GROUP PRESENTATION

Power & Energy Performance solutions

2019

When **energy** matters

socomec
Innovative Power Solutions

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POWER CONTROL & SAFETY

Managing power and protecting persons and facilities

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CRITICAL POWER

Ensuring the availability and storage of high quality power

EXPERT SERVICES

Enabling available, safe and efficient energy

For the energy performance of your critical installations

The benefit of a specialist

Since its foundation more than 95 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.

SYDIV 419 A

1
independent manufacturer

3,500 m²
of test platforms

One of the leading independent power testing labs in Europe

10 %
of turnover invested in R&D

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

105,000
on-site interventions per year

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

MADE IN EUROPE

ENERGY SPECIALIST since 1922

THE GLOBAL COMPACT WE SUPPORT

socomec Innovative Power Solutions

Your energy, our expertise

Power conversion

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.


© Datadock

Power switching

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

Power monitoring

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

A responsible, open and committed group

for sustainable growth

The independence of the Socomec Group guarantees the control of its strategic and operational decisions, and is fully in keeping with the values forged by its family shareholding and shared by all members of staff. The company therefore has chosen to clarify the question of its responsibility with regard to its shareholders, employees, customers and partners, as well as its relation to civil society at large and its environment. The Socomec Group fully assumes this responsibility through its commitments, thereby fostering the conditions for a lasting and coherent development.

"Our family-owned and independent company is reinforced by its culture and values. Our natural assets and our innovative approach allows us to create lasting value.
We favour a mid to long term company vision that will assure sustainable growth whilst respecting people, society and the environment."

Ivan Steyert
Chairman & CEO

Our economic commitments

In keeping with the determination to assure the profitability and durability of our business as an industrial manufacturer in the field of low voltage networks, we are committed to the following:

- to optimise our growth via a specific business model :
  - by using a medium to long term approach to decide our company's strategy,
  - by limiting our debt thanks to a growth model that favours profitability and use of equity capital,
  - by ensuring corporate governance based on good business practice and with a board open to non-family directors.
- to strengthen our positioning as specialists centred on the customer and targeted applications:
  - by focusing our product offer on our customers' power performance,
  - by targeting the constant satisfaction of their expectations,
  - by investing in new technological know-how,
  - by encouraging direct contact for all sales,
  - by fostering innovation at all levels of our organisation.
- to develop our international business activities to ensure long term growth:
  - by establishing industrial plants in emerging markets whilst applying a "Centre of Excellence" policy that maintains our manufacturing jobs on all European sites,
  - by seeking the right balance in the management of our subsidiaries (centralisation / decentralisation).

ENERGY SPECIALIST SINCE 1922

THE GLOBAL COMPACT WE SUPPORT

GRAND PRIX DE L'ENTREPRISE PATRIMONIALE ET FAMILIALE

socomec Innovative Power Solutions

Our social commitments

Insisting on a fair social contract open to all cultures without discrimination, we are committed to the following:

- to institute working relations that encourage the initiative and commitment of our staff:
  - through contractual management that aims to develop relational ability,
  - through the continuous improvement of our organisations and working methods,
  - by implicating personnel in the company's success.
- to develop our human resources by maximising our people's employability:
  - through an ambitious training policy,
  - through a motivating approach to skills management.
- to respect people, their working conditions, their safety and their rights wherever we operate:
  - through a vigilant health & safety policy,
  - through open and constructive social dialogue,
  - through equal opportunities for all staff.

Our commitments to the community

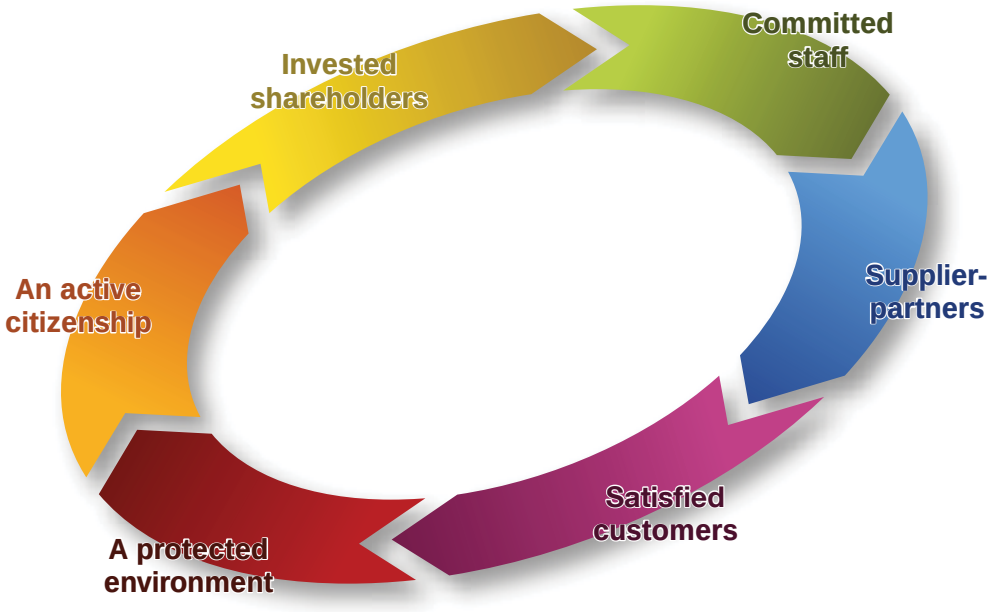
As a good-citizen company, we are committed to the following:

- to develop our business whilst respecting good ethical practice:
  - through a responsible purchasing policy,
  - through an exemplary business ethic.
- to advance our profession in its evolution and practices:
  - through active participation in professional bodies and standards authorities,
  - through policies in support of training and education that are relevant to our business activities.
- to back associative and cultural development within civil society:
  - through a few focused programmes in cultural and humanitarian sponsorship,
  - through supporting our staff in their involvement in associations outside of the company,
  - through our involvement in external initiatives in favour of sustainable development.

