

Enabling available, safe & efficient energy

2017
2018



your energy
our expertise



PREVENTION
AND SERVICE
OPERATIONS

MEASUREMENT
AND ANALYSIS


UNDERSTANDING
EXPERTISE
PROXIMITY
ADAPTATION

CONSULTANCY,
DEPLOYMENT
AND TRAINING

OPTIMIZATION

Contents



Corporate presentation	p. 4
Prevention and service operations	
	
Preventive maintenance.....	p. 8
Emergency service 24/7	p. 9
Maintenance service packages.....	p. 10
Packages for UPS Standard.....	p. 11
Packages for UPS Modular.....	p. 12
Packages for UPS in data centres	p. 14
UPS Rental.....	p. 15
Link-UPS remote monitoring.....	p. 16
Battery care.....	p. 18
Replacement of batteries.....	p. 20
Replacement of consumables.....	p. 21
Inspection and testing visit for transfer switches	p. 22
Measurement and analysis	
	
Power quality audit.....	p. 23
Thermal imaging.....	p. 24
Electrical measurement plan.....	p. 25
On-site Metrology.....	p. 26
Optimisation	
	
Continuous improvement approach.....	p. 27
End-of-life management	p. 28
Product renewal	p. 29
Consultancy, deployment and training	
	
Project consultancy	p. 30
Commissioning & on-site test	p. 31
Technical training	p. 32
General guidelines for UPS and batteries operating environment	p. 33

An independent manufacturer

The benefit of a specialist

3,500 m²
of test platforms

One of the leading independent power testing labs in Europe

65,000
on-site interventions per year

Nearly 400 experts in commissioning, technical audit, consultancy and maintenance

10 %
of turnover invested in R&D

Always at the cutting-edge of technology for innovative, high-quality products



SO innovative!

Since its foundation more than 90 years ago, SOCOMEC continues to design and manufacture its core products in Europe. Notably solutions for its primary mission: the availability, control and safety of low voltage electrical networks.

As an independent manufacturer, the Group is committed to constant innovation to improve the energy performance of electrical installations in infrastructures as well as industrial and commercial sites.

Throughout its history, SOCOMEC has constantly anticipated market changes by developing cutting-edge technologies, providing solutions that are adapted to customer requirements and fully in keeping with international standards.

“Optimising the performance of your system throughout its life cycle” - this is the commitment carried out every day by the SOCOMEC teams around the world, wherever your business is located.



Your energy, our expertise



Critical Power Ensuring the availability and storage of high quality power

With its wide range of continuously evolving products, solutions and services, Socomec are recognised experts in the cutting-edge technologies used for ensuring the highest availability of the electrical power supply to critical facilities and buildings, including:

- static uninterruptible power supplies (UPS) for high-quality power free of distortions

and interruptions occurring on the primary power supply,

- changeover of static, high availability sources for transferring the supply to an operational back-up source,
- permanent monitoring of the electrical facilities to prevent failures and reduce operating losses,
- energy storage for ensuring the proper energy mix of buildings and for stabilisation of the power grid.



© Datastock



Power Control & Safety Managing power and protecting persons and facilities

Active in the industrial switching market since its foundation in 1922, Socomec is today an undisputed leader in the field of low voltage switchgear, providing expert solutions that ensure:

- isolation and on load breaking for the most demanding switching applications,
- continuity of the power supply to electrical facilities via manual remotely operated or automatic transfer switching equipment.
- protection of persons and assets via fuse-based and other specialist solutions.



APPLI 575A



Energy Efficiency Managing the energy performance of buildings

Socomec solutions, from current sensors through to a wide choice of innovative scalable software packages are driven by experts in energy performance. They meet the critical requirements of facility managers and operators of commercial, industrial and local authority buildings for:

- measuring energy consumption, identifying sources of excess consumption and raising the awareness of occupants about their impact,
- limiting reactive energy and avoiding the associated tariff penalties,
- using the best available tariffs, checking utility bills and accurately distributing energy billing among consumer entities,
- monitoring and detecting insulation faults.



APPLI 571A



Expert Services Enabling available, safe and efficient energy

Socomec is committed to delivering a wide range of value-added services to ensure the reliability and optimisation of end-users' equipment:

- prevention and service operations to lower the risks and enhance the efficiency of operations,
- measurement and analysis of a wide range of electrical parameters leading to

recommendations for improving the site's power quality,

- optimisation of the total cost of ownership and support for a safe transition when migrating from an old to a new generation of equipment,
- consultancy, deployment and training from the project engineering stage through to final procurement,
- performance assessment of the electrical installation throughout the life cycle of the products via analysis of data transmitted by connected devices.



APPLI 760A

Maintenance and professional services

50 years manufacturer experience of Critical Power care

Our expertise is dedicated to optimising the performance of your low voltage equipment during its life cycle.



APPLI 560 A

The expertise of a single design, manufacture and maintenance supplier

Since 1968, Socomec has been developing products and services which are geared towards the quality and continuity of your high quality energy.

Specialists at your service

Our Services team comprises qualified engineers whose mission is to guarantee the correct operation of your UPS system(s).

We offer a comprehensive support service package which gives you complete peace of mind: commissioning, on-site testing, certified preventive maintenance visits, 24-hour call out and rapid on-site repairs, genuine (original) spare parts, power quality and energy efficiency audits, consultancy, design and implementation of installation modifications and updates, etc.

Our Services team is the most reliable partner to advise you on the maintenance of Socomec equipment and to resolve any problems in accordance with current environmental standards and procedures.

The availability of original spare parts

The various original parts and components that we stock guarantee that any faulty equipment can be rapidly brought back online, whilst maintaining its original performance and reliability.

Respect for the environment

As a manufacturer, we are committed to protecting the environment and actively participate in the development of legislation and standards related to this issue.

