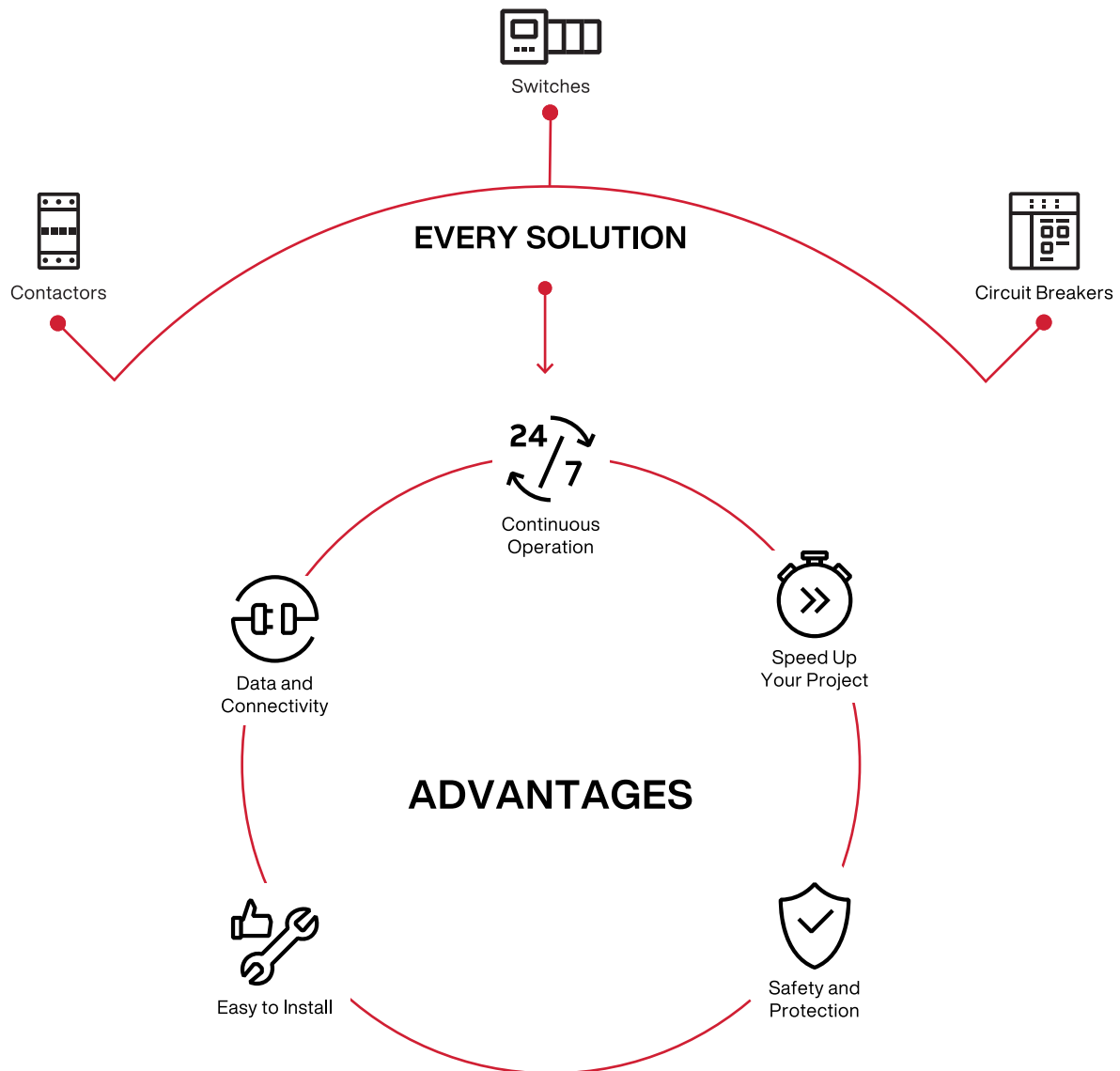


Performance tested beyond standard requirements, the **ELECTRONIL ETS** Stands ready to ensure the steady delivery of critical power at all times. Its self-contained design reduces the number of wires and connections, which speeds installation and minimizes the potential for connection failures to ensure best-in-class reliability. Its predictive maintenance and modular components reduce downtime and service costs. And its advanced connectivity is ready for the future. In addition, unlike typical ATS solutions, the **ETS Series** allows emergency manual operation under load for immediate power restoration in the event of an equipment malfunction.

The **ELECTRONIL ETS Series** Represents a major shift in engineering and a critical breakthrough for critical power.

TRANSFER SWITCH SOLUTIONS

To Empower You and Your Business.



IP ENCLOSURES

Protection degree IP42 as standard and up to IP65 is optional.

BYPASS OPERATION

Eliminates interruption to the loads during maintenance.

MICRO-POSSESSOR BASED CONTROLLERS

Provides a full array of features including communications, I/O and other advanced functionality.

HEAVY-DUTY CONTACTOR

Choices from ABB, Socomec or Schneider Electric transfer devices; molded case circuit breakers, air circuit breakers, contactors, or motorized changeover switches.