Our environmental commitments

Being active in helping to preserve natural resources, we are committed to the following:

- to promote energy efficiency in our sphere of business:
  - by helping our customers to reduce their energy bills,
  - by diversifying our product offer in the renewable energy sector,
  - by equipping our manufacturing and commercial sites with solar-powered installations.
- to minimise our impact on the environment and in particular our carbon footprint:
  - through ISO 14001 certification for our production sites,
  - by optimising energy consumption in our manufacturing and commercial sites,
  - through rigorous management of our industrial and office waste,
  - by taking into account the life cycle of our products.



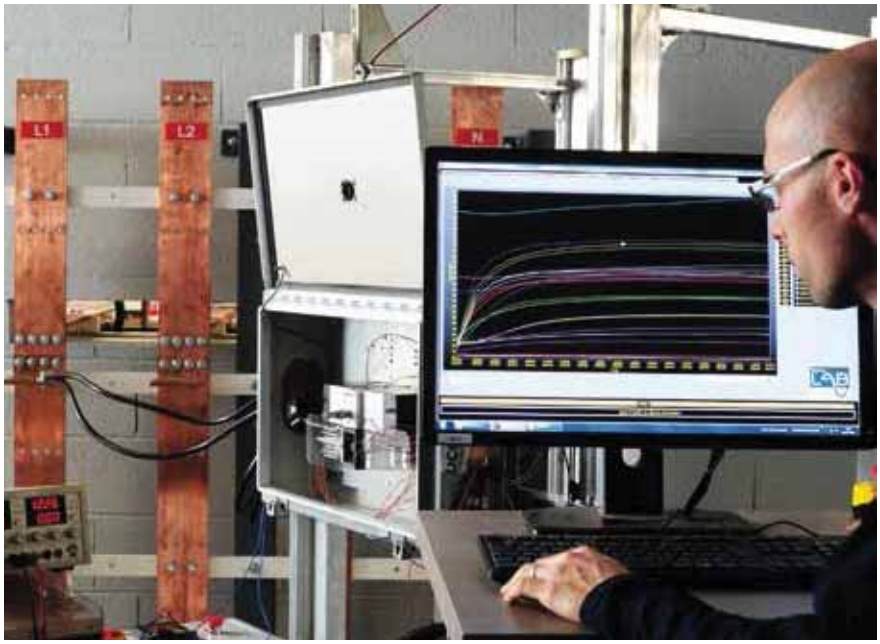
SYDV 076 A GB

The virtuous circle of responsibility shared between all company stakeholders.

A cutting-edge laboratory

the backing of an expert

Created in 1965, SOCOMEC's laboratory brings its expertise to guarantee the reliability and the conformity of our products and solutions.
Since 2015, the laboratory renamed Tesla Lab – Power Testing and Certification in 2015, offers its testing and certification services to all its customers.



CORPO 441 A

Proven expertise

Tesla Lab is an independant laboratory specialised in testing of LV switchgear, components and switchgear assemblies.

4 M€ has been invested since 2011 in this 2000 m² laboratory, where 30 experts guarantee the quality of the performed tests, making the Tesla Lab one of the most modern laboratories in Europe.

Vast range of tests

The laboratory has a 100 MVA (I_{cc} 100 kA rms 1 s) short-circuit platform, three 10 kA overload platforms and many other test facilities covering 2000 m² for:

- functional tests,
- mechanical tests: endurance,
- dielectric tests,
- environmental tests: vibration,
- Ingress Protection (IP),
- temperature rise tests up to 60 °C ambient.

International partnership

The laboratory is recognised by the major certification bodies worldwide: member of ASEFA and LOVAG, it is accredited by COFRAC, UL (CTDP), CSA (shared certification) and DEKRA (WMT).

The partnership with many international certification bodies guarantees the quality and safety requirements in each country.

Implementation of standard IEC / EN 61439

Electrical switchgear manufacturers

IEC / EN 61439 standards define the requirements of "Low voltage switchgear assemblies" as well as the tests necessary to ensure the achievement of the specified levels of performance. The compliance with these standards gives a guarantee of safety and performance to the user of the equipment

IEC/EN 61439 READY

An original manufacturer according to IEC / EN 61439 standards

Socomec offers a wide range of original manufacturer solutions complying with IEC 61439 standards.

- FLEXYS and CADRYS cabinet systems designed for distribution panel applications.
- Local switching and equipment cabinets covering requirements in power availability and safety.
- Components for integration.