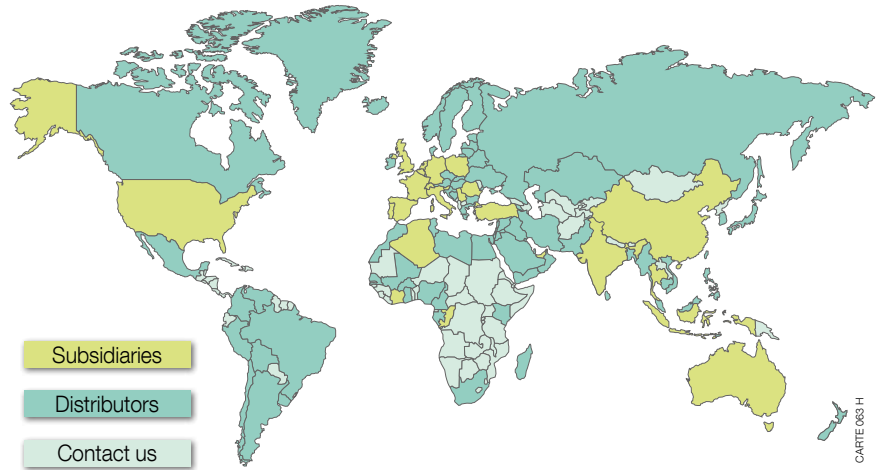
This guarantees that we will always respond to the demands of legislation concerning the disposal of used components and respect recycling procedures.

Key figures

Nearly 400 Socomec experts supported by 200 engineers and technicians from our distributors, drive the solutions to your specific needs.

Our global presence includes:

- 10 branches in France,
- 12 European subsidiaries,
- 8 Asian subsidiaries,
- representatives in 70+ countries.



On-site service management

- 65,000 service operations per year (mainly preventive visits).



Technical hotline network

- 20+ languages spoken.
- 3 advanced technical support centres.
- 100,000+ incoming calls handled per year.



Certified expertise

- 5,000 hours of technical training deployed per year (product, methodology and safety).





Preventive maintenance

Improving reliability and durability of your Critical Power equipment

Prevention and service operations

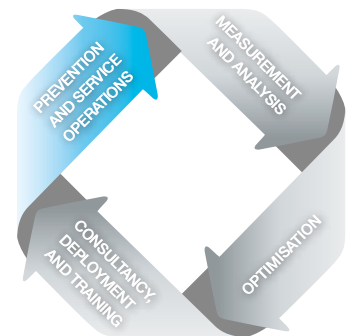


APPLI 724 A

The service life of the UPS depends on various factors such as load specifications (percentage, linearity and variability) and the operating environment (temperature, humidity, level of pollution).

To keep the UPS running at maximum levels of efficiency and to avoid system downtime with possible risks and damage to loads, it is important to have the manufacturer's expertise to perform regular preventive maintenance.

This is the best way to ensure the reliability of your equipment over time and the most cost-effective solution to keep the Total Cost of Ownership under control.



Key points

- > Inspections: mechanical, electrical, battery
- > Dust removal/equipment cleaning
- > Software updates
- > Electronics testing
- > Environmental checks
- > Battery check
- > Maintenance report

Benefits

- > Helps reduce equipment malfunction
- > Optimises operating efficiency
- > Extends equipment lifetime
- > Improves system availability



Emergency service 24/7

Guaranteed response to all unforeseen events

Prevention and service operations

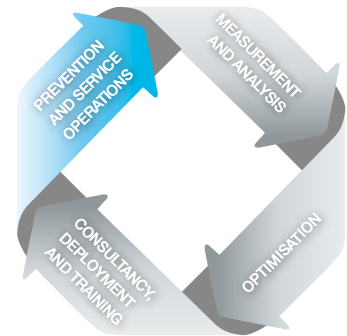


SITE 598/A

The response time is vital for business continuity and to limit as much as possible any downtime in case of a severe system anomaly.

It is therefore essential to have the expertise of a maintenance supplier who fully understands your equipment and knows your working environment and who can respond to emergencies within a time guaranteed by a bespoke Service Level Agreement (SLA).

Proximity and emergency service carried out by the manufacturer are the best guarantees for fast troubleshooting and real problem solving.



Key points

- > Specialist team of engineers on call 24/7
- > Technical expertise on-site within 4 hours* guaranteed
- > Remote monitoring and proactive troubleshooting
- > Corrective maintenance with original spare parts
- > 24/7 spare part stock availability with high priority shipment

** Please check the service coverage in your area.*

Benefits

- > Quality technical support
- > Fast and precise diagnostic
- > Real problem solving



Maintenance service packages

A broad range of solutions to suit all your needs





Prevention and service operations



APPLI 707 A

The Maintenance service packages which combine the advantages of preventive maintenance and emergency service are entirely tailored around customers' needs, taking into account individual operating constraints, business activity and the unique level of criticality associated with specific applications.

A variety of packages suitable for users of UPS Standard, UPS modular, UPS in data centres and transfer switches has been developed to cover all needs; from a simple combined service, to a fully-inclusive package that includes the cost of labour and spare parts and delivers the quickest response time to site.

	SILVER	GOLD	PLATINUM	PLATINUM+	REGULAR	PREMIUM	EVO PACK	PRISM
Standard UPS system 	•	•	•	•				
Modular & scalable UPS system 					•	•	•	
UPS system for data centres 								•
Transfer switches 	•	•	•	•				



Maintenance service packages

For your standard UPS

Prevention and service operations



APPLI 628 A

Silver, Gold, Platinum and Platinum+ are the Maintenance service packages suitable for standard UPS. 50 years of manufacturer's experience is at your disposal to provide you with a comprehensive support package which affords you complete peace of mind.

SERVICE DESCRIPTION	MAINTENANCE PROGRAM AVAILABLE FOR INDIA			
	SILVER	GOLD	PLATINUM	PLATINUM PLUS
No of preventative maintenance per annum	2	4	4	4
Battery check	•	•	•	•
Battery internal resistance check				•
Firmware update		•	•	•
Labour and mileage (corrective maintenance)		•	•	•
On site training		•	•	•
Spare parts		•	•	•
Consumables part (fan and capacitor)			•	•
Wound components replacement				•
Hot-line availability 24 h/365 d	•	•	•	•
RTS - Response time to site from 2 to 3 hours*	•	•	•	•
Resolution time in hours**	8	6	5	5
Additional preventive maintenance	o	o	o	o
Regular remote check and report (LINK-UPS)	o	o	o	o
Proactive troubleshooting (LINK-UPS)	o	o	o	o
Thermal Imaging	o	o	o	o
Power Quality Audit	o	o	o	o
Changeover switches inspection visit	o	o	o	o

* Site should be within 30 km from regional office, under natural environment and normal traffic condition.