AVAILABLE ACCESSORIES

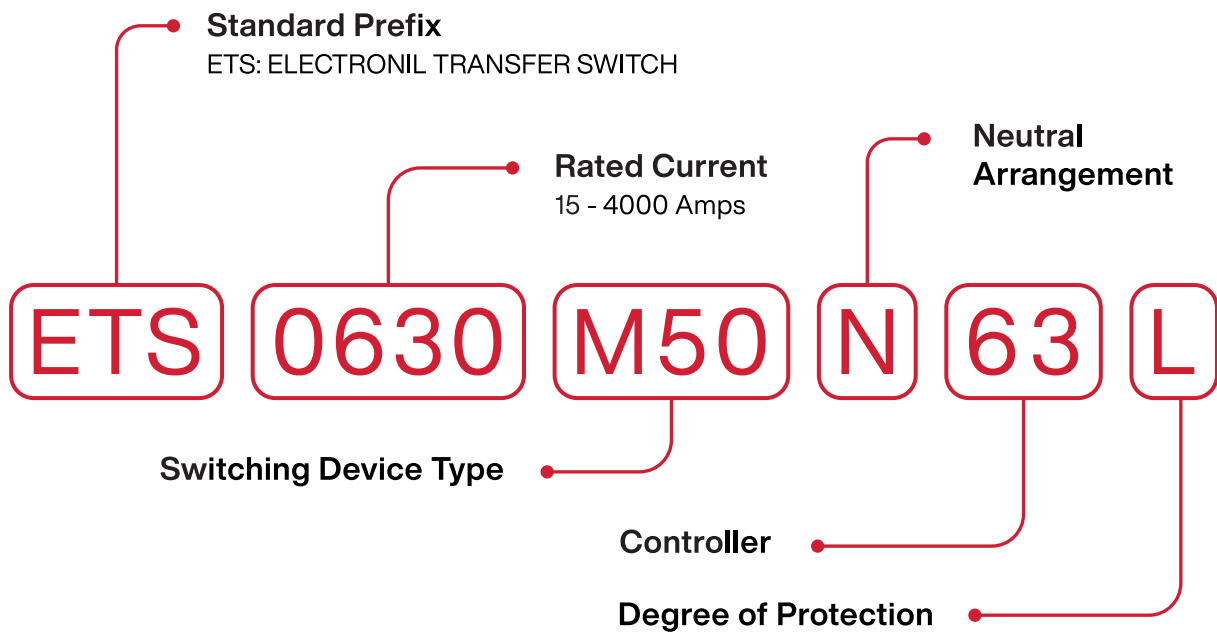
Digital multimeter, communication accessories, load-shed / load-add system, remote annunciator and more.

CUSTOM CONFIGURATION

The chart tells the story.

You can custom configure your power transfer switch by choosing the exact components needed. This standard process allows **ELECTRONIL** to provide the correct power transfer switch for your application with delivery in the shortest amount of time.

Each letter and numeral corresponds to a specific element of the ATS.



Configuration Options

Standard Prefix ETS		Rated Current 0630	
ETS ELECTRONIL TRANSFER SWITCH		15 - 4000 Amps.	
Switching Device Type M50			
C Contactor	M25 Molded Case Circuit Breaker (Icu=25kA)	A50 Air Circuit Breaker (Icu=50kA)	
S Motorized Changeover Switch	M36 Molded Case Circuit Breaker (Icu=36kA)	A66 Air Circuit Breaker (Icu=66kA)	
	M50 Molded Case Circuit Breaker (Icu=50kA)	A10 Air Circuit Breaker (Icu=100kA)	
	M70 Molded Case Circuit Breaker (Icu=70kA)		
Neutral Arrangement N		Controller 63	
S Single Phase, Two Wires with Switched Neutral (2 Pole)	61 ELECTRONIL ENCP 6.1 Control System	L IP4x	
C 3 Phase, 4 Wires with Solid Neutral (3 Pole)	62 ELECTRONIL ENCP 6.2 Control System	M IP5x	
N 3 Phase, 4 Wires with Switched Neutral (4 Pole)	63 ELECTRONIL ENCP 6.3 Control System	H IP6x	
	X2 ABB TruONE Level 2 ATS Controller		
	X3 ABB TruONE Level 3 ATS Controller		
	XC ABB C21D ATS Controller		

MECHANISM TYPES.

Options for Every Application.

STANDARD TRANSFER SWITCH

A standard transfer switch has a single mechanism that transfers the load from one power source to another power source. It's the most common type of application.

- Available in Contactors, Molded Case Circuit Breakers, Air Circuit Breakers and Changeover Switches.
- Available in standard/open, delayed/programmed and closed transition.

BYPASS TRANSFER SWITCH

A bypass transfer switch bundles an automatic and a manual transfer switch into a single unit.

Bypass is used to transfer power by the manual switch in case of the primary automatic transfer switch failure .

Bypass transfer switches is commonly used in hospitals, data centers and other critical applications where interruption of power in case of control system failure can't be tolerated.

- One source changeover serves as the day-to-day automatic transfer switch and a manual transfer switch that bypasses the automatic switching function.
- Available in standard/open and delayed/programmed transition.

BYPASS-ISOLATION TRANSFER SWITCH

A bypass-isolation transfer switch bundles an automatic and a manual transfer switch into a single unit.