Tesla Lab accredited by COFRAC

With its world-class testing facilities, the Tesla Lab can perform all of the tests required by IEC / EN 61439 standards for switchgear assemblies

We can therefore help you to:

- define a verification program,
- perform conformity tests,
- issue test reports in order to get certification from third party certification bodies (ASEFA, LOVAG, DEKRA, UL, CSA, COFRAC, ASTA…).

Expert Services your partner

enabling available, safe and efficient energy

SOCOMEC is committed to deliver a wide range of value-added services to ensure the availability of your critical installation, the safety of your site operations and the performance optimisation of your low voltage equipment during its life cycle. The expertise and proximity of our specialists are there to ensure the reliability and durability of your equipment.

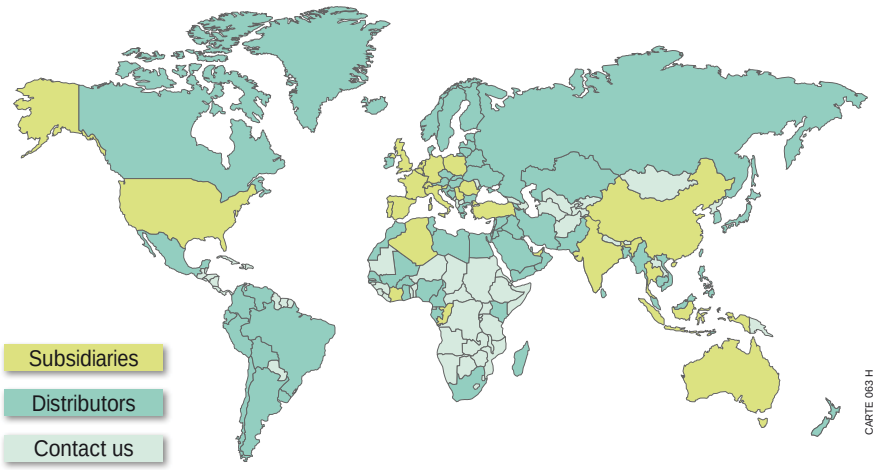
APPLI 724 A

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.



CARTE 063 H

On-site service management

- 65,000 service operations per year (mainly preventive visits).
- 98% Service Level Agreement compliance rate.

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).


APPLI 571 A


SITE 588 A


CORPO 269 A

Webspace at your service

all our solutions can be adapted to your needs

www.socomec.com

Expertise, customised solutions, products and services, downloads… All yours in a couple of clicks!

CORPO 385 A

1. **Tap into our expertise**
2. **Discover our customised solutions**
3. **Access all our products and services**
4. **Download photos, documentation, software and CAD files**

www.diris-digiware.com

Check out the dedicated site about DIRIS Digiware, our measuring and monitoring system. It gives you all the information you need, including videos, images and documentation on the most revolutionary solution on today's market.

CORPO 466 A

Follow us on social media!

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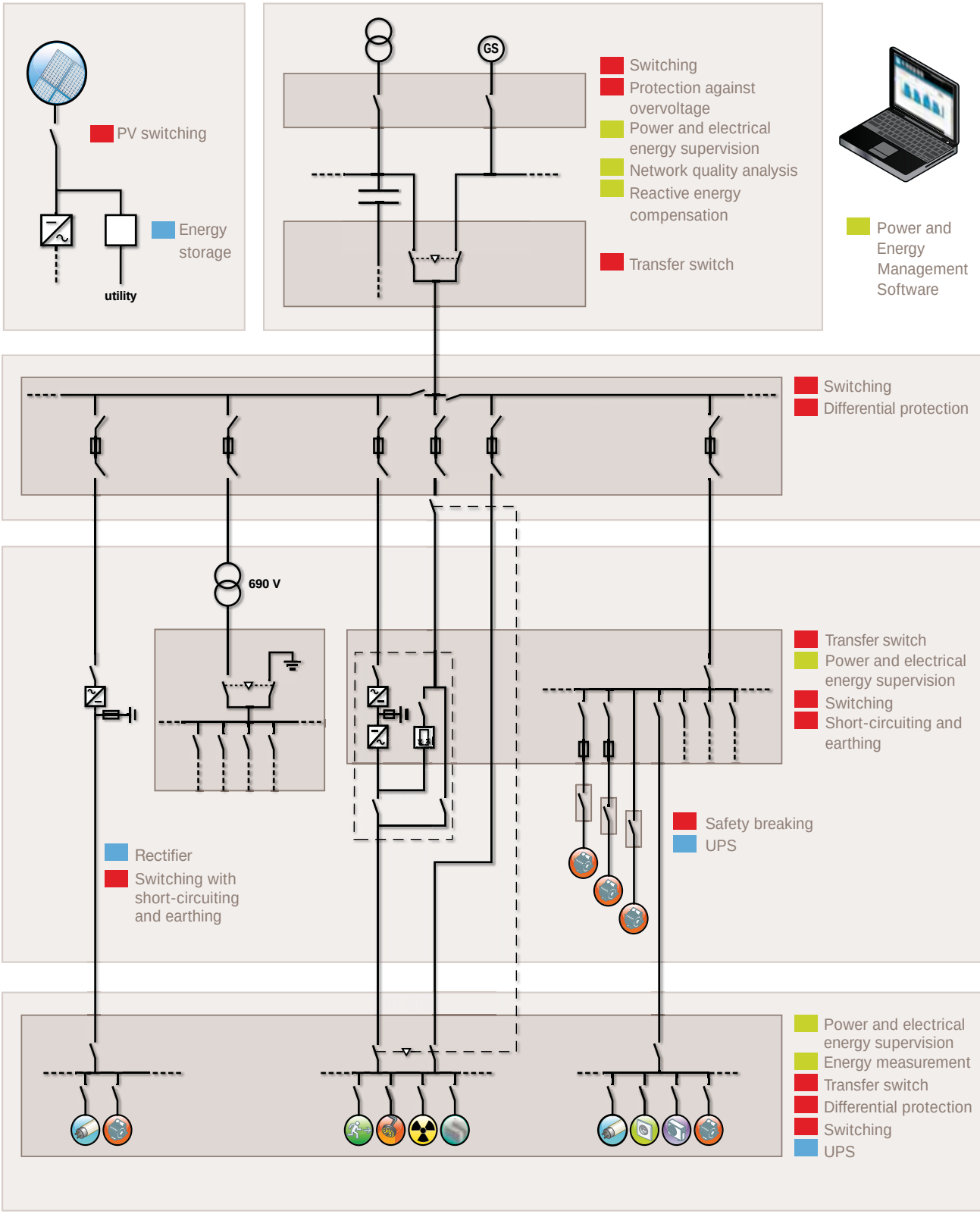
The benefits of specialist expertise