** Under standard operating condition as per operating manual.

•: included.
o: optional.



Maintenance service packages

For your modular UPS

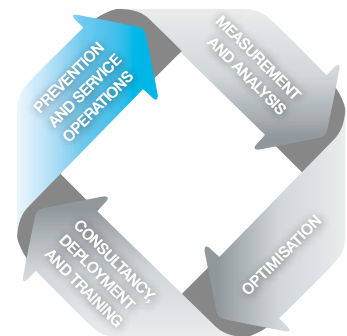
Prevention and service operations

APPLI 718 A



IT and facility managers, having chosen a modular UPS system to protect their critical applications, are looking for extra services from the manufacturer to optimise their investment throughout the lifecycle of the product.

With REGULAR, PREMIUM and EVOLUTION PACK, Socomec offers unique maintenance packages to take full advantage of the modular architecture of the UPS system: fast upgrading, cost predictability and no more "end-of-life criticality".



Evolution pack summary

Evolution Pack delivers the most comprehensive service guarantee:

- > 5-year, fully inclusive package,
- > Permanent access to the latest technology,
- > Periodic upgrades with complete module replacement,
- > Continuous system care and monitoring based on specific usage conditions.

Evolve with Socomec:

- > Control your costs: fixed price guaranteed over a 5-year period,
- > Maximise your investment: incorporate cutting edge technology for the ultimate energy efficiency,
- > Futureproof your system: eliminate end-of-life criticality.



Maintenance service packages

For your modular UPS

New service features & key benefits

1 Remote monitoring LINK-UPS

- Alarm notification to the nearest Socomec Service Centre.
- Remote diagnostic and troubleshooting.
- Periodic analysis reports.

2 Smart module management

- Fast hot-swap replacement.
- Load fully protected during maintenance.

3 Full power system upgrade

- Periodic renewal, with complete module replacement using the latest technology.



SERVICE DESCRIPTION	MAINTENANCE PROGRAM AVAILABLE FOR INDIA		
	REGULAR	PREMIUM	EVOLUTION PACK 5 years
Preventative Maintenance Visits	2	4	4/Year
Regular remote check and report (LINK-UPS)	o	•	•
Proactive troubleshooting (LINK-UPS)	o	•	•
Replacement Module up on fault		•	•
1 full set new modules replacement per 5-year period			•
Labour & mileage (Corrective Maintenance)	•	•	•
Spare parts		•	•
Hot-line availability	•	•	•
Consumable parts replacement (fan & capacitor)			•
Response time in hours (Max 30 km from office)	4	2	2
Resolution time in hours (Max 30 km from office)*		5	5
Additional Maintenance Visits	o	o	o
Thermal Imaging	o	o	o
Power Quality Audit	o	o	o
Changeover switches inspection visit	o	o	o

* Including system checking & reporting.

•: included.

o: optional.



Maintenance service packages

PRISM for your UPS in data centres

Prevention and service operations



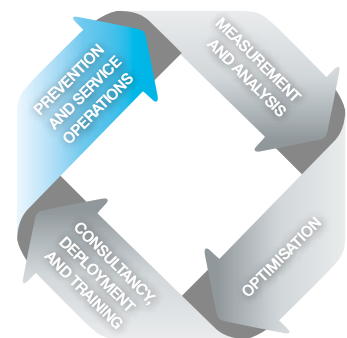
COUJ 266 A



Every data centre is unique with its own power requirements and site constraints. In addition, data centre managers are very aware of issues relating to resource optimisation.

It is therefore essential that maintenance services are tailored to site conditions, ensuring the maximum level of protection and able to offer real control over maintenance costs.

PRISM Availability services is the maintenance package proposed by Socomec for ensuring Critical Business continuity 24/7 and protecting your investment.



Key points

- > 5-year all inclusive package at a fixed price including all operational maintenance costs guaranteed with no extra charges



Benefits

- > Personalised maintenance management and site improvement in line with specific data centre expectations
- > Improved system uptime
- > Total control over your maintenance costs for 5 years



UPS Rental

All-inclusive solution for immediate Critical Power needs

Prevention and service operations

new



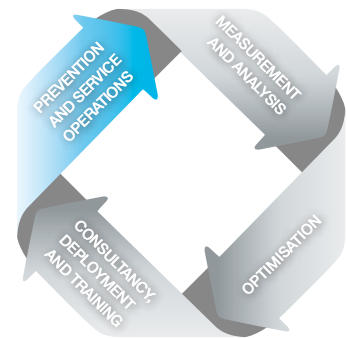
SITE 789A

For guaranteed high quality, uninterrupted electrical energy - where and when you need it most - Socomec UPS Rental is the ideal short-term critical power solution for rapid response deployment.

Immediate UPS availability: standard UPS across all power ranges (from 1 to 100 kVA) are in stock, ready to be fast tracked to your site.

Flexible rental options: because every situation is unique, Socomec offers a flexible approach to rental periods, from just one month up to several months and beyond – with easy extension options.

All-Inclusive solution: as the industry experts, Socomec will take care of all aspects of the UPS shipping, commissioning and maintenance – right through to removal and return transportation - making deployment quick and easy.