Bypass isolation is used to transfer power to the manual switch to allow servicing of the ATS while maintaining power to the facility. When the primary automatic transfer switch is in test or isolate position, the manual transfer switch is powering the loads.

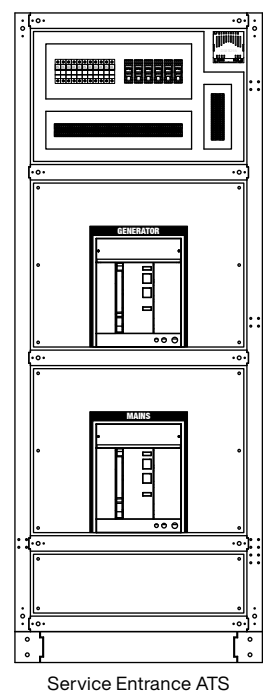
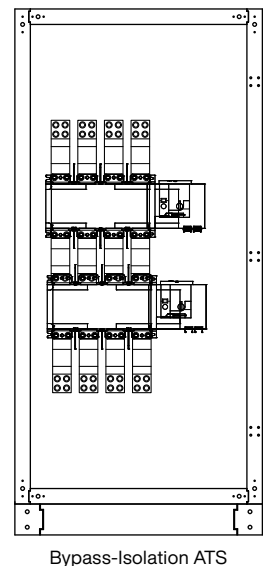
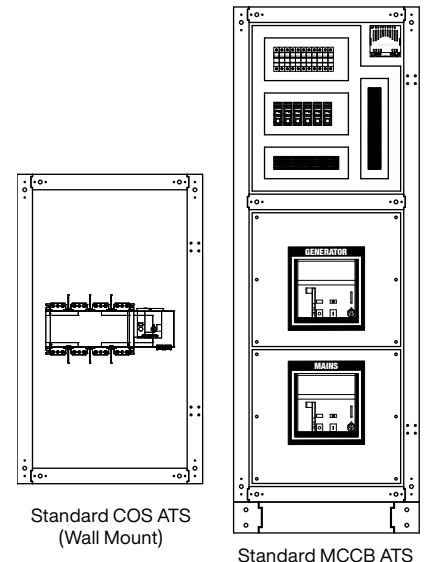
Bypass isolation is commonly used in hospitals, data centers and other critical applications where interruption of power for service or maintenance can't be tolerated.

- One source changeover serves as the day-to-day automatic transfer switch.
- One source changeover serves as a manual transfer switch that bypasses and isolates the automatic switch.
- Available in standard/open and delayed/programmed transition.

SERVICE ENTRANCE TRANSFER SWITCH

A service entrance transfer switch serves as both the automatic transfer switch and the utility disconnect, with circuit breakers and motor operators utilized as the transfer switch mechanisms.

- The breaker on the normal utility source serves as the main entrance point for the utility.
- The emergency/generator source serves as the main entrance point for the standby generator.
- Available in standard/open, delayed/programmed and closed transition.



TRANSITION TYPES.

Factory-Configured for Mode of Operation.

The transfer switch controller manages the power sensing, timing functions and fault monitoring needed for automatic operation. Depending on your application, the switch can be configured to operate in one of three modes: standard/open transition, delayed/programmed transition or closed transition.

STANDARD/OPEN TRANSITION

BREAK BEFORE MAKE

In open transition, the load is disconnected from one source before being connected to the alternate source.

This is the most common type of application, used for loads that are not highly inductive or mission-critical.

- One set of contacts opens before the other set closes.
- Load is disconnected from power during transfer.

DELAYED/PROGRAMMED

BREAK BOTH SIDES

Delayed/programmed mode is used with highly inductive loads such as motor loads and transformers.

The load disconnects from one source, then pauses in an “off” position before connecting to the alternate source to protect from power surges. The delay allows the magnetic field to decay to a safe level before transferring. Delayed transition can also be used with the load-shed option for lower-priority loads.

- One set of contacts opens before the other set closes.
- The other set of contacts delays in closing.
- Load is disconnected from power during all transfers.
- Delay time is user-programmable.

CLOSED TRANSITION

MAKE BEFORE BREAK

Closed transition is used in mission-critical applications, such as data centers and hospitals, where the system can't withstand a momentary load interruption. The source from which the load is being transferred remains closed until the source to which the load will be transferred is also closed. After both sources are closed, the source from which power is being transferred is opened.

- Contacts overlap, with both sources providing power.
- Both sources synchronize before transfer occurs.
- Load is never disconnected from power during transfers when both services are available.
- Transfers via open transition if one source fails or fails to sync.
- External fail-safe timer provided.

POLES AND NEUTRAL SWITCHING.

Ground-Fault Protection Without Compromise.

A solid neutral or a switched neutral must be chosen when specifying an automatic transfer switch. A 3-pole ATS has a solid, unswitched neutral; a 2-poles/4-pole ATS has a half rated switched neutral that follows the contactor position.

The emergency system grounding and ground-fault protection method determine the use of a 2-pole/4-pole or 3-pole power transfer switch.