a complete offering



Symbols: *Sockets* · *Lighting* · *HVAC* · *Motor* · *Surgical lamps* · *Radiography* · *Solar panels* · *Data centres* · *Emergency lighting*

Adapted solutions

to meet your energy objectives

SMART BUILDINGS

Reducing your energy bills and energy dependency


DIRIS Digiware AC & DC multi-circuit measurement system


ENERGY MANAGEMENT software packages


ATyS automatic and remotely operated transfer switches


SUNSYS PCS² Power Conversion System and Storage

Controlling and securing your energy


DELPHYS MX UPS


COUNTIS E energy meter and DIRIS A multifunction meter (PMD)

NAVAL SHIPS

Energy conversion in environments with harsh restrictions


SHARYS IP rectifier


NETYS RT-M UPS


UPS and other customised products


SIRCO load break switches

SHOPPING CENTRES

Assuring your business continuity and visitor safety


COUNTIS E energy meter and multi-utility pulse concentrator


ATyS M automatic and remotely operated modular transfer switches


MASTERYS BC+ UPS


EMERGENCY CPSS, secure power supply for emergency systems


ENERGY MANAGEMENT software packages

PUBLIC DISTRIBUTION AND SMART GRID

Helping you to meet the challenge of energy demand and response


SUNSYS PCS² Power Conversion System and Storage


TIPI low-voltage feeder pillar with DIRIS multi-function meter


Auxiliary unit with ATyS transfer switch


SIRCO and SIDER load break switches


DIRIS Digiware AC & DC multi-circuit measurement system

RENEWABLE ENERGY

Guaranteeing the performance, security and durability of your photovoltaic facilities


SUNSYS PCS² Power Conversion System and Storage


INOSYS LBS DC load break switches with tripping function


DIRIS Digiware DC multi-circuit measurement system

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POWER PLANTS

Securing the piloting of your high-security installations and installations with seismic constraints


SHARYS IP rectifier


UPS and other customised products


DIRIS Digiware AC & DC multi-circuit measurement system

HEAVY INDUSTRY


FUSERBLOC fuse combination switches


Safety enclosure with switch disconnector for standard and explosive environments


DIRIS Q800 network analyser

TRANSPORT

Securing the continuity of your installations


ATyS Bypass 'zero outage' solution


MASTERYS IP+ Rail UPS


DIRIS A multifunction meter (PMD)

DATA CENTRES

Meeting the challenge of the availability and performance of your energy


Modular and scalable UPS system


ATYS automatic and remotely operated transfer switches


DIRIS Digiware AC & DC multi-circuit measurement system


MASTERYS GP4 UPS


DIRIS Q800 network analyser

MEDICAL FACILITIES

Assuring patient safety and the energy performance of your hospital


Green Power 2.0 UPS


ATyS automatic and remotely operated transfer switches


DIRIS Digiware AC & DC multi-circuit measurement system


MASTERYS GP4 UPS


MEDSYS medical IT cabinet

INDUSTRY

Ensuring the competitiveness of your site


MASTERYS IP+ UPS for harsh industrial environments


ENERGY MANAGEMENT software packages


Components for distribution enclosure with FUSERBLOC fuse-combination switches


DIRIS Digiware AC & DC multi-circuit measurement system


SIRCO load break switches

EXPERT SERVICES

We offer a wide range of value-added services ensuring the reliability of your equipment throughout its design life. Ask for personalised support -
see more information on p. 53 to 60.