Key points

- > Transport to customer site
- > UPS commissioning
- > Hot-line technical support
- > UPS decommissioning and removal
- > Return transport

Benefits

- > **First choice:** rapid identification of the optimum solution for your unique requirements
- > **Flexible:** rental periods available upwards of just one month, with easy extension options
- > **Safe:** manufacturer standards guarantee compliance and technical performance



Link-UPS remote monitoring

Socomec 24/7 monitoring of your Critical Power

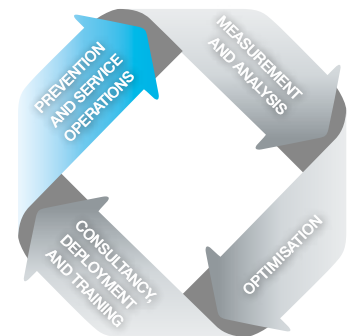
Prevention and service operations



APPLI 681 A

LINK-UPS is the new Socomec remote monitoring service designed to provide IT and Facility Managers with 24/7 support to ensure the ongoing performance, efficiency and safety of their critical infrastructure and avoid costly downtime.

LINK-UPS provides a permanent connection between the internal monitoring system of any Socomec installed UPS and the nearest Socomec Service Centre.



Key points

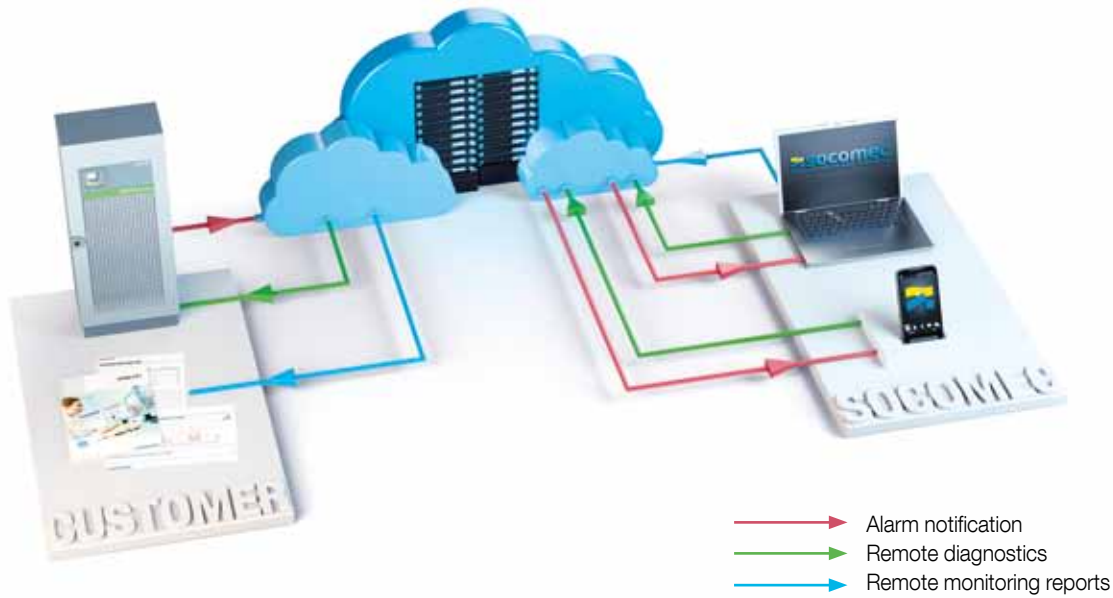
- > Continuous monitoring of equipment's performance
- > Automatic anomaly detection
- > Proactive diagnostics
- > Optimised troubleshooting

Benefits

- > Prevents problems from occurring
- > Reduces Mean Time to Repair
- > Increases system availability
- > Saves downtime costs

Link-UPS remote monitoring

Socomec 24/7 monitoring of your Critical Power



SYD1V 146/A

If an anomaly occurs in your UPS, the system will automatically notify the nearest Socomec Service Centre. A specialist Service Centre engineer will carry out a diagnostic check by remotely accessing the parameter dashboard and perform the most appropriate corrective action.

LINK-UPS report

LINK-UPS keeps you updated about the operating status of your UPS, providing you with regular reports and technical recommendations for improving the quality of your system.





Battery care

Managing the optimisation of backup time during battery life-time

Prevention and service operations

new



COLU 187 A

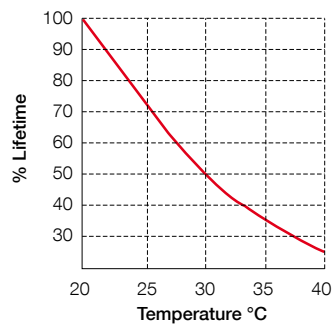
Batteries are a key element of UPS systems. Their efficiency and availability are important for preventing load downtime, but at the same time batteries are the most vulnerable and failure-prone component of such systems.

Battery failures are mainly caused by the premature “end of life” of a few battery blocks. A corrupted battery block, if not detected early and not replaced, can accelerate ageing within the rest of the battery string, therefore jeopardizing the integrity of the system.

The level of predictability for failure detection on a battery block depends on the number of measurements, tests and analyses that are performed on every single block.

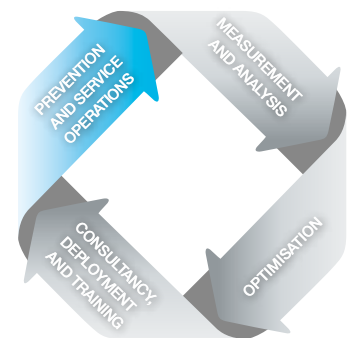
Main factors for the premature end-of-life of battery blocks:

- High temperatures
- Frequent number of cycles
- Discharge too deep
- Recharging with high voltage
- Lack of regular maintenance



Source: Eurobat

STDV 288 A GB



Key points

- > Impedance test, infrared inspection, temperature, voltage measurement block by block
- > Faulty/weak block detection
- > Back-up time measurement (optional)

Benefits

- > Information on the battery's state of health
- > Estimation of the optimum time for battery replacement
- > Optimisation of the battery's useful working life

Battery care

Managing the optimisation of backup time during battery life-time

Battery Care is a brand new set of service packages aimed to upgrade the standard battery check service (at string level) during the UPS preventive maintenance visit.

The packages will ensure the integrity of your business continuity by performing the highest level of inspection on your battery blocks.

Features

The Battery Care offer is designed around 3 packages: IMP (IMPedance), TEMP (TEMPerature) and PRIME (the full package).