SOLID

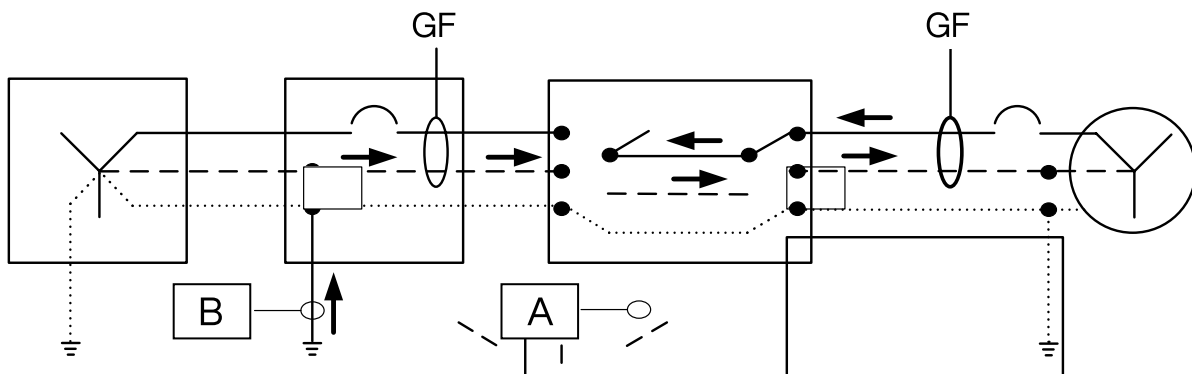
- 3 Pole
- Constant contact
- Generator is not a separately derived source

SWITCHED

- 2 Pole or 4 Pole
- Break-Before-Make on neutral
- Switching neutral with phase contacts
- Generator is a separately derived source

THREE POLE TRANSFER SWITCHES

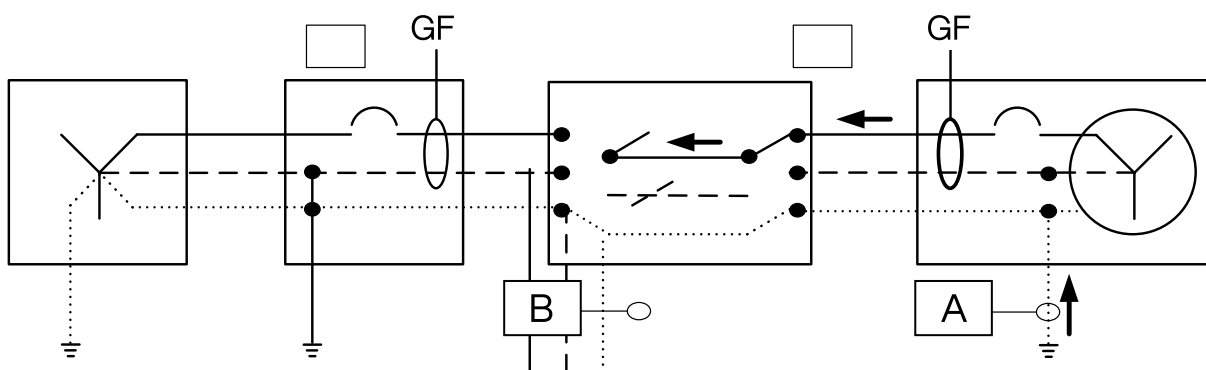
A 3 Pole transfer switch has a solid neutral; the neutral connection is not dependent upon the position of the switch. In this system, the generator is not a separately derived source, and there is no neutral-to-ground link at the generator. Should a ground fault occur, it cannot be sensed by the generator breaker.



TWO POLE/FOUR POLE TRANSFER SWITCHES

In order for the generator's current-based ground fault sensor to detect the ground fault and trip the generator unit-mounted circuit breaker, a 2 Pole/4 Pole transfer switch is needed.

Because the neutral is switched and not continuous, the generator is a separately derived source that needs a neutral-to-ground link at the generator.



National Electrical Code (NEC) and National Fire Protection Association (NFPA) regulations specify how ground-fault protection (GFP) must be handled for a generator system, which in turn determines the number of poles and neutral switching type required of the transfer switch. These regulations also determine whether or not a system needs the generator as a separately derived source.

Contactor Based Power Transfer Switches

TRANSFER SWITCH	SYSTEM RATINGS		SWITCHING DEVICE			CONTROL SYSTEM
Model	400volts, 50hz		Type	Model	Short circuit level	Model
	Amps	kWe	ABB	AF Contactors	Icu@380-415VAC	

This ETS Series Designates A Standard Contactor Based Automatic Power Transfer Switch

ETS0018CC61	18	7.5	Mechanically and Electrically Interlocked 3 Pole Contactors.	AF16-30-10-13	This ETS Series Doesn't Provide Short Circuit Protection as Standard (Can be modified upon customer request).	Standard: ENCP 6.1, Optional: ENCP 6.2 Control System
ETS0026CC61	26	11		AF26-30-00-13		
ETS0040CC61	40	18.5		AF40-30-00-13		
ETS0065CC61	65	30		AF65-30-00-13		
ETS0080CC61	80	37		AF80-30-00-13		
ETS0096CC61	96	45		AF96-30-00-13		
ETS0116CC61	116	55		AF116-30-00-13		
ETS0146CC61	146	75		AF146-30-00-13		

BENEFITS

- AC/DC Operation
- Wide Range of Control Voltage
- Single Phase, Split-Phase and Three Phase.