Power Control & Safety

Managing power and protecting persons and facilities

Load break switches

Manually operated load break switches

SIRCO M

- From 16 to 125 A
- 3, 4, 6 or 8 poles


SIRCM 132

SIRCO MV

- From 100 to 160 A
- 3 or 4 poles


SIRCM 099

SIRCO

- From 125 to 5000 A
- 3, 4, 6, 8, 9 or 12 poles
- Direct operation, external front or side operation


SIRCO 456

Load break switches with visible contact position indication

SIDER

- From 125 to 3150 A
- 3 or 4 poles (N poles for SIDER ND)


SIDER 089 A

SIRCO MV

- From 100 to 160 A
- 3 or 4 poles


SIRCM 099

Remotely operated load break switches

SIRCO MOT AT

- From 125 to 3200 A
- 3 or 4 poles


SIRCO PV 107

Load break switches incorporating tripping function

INOSYS LBS

- From 100 to 800 A up to 1000 VAC
- High-performance switching in a compact footprint
- Tripping function through a shunt-trip coil or an undervoltage release
- Clear visible contact position indication
- Enhanced disconnection and isolation
- Easy to install optional motor for remote operation
- IEC 60947-3 and UL 98 certified


INOSY 002 A


INOSY 093 A

SIDERMAT

- From 1000 to 1800 A
- 3 or 4 poles
- Direct operation or external front or side operation


SDMAT 066

To find out more

For more information on the load break switches protection range, visit our website:
www.socomec.com/en/distri-load-break-switches


QRCODE 062 A GB

Safety enclosures

We also offer safety enclosures. For more information, *go to the Products and integrated solutions section on p. 26/27.*


COFF 163 - 432

socomec
Innovative Power Solutions

Fuse protection

Fuse combination switches

FUSERBLOC

- From 25 to 1250 A
- 2, 3 or 4 poles
- Direct operation or external front or side operation (centred as an option)
- Optional rear connections - Certified for IEC and BS88 fuses

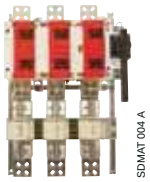
Fuse combination switches with tripping function and / or visible contact position indication

FUSOMAT

- From 250 to 1250 A
- 3 or 4 poles
- Certified for IEC and BS88 fuses and uR fuses
- Direct operation or external front or side operation
- Tripping via a shunt trip or undervoltage coil

SIDERMAT combination

- Visible contact position indication
- From 630 to 1800 A
- 3 or 4 poles
- IEC certified, NF and DIN fuses
- Direct operation or external front or side operation



Fuse combination switches to protect power semi-conductors

FUSERBLOC for uR fuses

- uR fuses from 10 to 2000 A
- 2, 3 or 4 poles
- Direct operation or external front or side operation

Fuse combination switches UL / CSA range

FUSERBLOC

- Fuses from 30 to 800 A
- 2, 3 or 4 poles
- CC, J, K fuses
- Direct operation or external front or side operation
- “Flange” type handle
- Accessories for compliance with the modifications to the standard UL 508 A and NFPA 79

Pre-load fuse combination switches

FUSERBLOC LMDC

Designed for the maintenance of loads supplied on a common DC bus

- From 63 to 1600 A
- DIN 43620 uR fuses

Pro Fuse international association

To make smart choices about electrical protection, visit the website:
www.profuseinternational.com

profuse INTERNATIONAL

QRCODE 051 A

Electronic fuse melding detector (FMD) for fusible disconnect switches

The FMD devices monitor and display the status of all type of fuses. Any operated fuse is detected and indicated per led.

Enclosed switches

We also offer enclosed solutions. For more information, *go to the Products and integrated solutions section on p. 26/27.*

To find out more

For more information on the fuse protection range, visit our website:
www.socomec.com/en/fuse-protection

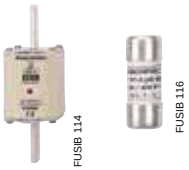
QRCODE 032 A GB

Fuse protection (continued)

Fuses

gG and aM fuses

- From 0.16 to 125 A in sizes 10 x 38, 14 x 51 and 22 x 58
- From 6 to 1250 A in sizes 000, 00, 0, 1, 2, 3 and 4
- 500 or 690 VAC
- With or without striker



BS fuses

- From 2 to 1250 A, in sizes F1 to F2, A1 to A4, B1 to B4, C1 to C3, D1
- 415, 550 or 660 VAC

uR fuses

- From 5 to 2000 A, in sizes 14 x 51, 22 x 58, 0000, 000, 00, 0, 1, 1*, 2, 3
- 690 or 1250 VAC
- With or without striker

M fuses

- From 1250 to 3200 A

Fuse holders and bases

RM / RMS

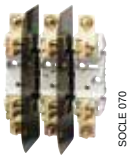
- Up to 125 A, in sizes 10 x 38, 14 x 51, 22 x 58
- 1 to 4 poles
- With or without signalisation on RMS version (14 x 51 and 22 x 58) and locking cradle on RMSC version (14 x 51)

RM CC

- Modular fuse holders for industrial class CC fuses
- Designed for UL class CC fuses
- UL 4248-4 certified
- Up to 600 VAC / 30 A
- 1P, 2P and 3P versions with or without LED indicator

Fuse bases

- From 160 to 2500 A, in sizes 00, 0, 1, 2, 3, 4
- 1, 2, 3 or 4 poles
- With or without signalisation
- Protection kit IP2 from 160 to 630 A