ACTIONS	WHERE	BATTERY CHECK	BATTERY CARE		
			IMP	TEMP	PRIME
Visual inspection check for leakage and corrosion	string	•	•	•	•
Cleaning	string	•	•	•	•
Measurement with partial discharge of V & I	string	•	•	•	•
Environment temperature check	string	•	•	•	•
Control of floating voltage and max current*	string	•	•	•	•
Impedance test	each block		•	•	•
Temperature measurement	each block			•	•
Voltage measurement*	each block		•	•	•
Thermal image	each block				•
Torque setting	each block				•
Back-up time measurement**	string		o	o	o

* during battery charge. **: by performing the end of discharge voltage test.

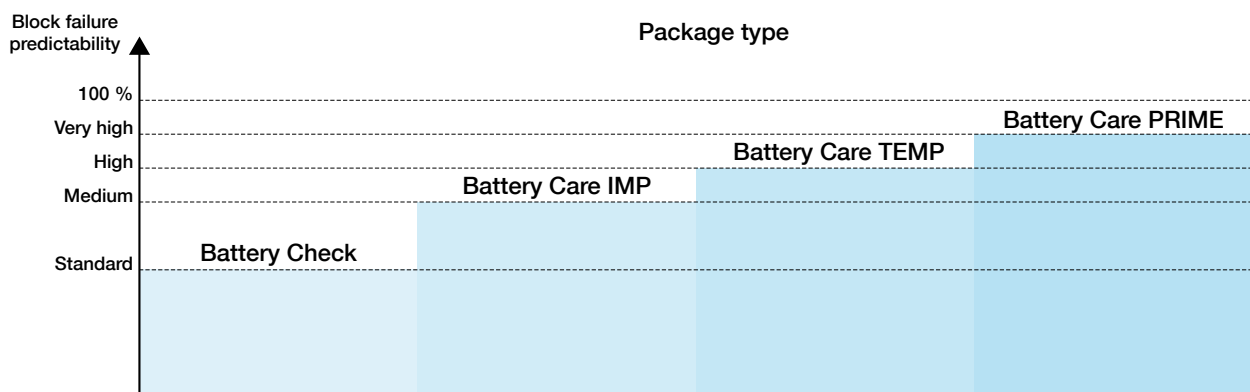
•: included.

o: optional.

Depending on the package chosen (IMP, TEMP, PRIME), a set of accurate measurements, tests and analyses will be performed on each single block across all battery strings by Socomec trained engineers.

An in-depth report will provide information about:

- the health of each single battery string/block,
- the faulty blocks that need to be replaced,
- the real "back-up time" of the battery system (optional).



SVC 007 A GB

Do you know your real back-up time ?

For various external factors, your real back-up time could be much less than the one declared by the battery manufacturer.

Thanks to a specific set of measurements and analyses, Socomec can provide you with the exact back-up time of your battery system.



Replacement of batteries

Ensuring the continued reliability of your battery system during its life-time

Prevention and service operations

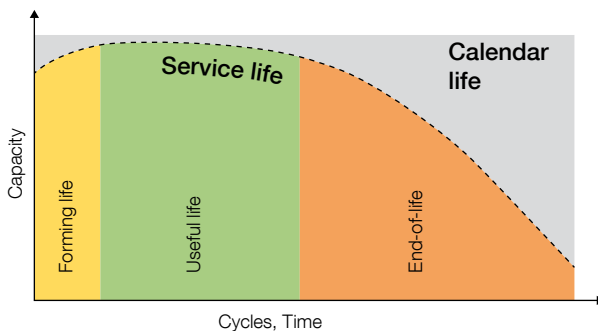
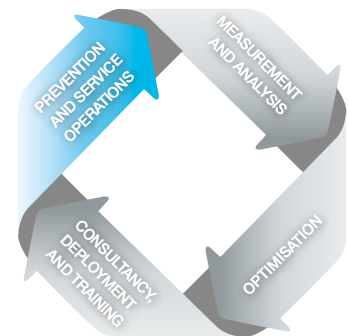


APPLI 732 A

The majority of batteries used in UPS applications (VRLA - Valve Regulated Lead Acid) normally have a calendar life of 5-10 years, depending on the local operating conditions. The calendar life is the actual time span from the date of installation until the end of life, when battery capacity drops below 80 % of its rating. VRLA batteries that are well maintained and installed in a properly conditioned environment, typically have a service life of 70 % to 80 % of their calendar life. This explains why the UPS back-up time could differ from the one declared by the battery manufacturer.

For the integrity of business continuity, it is essential to know the estimated end-of life of the battery system and to be correctly advised concerning the best time for its replacement.

The expertise of the UPS manufacturer is the best guarantee for carrying out any battery replacement operations. An expert that understands your equipment and how it is integrated into your unique working environment and who can respond effectively to any anomaly should any occur.



SVC 008 A GB

Key points

- > Checking and recalibration of battery charger setting
- > Fully secure battery discharge test
- > Battery disposal according to local regulations

Benefits

- > Prevents unexpected early shutdown of the UPS
- > Saves downtime costs
- > Advice for the optimisation of the battery back-up time



Replacement of consumables

Ensuring the continued reliability of your Critical Power equipment during its lifetime

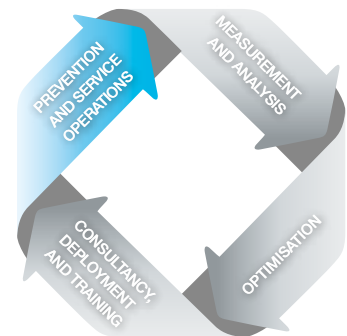
Prevention and service operations



APPLI572_A

The components of each UPS system are designed to operate reliably during the product's normal life cycle, in the electrical environments and environmental conditions stated in the installation and operating manual.

To reduce the impact of ageing on your system, which could affect the efficiency and availability of the installation, it is vital to carry out a periodic preventive replacement of parts subject to wear and tear such as fans and capacitors.



When a replacement is recommended ?