Changeover Switch Based Standard Power Transfer Switches

TRANSFER SWITCH	SYSTEM RATINGS		SWITCHING DEVICE			CONTROL SYSTEM
	Model	400volts, 50hz	Type	Model	Short circuit level	Model
	Amps	kWe	ABB	OTM Switches	Icu@380-415VAC	

This ETS Series Designates A Standard Changeover Switch Based Automatic Power Transfer Switch

ETS0040SC6x	40	22	Mechanically and Electrically Interlocked 3Pole Changeover Switch.	OTM40F3CMA230V	This ETS Series Doesn't Provide Short Circuit Protection as Standard (Can be modified upon customer request).	Standard: ENCP 6.1, Optional: ENCP 6.2, ENCP 6.3, ABB L2, ABB L3 and ABB C21D Control Systems
ETS0063SC6x	63	35		OTM63F3CMA230V		
ETS0080SC6x	80	44		OTM80F3CMA230V		
ETS0100SC6x	100	55		OTM100F3CMA230V		
ETS0125SC6x	125	69		OTM125F3CMA230V		
ETS0160SC6x	160	88		OTM160E3CM230C		
ETS0200SC6x	200	110		OTM200E3CM230C		
ETS0250SC6x	250	138		OTM250E3CM230C		
ETS0400SC6x	400	221		OTM400E3CM230C		
ETS0630SC6x	630	349		OTM630E3CM230C		
ETS0800SC6x	800	443		OTM800E3CM230C		
ETS1000SC6x	1000	554		OTM1000E3CM230C		
ETS1250SC6x	1250	692		OTM1250E3CM230C		
ETS1600SC6x	1600	886		OTM1600E3CM230C		
ETS2000SC6x	2000	1108		OTM2000E3CM230C		
ETS2500SC6x	2500	1385	OTM2500E3CM230C			
ETS0040SN6x	40	22	Mechanically and Electrically Interlocked 4Pole Changeover Switch.	OTM40F4CMA230V	This ETS Series Doesn't Provide Short Circuit Protection as Standard (Can be modified upon customer request).	Standard: ENCP 6.1, Optional: ENCP 6.2, ENCP 6.3, ABB L2, ABB L3 and ABB C21D Control Systems
ETS0063SN6x	63	35		OTM63F4CMA230V		
ETS0080SN6x	80	44		OTM80F4CMA230V		
ETS0100SN6x	100	55		OTM100F4CMA230V		
ETS0125SN6x	125	69		OTM125F4CMA230V		
ETS0160SN6x	160	88		OTM160E4CM230C		
ETS0200SN6x	200	110		OTM200E4CM230C		
ETS0250SN6x	250	138		OTM250E4CM230C		
ETS0400SN6x	400	221		OTM400E4CM230C		
ETS0630SN6x	630	349		OTM630E4CM230C		
ETS0800SN6x	800	443		OTM800E4CM230C		
ETS1000SN6x	1000	554		OTM1000E4CM230C		
ETS1250SN6x	1250	692		OTM1250E4CM230C		
ETS1600SN6x	1600	886		OTM1600E4CM230C		
ETS2000SN6x	2000	1108		OTM2000E4CM230C		
ETS2500SN6x	2500	1385	OTM2500E4CM230C			

Molded Case Circuit Breaker Based Service Entrance Power Transfer Switches

TRANSFER SWITCH Model	SYSTEM RATINGS		SWITCHING DEVICE			CONTROL SYSTEM
	400volts, 50hz		Type	Model	Short circuit level	
	Amps	kWe	ABB	XT & Tmax MCCB	Icu@380-415VAC	

This ETS Series Designates a Standard Molded Case Circuit Breaker Based Automatic Service Entrance Power Transfer Switch

ETS Model	Amps	kWe	Type	Model	Short circuit level	Control System
ETS0040MxxC6x	40	22	Mechanically and Electrically Interlocked 3Pole Fixed Molded Case Circuit Breakers. (Optional Withdrawable and/or 4Poles Type).	XT1-160-40	Optional short circuit level (Icu) from 25kA and up to 70kA.	Standard: ENCP 6.1, Optional: ENCP 6.2 and ENCP 6.3 Control Systems
ETS0050MxxC6x	50	27		XT1-160-50		
ETS0063MxxC6x	63	35		XT1-160-63		
ETS0080MxxC6x	80	44		XT1-160-80		
ETS0100MxxC6x	100	55		XT1-160-100		
ETS0125MxxC6x	125	69		XT3-250-125		
ETS0160MxxC6x	160	88		XT3-250-160		
ETS0200MxxC6x	200	110		XT3-250-200		
ETS0250MxxC6x	250	138		XT3-250-250		
ETS0315MxxC6x	320	177		T4-320		
ETS0400MxxC6x	400	221		T5-400		
ETS0500MxxC6x	500	277		T5-630		
ETS0630MxxC6x	630	349		T6-630		
ETS0800MxxC6x	800	443		T6-800		
ETS1000MxxC6x	1000	554		T7-1000		
ETS1250MxxC6x	1250	692		T7-1250		
ETS1600MxxC6x	1600	886	T7-1600			