Transfer switching equipment

Manual transfer switching equipment

COMO C

- From 25 to 100 A
- 3 or 4 poles
- Positions: I / II, I / 0 / II, I / I+II / II


COMO 108

SIRCO M

- From 25 to 125 A
- 3 or 4 poles
- Positions: I / 0 / II


SIRCM 124

SIRCO VM1

- From 63 to 125 A
- 3 or 4 poles
- Positions: I / 0 / II, I / I+II / II


COMUT 004

Manual transfer switching equipment - MTSE

SIRCOVER

- From 125 to 3200 A
- 3 or 4 poles
- Positions: I - 0 - II or I - I+II - II


SVR 107 A

Manual bypass transfer switching equipment

COMO C Bypass

- From 25 to 100 A
- 3+6 or 4+8 poles
- Positions: I / 0 / II


COMO 108

SIRCOVER Bypass

- From 125 to 1600 A
- 3+6 or 4+8 poles
- Positions: I / 0 / II


SVR 059

SIRCOVER ATS Bypass

- From 125 to 1600 A
- 12+4 poles
- Positions: I / 0 / II


SVR 133

Enclosed transfer switches

We also offer enclosed switching solutions. For more information, *go to the Products and integrated solutions section on p. 26/27.*


COFF 298 B

ATyS Bypass solutions

From 40 to 3200 A, this solution enables the automatic transfer switch to be completely isolated for inspection while guaranteeing the continuity of the installation's power supply. For more information, *go to the Products and integrated solutions section on p. 26/27.*


TABLO 028 A

Transfer switching equipment (continued)

Remotely operated transfer switching equipment - RTSE

ATyS d M

- Modular format
- From 40 to 160 A
- 2 or 4 poles

ATyS S & ATyS d S

- From 40 to 125 A
- 4 poles
- ATyS d S: Dual power supply
- AC or DC power supply

ATyS r, ATyS d & ATyS dH

- From 125 to 6300 A
- 3 or 4 poles
- ATyS d and ATyS dH: Dual power supply

Automatic transfer switching equipment - ATSE

ATyS t M, ATyS g M & ATyS p M

- Modular format
- From 40 to 160 A
- 2 or 4 poles
- ATyS t M: transformer / transformer applications
- ATyS g M: transformer / genset applications
- ATyS p M: programmable with communication options

ATyS t, g & p

- From 125 to 3200 A
- ATyS t: transformer / transformer applications
- ATyS g: transformer / genset applications
- ATyS p: programable including metering, energy management, communication options and an integrated web server

Our dedicated Expert Services for ATyS

We offer services to ensure AtyS highest availability:

- inspection visit,
- inspection packages,
- training.

(see pages 53 to 60)

Ask for our catalogue Expert Services

Universal ATS controllers

Controllers for transfer between:

- Mains / Mains or Genset ATyS C20 / C30
- Genset / Genset ATyS C40

Added value of IEC 60947-6-1

The ATyS M, ATyS S, ATyS and SIRCOVER ranges meet or exceed the requirements of IEC 60947-6-1. This is the international standard, which governs all testing relative to:

1. the equipment specifications,
2. the equipment behaviour under normal and abnormal conditions (e.g. under short circuits),
3. the tests to ensure that the conditions have been met and the methods for carrying out these tests,
4. the information to be marked on the equipment.

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Switching and protection of photovoltaic installations

Load break switches

SIRCO MC PV

- From 25 to 40 A
- 600 and 1000 VDC
- Rear or door mounting
- IEC 60947-1 -3 & UL 508i
- Switching of up to 3 PV circuits
- Specific version available. e.g. for simultaneous switching of AC and PV


SIRCM-PV 010

SIRCO MV PV

- 63 and 80 A
- 1000 VDC


SIRCM-PV 010

SIRCO PV

- From 100 to 3200 A
- 1000 and 1500 VDC
- Switching of up to 4 PV circuits


SIRCO-PV 058

SIRCO MOT PV

- From 200 to 3200 A
- 1000 VDC
- UL certified up to 400 A


SIRCO-PV 016

SIRCO PV UL

- From 100 to 2000 A
- 1500 VDC IEC 60947-3
- 1000 VDC UL98B
- Switching of up to 4 PV circuits


SIRCO-PV 059

Load break switches incorporating tripping function

INOSYS LBS

- From 100 to 1250 A, up to 1500 VDC
- High-performance switching in a compact footprint
- Tripping function through shunt-trip coil or undervoltage release
- Clear visible contact position indication
- Enhanced disconnection and isolation
- Modular solution
- Easy to install optional motor for remote operation
- IEC 60947-3 and UL 98 certified


INOSY 001


INOSY 056

Switching and protection of photovoltaic installations (continued)

Fuses

gPV fuses

- 1000 VDC: From 1 to 600 A in sizes 10 x 38, 14 x 51, T1, T2, T3, T2XL and 3L
- 1500 VDC: From 2 to 400 A in sizes 10 x 85, 1XL and 3L
- UL available up to 30 A


FUSIB PV 026


FUSIB PV 018

Fuse disconnectors and bases

RM PV

- 1 pole
- From 1 to 30 A, in sizes 10 x 38 and 14 x 51
- IEC and UL version available


RM-PV 004


RM-PV 005

PV fuse bases

- From 32 to 600 A
- 1 pole
- Size 1 to 3L
- Insulating voltage 1000 or 1500 VDC
- Protection kit IP 2X size option 1


SOCLE PV 002


SOCLE PV 004

Protection against overvoltages

SURGYS G51 PV

- Type 2 surge protection device
- 500, 600, 800, 1000 and 1500 VDC
- Maximum discharge current of 40 kA