The preventive replacement is recommended by the following years of operation*:

Consumable part	Years
Fan	4
DC capacitor	5
AC capacitor	7



Fans and capacitors must be replaced by qualified personnel only. Only Socomec personnel are authorised to make recommendations for any replacement parts.

* based on operation of the unit within the manufacturer's specification (refer to installation manual). Capacitor & Fan lifespan is subject to change if environmental conditions (premises, usage or load type) are abnormal or harsh for the equipment.

Benefits

- > Prevents UPS instability and malfunctions
- > Avoids risk of system breakdown
- > Saves downtime costs



Inspection and testing visit

For the care of your transfer switches

Prevention and service operations

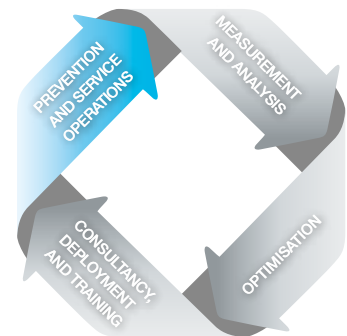


APPLI 759 A

Because of the critical nature of many applications coupled with the rigorous demands of insurers and other bodies concerned with building safety, some organisations may benefit from the reassurance of a routine inspection of their transfer switches by the manufacturer.

The Inspection and Testing Visit for ATyS comprises an annual site visit by a qualified Socomec engineer, which certifies that each transfer switch is functioning correctly.

After each inspection and testing procedure the engineer will provide a detailed report and declaration of conformity.



Key points

- > Manufacturer seal of approval
- > Latest firmware updates
- > Complete report including technical recommendations
- > Declaration of conformity

Benefits

- > Secures all critical points and put them under control
- > Reduces risk of potential undetected faults
- > Avoids costly downtime and reduces risk of operating losses



Power quality audit

Optimising the reliability, efficiency and safety of your high quality power supply

Measurement and analysis

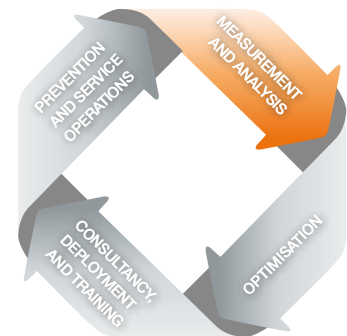


APPLI 731 A

The Power Quality Audit (PQA), is a service offered by Socomec that checks the load level and the quality of the low voltage electrical installation.

The PQA uses network analysers, designed to detect faults and deteriorations and record parameters and information over a significant period that may be of use in locating the causes of electrical disturbance.

The data is collected and analysed by Socomec engineers, who can then diagnose the problems and suggest the most appropriate solutions. This may have a beneficial impact of the installation reliability and extend the equipment lifetime.



Key points

- > Voltage variation
- > Harmonic distortion
- > Transient current
- > Neutral and earth fault, EMC environment
- > Unbalanced three-phase load
- > Power factor correction

Benefits

- > Detects recurring defects
- > Identifies disjunctions and dysfunctions
- > Anticipates deterioration of the installation
- > Extends service life of equipment
- > Improves system reliability



Thermal imaging

High resolution analysis for predictive maintenance

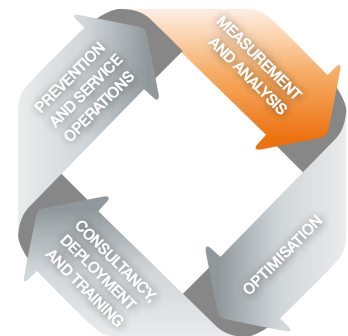
Measurement and analysis



COUV 142 A

Socomec's Thermal Imaging service involves checking the components of your electrical installation using special infrared equipment.

Infrared cameras are used to detect and photograph infrared radiations produced by warm objects, thus enabling an object's temperature to be analysed in a non-invasive way and with a high level of precision. In this way it is possible to perform a preventive diagnosis of breakdown risks by analysing the temperature of components including transformers, electrical switchboards, power factor correction systems, distribution cables, protection devices, isolators, UPS, converters, and batteries, etc.



Key points

- > Complete check-up of your low voltage installation
- > Wide range of components can be analysed
- > Identification of malfunctions that would not be possible through simple visual inspection

Benefits

- > Increased equipment availability and reliability
- > Reduced downtime costs
- > Optimised service lifetime of equipment
- > Reliable estimation of expected remaining service life of consumables
- > Increased MTBF (Mean Time Between Failures)



Electrical measurement plan

Monitoring and optimising your electrical consumption

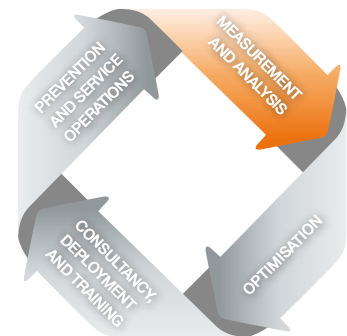
Measurement and analysis



APPLI 541 A

Socomec service experts can perform a complete 'energy efficiency' diagnosis of your electrical installation, and so identify the appropriate measurement points essential to achieving your goals.

Once done Socomec teams will help you set up the measurement instrumentation and software and also provide you with all the support services necessary to maintain your system during its entire lifecycle.



Key points

- > Audit of your energy efficiency needs
- > Integration and checking of each measurement point
- > Commissioning of the solution (hardware + software)
- > Software customisation based on your requests
- > Several levels of training modules (user training, advanced training, in-house and intercompany trainings)
- > Maintenance and software upgrades

Benefits

- > A secured installation of your energy efficiency solution
- > The guarantee of a complete system (product + software) that is immediately operational
- > An adapted solution based on your requirements
- > A reliable installation to optimise your energy consumption
- > Controlled and predictable cost savings



On-site metrology

Accurate calibration of your site metering equipment

Measurement and analysis

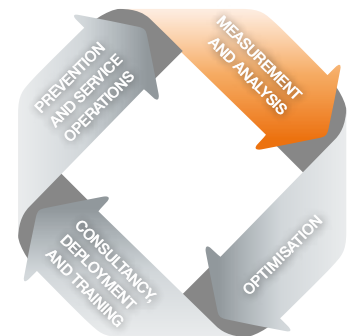
new



APPLI 627 A

The ISO 50001 standard stipulates that organisations must define and periodically review their measurement needs and ensure that the equipment used in monitoring and measurement of key characteristics provide data which are accurate, reliable and repeatable.