BENEFITS

- AC/DC Operation
- Built-in Short-Circuit Protection up to 70kA
- Overload Protection
- Fixed and Adjustable Circuit Breakers
- Service Entrance
- Wide Range of Control Voltage

Air Circuit Breakers Based Service Entrance Power Transfer Switches

TRANSFER SWITCH Model	SYSTEM RATINGS		SWITCHING DEVICE			CONTROL SYSTEM
	400volts, 50hz		Type	Model	Short circuit level	
	Amps	kWe	ABB	Emax ACB	Icu@380-415VAC	
This ETS Series Designates a Standard Air Circuit Breakers Based Automatic Service Entrance Power Transfer Switch						
ETS0630AxxC6x	630	349	Mechanically and Electrically Interlocked 3Pole Fixed Air Circuit Breakers. (Optional Withdrawable and/or 4Poles Type).	E1.2-630	Optional short circuit level (Icu) from 50kA and up to 100kA.	Standard: ENCP 6.1, Optional: ENCP 6.2 and ENCP 6.3 Control Systems
ETS0800AxxC6x	800	443		E1.2-630		
ETS1000AxxC6x	1000	554		E1.2-630		
ETS1250AxxC6x	1250	692		E1.2-630		
ETS1600AxxC6x	1600	886		E1.2-630		
ETS2000AxxC6x	2000	1108		E2.2-2000		
ETS2500AxxC6x	2500	1385		E2.2-2500		
ETS3200AxxC6x	3200	1773		E4.2-3200		
ETS4000AxxC6x	4000	2217		E4.2-4000		

BENEFITS

- AC/DC Operation
- Built-in Short-Circuit Protection up to 100kA
- Overload Protection
- Fixed and Adjustable Circuit Breakers
- Service Entrance
- Available in 3 Poles and 4 Poles Formation
- Available in Fixed and Withdrawable Types.
- Wide Range of Control Voltage

ENCP ATS

TRANSFER SWITCH CONTROL SYSTEMS.

The ENCP 6 Series Power Transfer Switch Control Systems are designed for a variety of standby power applications. They provide flexibility, reliability and value in a compact package.

The open transition Power Transfer Switches will provide fully functioning transfer in applications where a momentary loss of power is acceptable on re-transfer from emergency to normal power supply. The ENCP 6 Series Power Transfer Switch Control Systems also permits periodic testing of the emergency source without interrupting power to the loads.

The closed transition Power Transfer Switches are designed to Meet application requirements where emergency backup power is required with no momentary loss of power by connecting/short time paralleling both sources before the transfer occurs. Closed transition also permits periodic testing of the emergency power source without interrupting power to the loads.

The Service Entrance Power Transfer Switches are designed to provide standby power emergency power to entire installation loads to protect against utility power interruption; yet allow the ATS to be as close as possible to the point of service entrance.

By safely and in code compliance, integrating the necessary over-current protection and service disconnecting means into the power transfer switch, a single installation can be made at the service entrance. This design eliminates the need for a separate upstream fault protection and respective interconnections, which in turn reduces installation space, time, and cost.

Our Circuit Breaker based Service Entrance Power Transfer Switches are available from 40A to 4000A.

ENCP.9.1

ELECTRONIL POWER SOLUTIONS

GENSET 1

- ON DUTY SELECTED
- ENGINE FAIL TO START
- LOW ENGINE OIL PRESSURE
- HIGH ENGINE TEMPERATURE



**ALARM
WARNING
SHUTDOWN**



**SYSTEM
NOT IN AUTO**



**REMOTE START
INITIATED**



**REVERSE
POWER ALARM**



**GENSET
OVERLOADED**

LOCK

**REMOVE
KEY**

UNLOCK



**ALARM
RESET**

SOLUTIONS



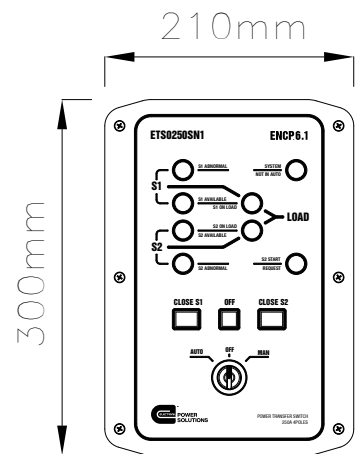
**EMERGENCY
STOP**

ENCP 6.1

POWER TRANSFER SWITCH CONTROLLER.



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



Overall Size: 300x210mm

PRODUCT HIGHLIGHTS

FEATURES

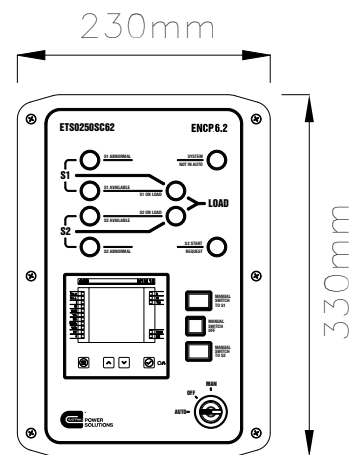
- Automatic switch-over between supplies.
- Source 1 / Source 2 control.
- LED Indicators.
- Not in Auto warning LED.
- S2 Start Request Indication LED.
- Self powered.
- Manual restore to S1.
- Configurable timers.
- Manual & automatic return.
- Configurable timers.
- Rotary ATS configuration.