SGYS 076

Photovoltaic enclosures

- Parallel connection, protection and isolation of the photovoltaic strings
- Connection to the photovoltaic inverter
- Protection against overvoltage

RJB enclosures

- For residential applications
- From 1 to 2 strings
- DC or DC / AC IP65 enclosures
- From 600 to 1000 VDC
- From 1 to 2 MPPT
- Operational safety


COFF-PV 070

BJB enclosures

- For building applications
- From 3 to 6 strings
- DC or DC / AC IP65 enclosures
- From 600 to 1000 VDC
- From 1 to 2 MPPT
- Operational safety


COFF-PV 067

FJB / IFB enclosures

- For solar parks
- From 8 to 32 strings
- 1000 VDC voltage
- Operating temperature up to 60 °C
- Monitoring of the strings and photovoltaic installation


COFF-PV 018


COFF-PV 023

Pro Fuse international association

To make smart choices about electrical protection, visit the website:
www.profuseinternational.com

profuse INTERNATIONAL

QRCODE 051 A

socomec Innovative Power Solutions

Electronic protection

Earth Leakage protection

RESYS M40/RESYS M40R
RESYS P40

- Type A
- Modular or flush-mounted unit

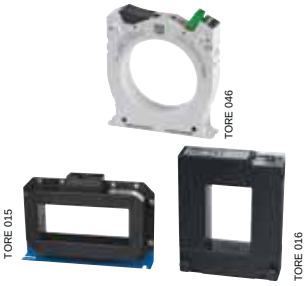
Core balance transformers

Circular closed core balance transformers (ΔIC)

- Diameter from 15 to 300 mm
- Different fixing types
- Patented cable locator

Rectangular closed transformers

Rectangular split-core transformers



Protection against overvoltages

SURGYS G100-F/G140-F/
G40-FE/G50-FE

- Surge protection at the top of low voltage installations

SURGYS G70/D40/E10

- Surge protection for distribution and equipment protection

SURGYS RS-3/mA-3/TEL-3

- Low current surge protection to protect equipment connected to telecommunication and data transmission networks
- Available in 1 or 2-pair versions

To find out more

Download the product sheet for core balance transformers:
www.socomec.com/en/fiche-tores-differentiels

QRCODE 039 A GB

Enclosures and accessories

Insulating enclosures

COMBIESTER

- Flexible system
- Monobloc enclosures: 4 models from 130 x 80 to 255 x 180 mm
- Enclosure assembly kits: 15 models in increments of 90 mm, from dimensions of 180 x 135 to 720 x 540 mm
- Casing with transparent or opaque cover (polycarbonate)


COMBI 001

MINIPOL

- 7 models from 300 x 250 x 140 to 800 x 600 x 300 mm
- Casing with transparent (polycarbonate) or opaque (fibre glass reinforced polyester) door


MINP 003

MAXIPOL

- 16 models from 500 x 500 x 312 to 1000 x 1000 x 420 mm
- Casing in polyester with opaque door with hinges


MAXIP 027

Sheet metal enclosures

CADRYS enclosures

- ST / SH enclosures, sheet steel
  - 51 models, heights from 300 to 1200 mm
  - 1 or 2 solid doors opening to 120°
- SP enclosures, sheet steel
  - 17 models, heights from 500 to 1200 mm
  - Transparent door with RAL 7035, polyester epoxy paint
- Brushed stainless steel SI enclosures:
  - 22 models, heights from 300 to 1200 mm
  - 1 or 2 solid doors opening to 120°


KDRYS 419

CADRYS cabinets

- Monobloc design: 15 models, heights from 1600 to 2000 mm
- Modular design: 96 models, heights from 1600 to 2200 mm
- Solid or transparent door
- Solid face plates or for modular devices


KDRYS 418
KDRYS 432

Aluminium mounting systems

BLOCAL

- 10 types of profile in 3 lengths
- Very full range of accessories enabling frame mounting and assembling
- Range of standard or custom-made frames


BLOCA 004

Integrated PC-workspace

CADRYS AE control desks

- Monobloc or upgradeable design
- 7 models, widths from 600 to 1600 mm
- 24 possible combinations


KDRYS 357
KDRYS 360

To find out more

To find out more about enclosures and accessories, visit our website:
www.socomec.com/en/enclosures

QRCODE 042 A GB

Modular system

Solutions for electrical panels composed of modular CADRYS DELTA cabinets with their various accessories and range of mounted and cabling accessories (copper busbar, busbar supports).