The aim of Socomec's calibration control service is to identify the accuracy of the electrical measurements of the site metering equipment. Socomec therefore ensures that the collected data used by the customer is trustworthy.



Key points

- > Environment analysis
- > Measurement campaigns with metrological certified measure device
- > Detailed customer report with recommendations
- > Technical advices
- > Curative actions
 - Cabling modifications
 - Measure point setting adapted to the customer environment
 - Network and communication check and testing
 - Measurement point replacement

Benefits

- > Guarantee the precision of measurements
- > Edit reports attesting the good installation and the effective operation of the equipments
- > Full compliance with ISO 50001
- > A unique service for all your measurement devices (Socomec and third-party equipments)



Continuous improvement approach

Proactive advice for your system integrity over the years

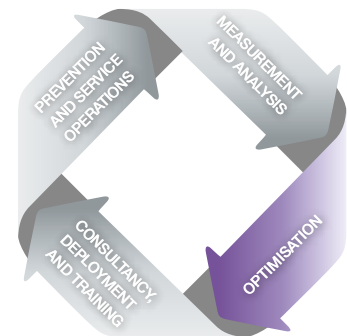
Optimisation



SYDN_248_A

Upon request every year our specialist engineers will draw up a complete report with the summary of all activities performed by our field service engineers, including an in-depth analysis of equipment performance and key recommendations for improvement.

This will help you improve your maintenance process and so optimise your resources and costs during the entire lifecycle of your electrical installation.



Key points

- > In-depth analysis of operating conditions and usage of your installation
- > Dedicated report with a summary of all operations performed
- > Periodic meetings with our experts
- > Key recommendations for improvement

Benefits

- > Optimisation of system and solutions based on environment conditions and operational constraints
- > System reliability, efficiency and safety
- > Resource and cost optimisation during the entire lifecycle



End-of-life management

Expert assistance to maximise the residual value of your assets

Optimisation

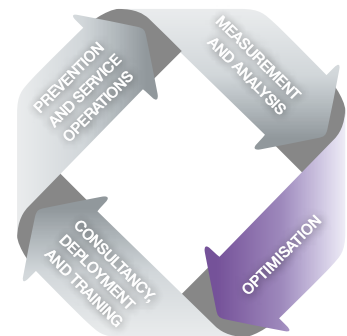


SYDN_249_A

End of Life (EoL), in the context of manufacturing and product lifecycles, is the final stage of a product's existence.

For product users, EoL also concerns the responsible disposal of the existing product, transitioning to a different product and ensuring that disruption will be minimal.

Socomec experts can manage all of these critical tasks in a secured and efficient way, from the diagnostic phase through to the eventual recycling phase.



Key points

- > Technical & economic analysis
- > Support for planning the safe removal and disposal of old products (including recycling of batteries) following the applicable environmental standards (e.g. ISO 14001, WEEE, etc.)

Benefits

- > Certified eco-friendly processes for hardware disposal, refurbishment & recycling
- > Cost optimisation
- > One point of contact during the entire lifecycle



Product renewal

Uninterrupted transition from old to new

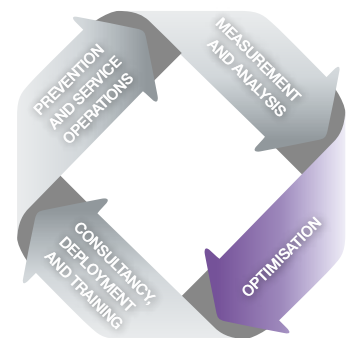
Optimisation



SYDN_247_A

Having a product renewal process is essential in order to support sustainable growth and to avoid or anticipate operational disturbances while always benefiting from the latest technology.

Socomec is on hand to accompany you in the evolution of your business and provide you with the best advice in order for your critical installation to benefit from a seamless transition or upgrade.



Key points

- > Special price conditions
- > Full consultancy and support on product refurbishment
- > Risk-free procedures during the entire replacement operation

Benefits

- > Reduced risk of downtime
- > Cutting-edge technology, always
- > Cost optimisation



Project consultancy

From design through to operation of your system

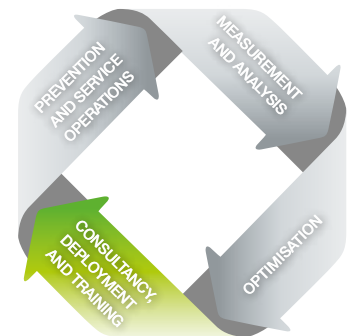
Consultancy,
deployment and training



SYDV 037 A

Critical power projects can be challenging and may require dedicated personnel with the right level of experience and seniority to manage complexity in a quick, reliable and cost efficient way.

With its teams of highly skilled design engineers, Socomec offers its manufacturing expertise to provide a range of consultancy services to support customers to achieve their project objective. Site audit, analysis, design and implementation for reliable, safe and effective power facilities in order to fully guarantee the productivity of the customer's business... anytime and anywhere.



Key points

- > Audits of preliminary installations
- > Functional analysis of your solution
- > Recommendations for implementation
- > On-site commissioning and tests
- > Tracking system implemented in the first weeks of operation

Benefits

- > All-in-one solution
- > Single point of contact
- > Manufacturer expertise
- > Better time to market



Commissioning & on-site test

Quality procedure for the startup and handover of your system

Consultancy,
deployment and training

APPLI 631 A



The commissioning of a UPS or other Critical Power supply systems covers start-up of the equipment, verification of its functions according to its design specifications, and to ensure that it is compatible with the customer's working environment.

Socomec performs the commissioning service within a quality process standard by ensuring that your equipment will be delivered in a safe, reliable and operational condition.