ENCP 6.2

POWER TRANSFER SWITCH CONTROLLER.



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



Overall Size: 330x220mm

PRODUCT HIGHLIGHTS

FEATURES

- Automatic switch-over between supplies.
- Source 1 / Source 2 control.
- LED Indicators.
- Not in Auto warning LED.
- S2 Start Request Indication LED.
- Self powered.
- Manual restore to S1.
- Configurable timers.
- Manual & automatic return.
- Configurable timers.
- Rotary ATS configuration.
- True RMS Voltage and Current measurements.
- Frequency and On-Hours measurements.

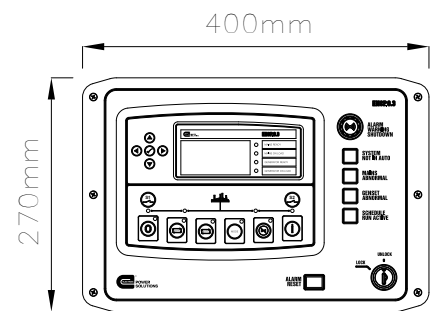
Full list of features available at
electronil.com/encp_6.2

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

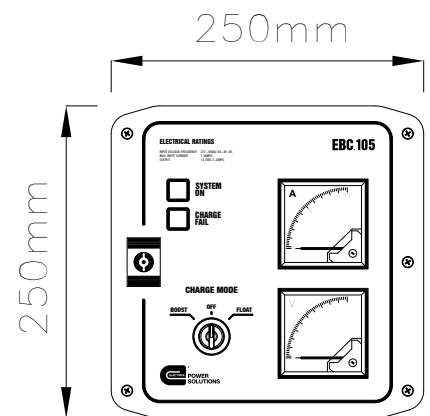
- Configuration Suite PC software
- Front panel (PIN protected)

EBC Series

AUTOMATIC ENCLOSED BATTERY CHARGERS.



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



Overall Size: 250x250mm

PRODUCT HIGHLIGHTS

FEATURES

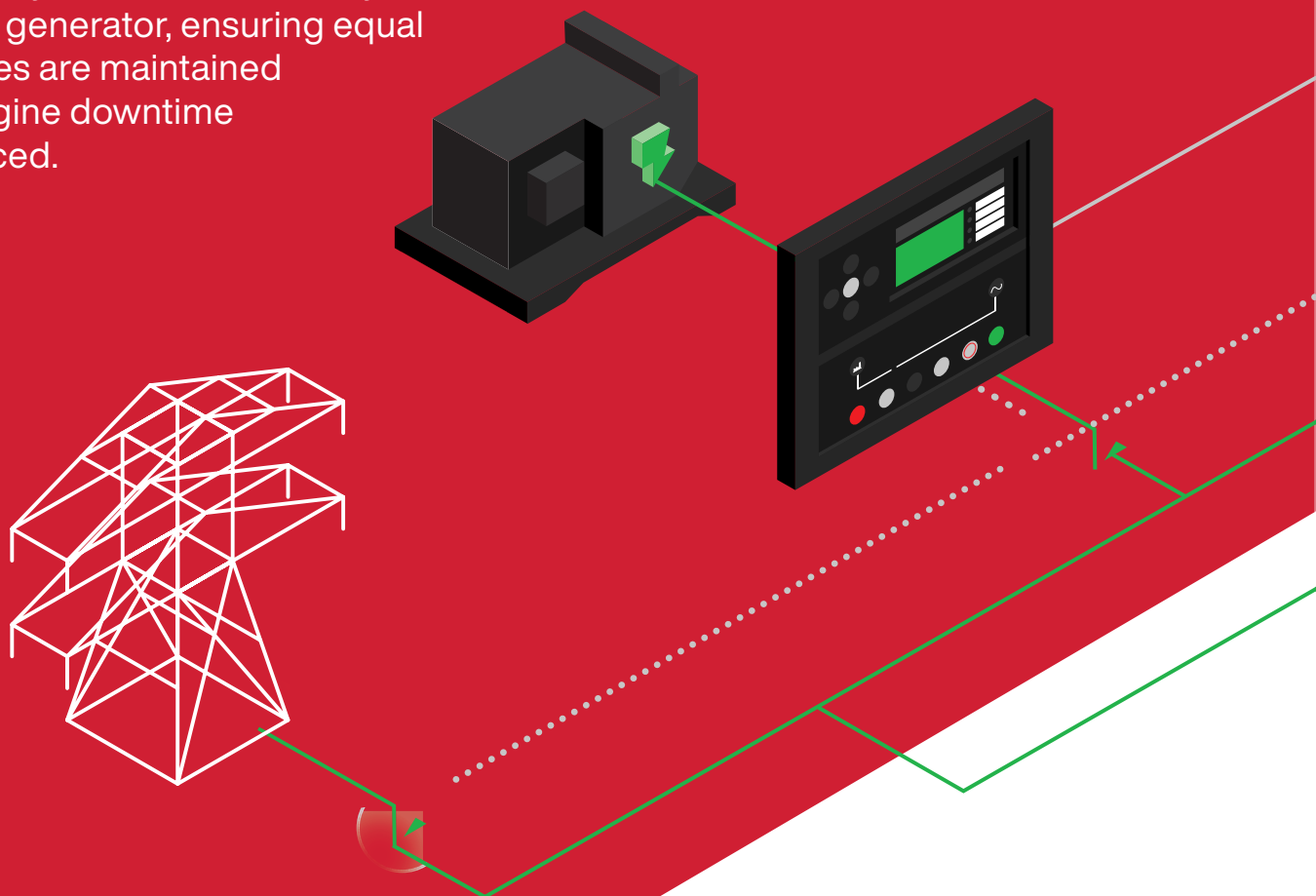
- Constant current / constant voltage.
- Automatic float mode return.
- Low output ripple.
- Reverse polarity, short-circuit and current limiting protection.
- Auto recovery on fault condition removal.
- Cell charge boost and equalizing.
- Power save mode.
- No moving parts – convection cooled.
- Charge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

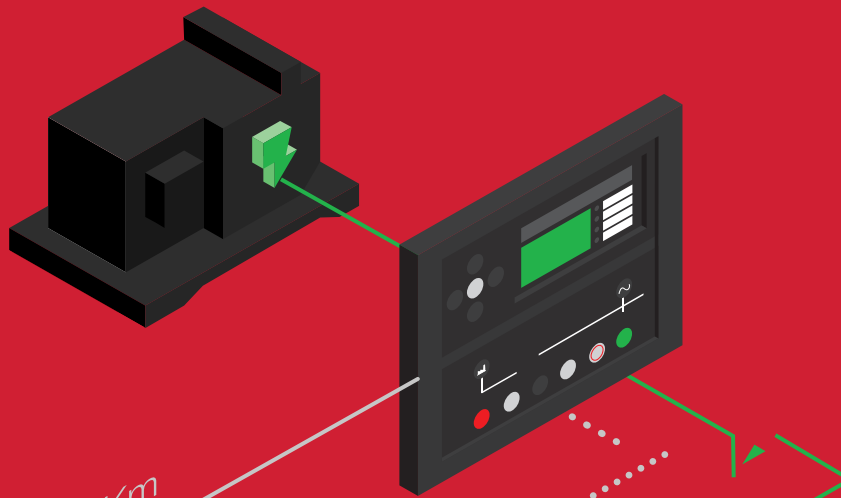
THREE-SOURCE SYSTEM.

Backup to Your Backup (DUAL-MUTUAL STANDBY).

A three-source system offers redundancy without the complexity or cost of a paralleling system. Available with a microprocessor-based controller, the system is based on two generators, two controllers and a two out of three power transfer switches.

Balancing engine run hours and instructing a second back-up generator to safeguard against the loss of power is essential for power critical applications. The Integrated dual mutual standby functionality simplifies the process of balancing engine run hours, whilst maintaining a back-up if the running generator fails. Connected via RS232 or RS485 the ENCP 3.3/ENCP 7.3 Control Systems Automatically run the correct generator, ensuring equal run times are maintained and engine downtime is reduced.





THE BENEFITS ARE MANY

- One generator is available when the other is being serviced.
- You have automatic backup power from the second generator; many critical power applications require this.
- By alternating generator runtime and extending the time it takes to accumulate engine hours, you extend time between maintenance and overhauls.
- You lengthen the time between refueling, because you have two fuel sources one for each generator.
- You have peace of mind knowing that if one generator fails, the other is automatic ***IT'S BACKUP TO YOUR BACKUP.***

ELECTROCARE

Maintenance Support Plan.

ELECTRONIL POWER SOLUTIONS Provide Comprehensive Support on All type of Generators, Switchgears, Switchboards and Control Panels Across Egypt.

Ensure your 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 Plan** options to give your equipment the highest possible service care and maintenance cover, giving you *total peace of mind*.

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.

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.

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.

THE BEST WAY TO PROTECT YOUR POWER.

And Protect Your Team.

Our genuine parts are easily accessible, which can reduce customer downtime, improve your responsiveness and provide a competitive advantage.

Structured to help you deliver top-tier service and capture profits, our Parts and Service team provides the parts, people and performance you can count on.

PARTS

Designed to perform under the toughest environmental conditions, Our Genuine Parts are chosen specifically for your generator—and will be available when you need them. They undergo extensive lab and field testing as part of the overall power-system to ensure everything works as expected.

PEOPLE

Our experienced Service and Support team is available to answer your questions. Choosing genuine parts provides you with comprehensive support, training and technical assistance straight from the factory.

- Factory training
- On-site technical support
- One point of contact for all your parts and service needs
- Dedicated after-sales channel support

PERFORMANCE

We continuously invest in better processes that make your job easier, and we're here to support you in decisions that affect your business.

- Inventory management
- Warranty management
- Lead-time strategy



Your Reliable source for advanced and integrated power solutions.





ELECTRONIL POWER SOLUTIONS

ENGINEERING THE FUTURE Since 1995.

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