		PLACE YOUR CERTIFICATION HERE	
CERTIFICATION OF "SAFE AND RELIABLE INSTALLATION"			
TECHNICAL SUPPORT	_____		
HOT LINE	_____		
CONTRACT No	_____		
UPS TYPE	_____		
POWER	_____		
SERIAL NUMBER	_____		
CONFIGURATION (single/parallel)	_____		
COMMISSIONING DATE (UPS)	_____		
COMMISSIONING DATE (Battery)	_____		
VALIDITY OF THE CERTIFICATE (check renewal)	_____		
<small>SOCOMECS (www.socomec.com) declares the system has been checked and certified for high quality and availability supply and reserves the right to limit the responsibility in case the start up and the maintenance is not performed by authorised personnel*. The present certificate should be renewed on yearly basis.</small>			
<small>* Personnel is authorised only if trained by the manufacturer and enabled by a certificate released by the manufacturer. Only authorised personnel can issue Competence, Original spare parts, global diagnostic through appropriate tools, Update of the unit according to new releases.</small>			

Key points

- > Work environment inspection
- > Electrical installation check (isolator switch, cabling, circuit breakers etc.)
- > UPS internal and external check
- > System power on and set up
- > Operating test
- > Load bank test (on request)

Benefits

- > Commissioning performed with the best working standards
- > Compatibility with your work environment
- > Compliance with the various installation standards



Technical training

Certified Manufacturer Training Program

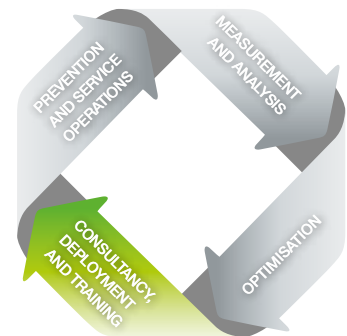
Consultancy,
deployment and training

CORPO 270 A



Socomec specialists can help you gain the necessary skills to operate your equipment efficiently and so increase its availability.

Socomec technical training courses can take place either at your premises or in Socomec's dedicated training centre.



Key points

- > Hands-on training
- > Either in Socomec factories or at customer's site
- > Open discussions and participants' feedback
- > Many types of configurations covered
- > Real-case simulations based on customer's actual installation
- > Experienced 'field-tested' trainers

Benefits

- > Autonomy to manage routine operations
- > Alarm procedures
- > Always up to date with latest technologies



General guidelines for UPS and batteries operating environment

Socomec products are accompanying with user manual that contains important and detailed instructions. It shall be followed during installation and maintenance of specific UPS and batteries. However this one page document has been developed for easy reference. For complete detailed information please refer to installation and operating manual of the concerned product.

System Description

Uninterruptible Power Supply (UPS) are designed to protect critical and process equipment by preventing blackout, brownouts, surges, sags and other irregularities that are coming from utility power. It safeguards hardware, software, data loss and minimize equipment downtime.

Thorough understanding of the system and its operating environment greatly enhances the UPS performance and availability of a power protection system as a whole.

Environment

- UPS is not designed for outdoor use. The recommended operating

temperature is 25 °C and relative humidity of < 90 % without condensation. The maximum operation altitude is 1000 m without derating.

- Battery room temperature must be controlled as per battery manufacturer recommendation.
- When provided, Socomec battery room temperature sensor shall be installed and wired.
- The circumstance surrounding the UPS should be kept clean and dust free. Keep UPS away from any kind of liquids and gases. It shall comply with a pollution index of class 2 (i.e. free from conductive dust).
- UPS protection index is IP 20, therefore ensure no possible damage from vermin.
- Do not expose the UPS to

direct sunlight or to sources of excessive heat.

- Do not let UPS/batteries to come in contact with any liquid, avoid positioning of AC unit or AC duct on top of it.
- Enough space in front, top, rear or side of the product must be there as indicated in the installation and operating manual in order to ensure proper ventilation and heat dissipation.

Electrical

- Ensure that control and power cables are not mixed together.
- Ensure proper sizing of Phase & Neutral cable along with appropriate AC protection in upstream & downstream of the UPS.
- In case of parallel installation downstream protection shall be monitored.
- Ensure proper sizing of DC cable along with appropriate and monitored DC protection (fast acting).
- Ensure that DC protection is located at battery side.
- Ensure proper setting of protection devices for having correct discrimination with the UPS fuses.
- Earth conductor should be sized at least half of the size to the phase conductor size of UPS input.

- Permanent earthing should be ready and connected to UPS before commissioning for safety reasons.
- UPS room should be adequately illuminated. Utility power point should be available near UPS for service and maintenance purpose.

Operating Personnel

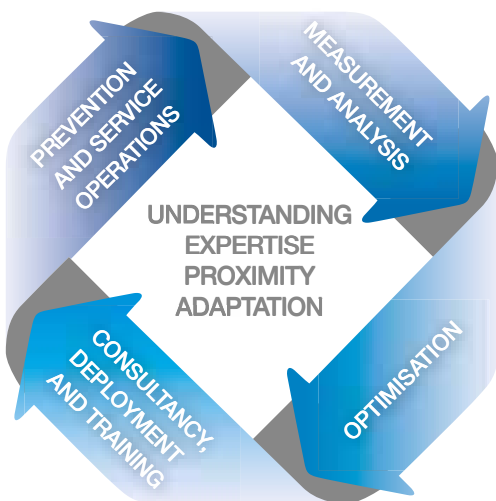
- UPS and Battery room should be locked and only authorized person is allowed to enter inside the room once installation completed.
- Operations inside the UPS must be performed by a service engineer from Socomec or from an authorized service provider appointed by Socomec.



Servicing your energy



Global services to maximise the availability and performance of your Low Voltage infrastructure



Benefit from the world-class support and expertise of an industry leading manufacturer and energy specialist.



Critical power (UPS)

- > Commissioning & maintenance
- > Monitoring & support
- > Consumables & battery care
- > Rental



Energy efficiency

- > Assessment & reporting
- > Power quality & EMC audit
- > Reactive power compensation



Consultancy

- > Training courses
- > Continuous improvement
- > End of life management

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THAILAND

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IN AMERICA

USA, CANADA & MEXICO

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