SISMO 009 A

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Enclosures and accessories (continued)

Copper busbars

- Solid or insulated flexible busbars
- Perforated busbars
- Insulated braids
- Threaded busbars
- Connection accessories
- Connection without drilling


BARRE 011

Busbar support systems

- Mounting of flat, edgwise, stair-type or tilted busbars
- Unipolar or multipolar supports (3 or 4 pole)
- Insulators
- Admissible amperage up to 7000 A


SB 123


SB 214


SB 084

Distribution blocks

- Range of distribution blocks designed to be connected to Socomec switches
- From 80 to 630 A
- 1, 2, 3 or 4 poles
- Terminal lug or cable clamp connection
- Row distribution blocks for modular applications


REPAR 020

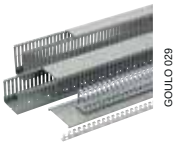
Power terminals

- From 250 to 630 A
- Multi-poles (3 or 4 poles)
- Connection using lugs, cable clamps or cage terminals


BORN 016

Cable trunking

- 3 models: rigid, flexible adhesive and halogen-free
- 29 sections


GOULO 029

Mounting rails and profiles

- 21 types of profile with or without perforation
- Material: zinc-bichromate or galvanised, stainless steel or aluminium


ELCHA 039

Thermal regulation

- Ventilation
- Wall-mounted air conditioning system
- Roof-mounted air conditioning system
- Heating systems
- Thermostats and fans


VENTI 013


VENTI 036

Integrated products and solutions

Enclosed switches

Enclosed load break switches

- IEC 60947-3, IEC 61439 & UL certified
- Steel, stainless steel, polyester & polycarbonate enclosures
- Equipped with COMO, SIRCO, SIRCO M load break switches with positive break indication
- From 16 to 1250 A
- 3, 4, 6 and 8 poles
- Top / bottom or bottom / bottom connection
- Front or side operation


COMO ENC 001


COFF UL 034

Enclosed fuse combination switches

- IEC 60947-3, IEC 61439 & UL certified
- Steel, stainless steel, polyester & polycarbonate enclosures
- Equipped with FUSERBLOC
- From 50 to 1600 A
- 3, 3 + N and 4 poles
- Front or side operation
- Top / bottom or bottom / bottom connection
- Positive break indication


COFF 320 - 284

To find out more

To find out more about enclosures and accessories, visit our website:
www.socomec.com/en/local-safety-enclosures

QRCODE 144 A GB

Safety enclosures

Normal atmospheres

- IEC 60947-3 & IEC 61439
- Sheet metal or polyester enclosures
- Fitted with visible contact position indication SIDER switch
- From 50 to 1600 A
- 3, 4 and 6 poles
- Double door locking
- Front or side operation
- Top / bottom or bottom / bottom connection
- Mechanical flag indicator


COFF 432 - 502

Explosive atmospheres (ATEX)

Zone 21 and 22 (dust) as per European Directive ATEX 94/9/CE - Category 2

- IEC 60947-3 & IEC 61439
- Sheet metal enclosures
- Fitted with visible contact position indication SIDER switch
- From 50 to 630 A
- 3, 4 and 6 poles
- Side operation
- Double door locking
- Mechanical flag indicator
- Bottom / bottom connection
- Factory option: fitting of push-buttons, indicators and polyamide or brass cable gland

COFF 313

INOSYS LBS

- From 100 to 800 A
- High-performance switching in a compact frame
- Clear visible contact position indication
- Enhanced disconnection and isolation


INOSY 111

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Integrated products and solutions (continued)

Enclosed transfer switching equipment

Manual source transfer switches - MTSE

- IEC 60947-6-1, IEC 61439 & UL certified
- Steel, stainless steel, polyester & polycarbonate enclosures
- Equipped with SIRCO M, SIRCO VM1, SIRCOVER or SIRCOVER Bypass transfer switches
- From 25 to 3200 A
- 3 or 4 poles
- Front operation
- Double door locking
- A wide range of options & accessories


COFF 293 - 298 - 299

Remote-controlled (RTSE) or automatic (ATSE) source transfer switching equipment

- Sheet metal, polycarbonate or polyester enclosures
- Equipped with ATyS M, ATyS or ATyS S transfer switches
- From 40 to 3200 A
- 2 or 4 poles
- A wide range of options & accessories


ATYSM 251 - COFF 366 - 306

ATyS Bypass

The high availability switching solution

- IEC 61439 certified
- Sheet metal enclosures or cabinets
- Equipped with a load break switch (SIRCO M or SIRCO), one or two Manual transfer switches (SIRCO M or SIRCOVER) and an automatic transfer switch (ATyS M or ATyS)
- From 40 to 3200 A
- 4 poles
- 2 versions: single or dual line bypass
- Separation & protection of the various units
- Operation to bypass mode with no break
- Many options available


TABLO 035 - 038

To find out more

To find out more about enclosures and accessories, visit our website:
www.socomec.com/en/enclosed-solutions

QRCODE 061 A GB

The solution for healthcare applications

MEDSYS

- IEC 61439 certified
- 4 versions of IPS (Isolated Power Supply) for all electrical architectures
- From 4 kVA to 2 x 10 kVA
- Wall mounting & floor standing version
- Integrated insulation monitoring device
- Integrated earth fault detection
- Equipped with transfer switch equipment (STATYS & ATyS)
- Many options available


GAMME 610 A

Our dedicated Expert Services for MEDSYS

We offer services to ensure MEDSYS highest availability:
- commissioning,
- training,
- inspection visit,
- maintenance packages.

(see pages 53 to 60)

Ask for our catalogue Expert Services

Customised design and solutions

We can offer you support at the various stages of your project:
- Analysis of specifications and needs
- Definition of architectures and solutions
- Design, manufacturing, validation, testing and certification of equipment
- Commissioning assistance
- Training in use and maintenance.

For any specific request, please contact your Socomec branch.

A few examples of specific designs


TABLO 025 A


COFF 145 C

Energy Efficiency

Managing the energy performance of buildings

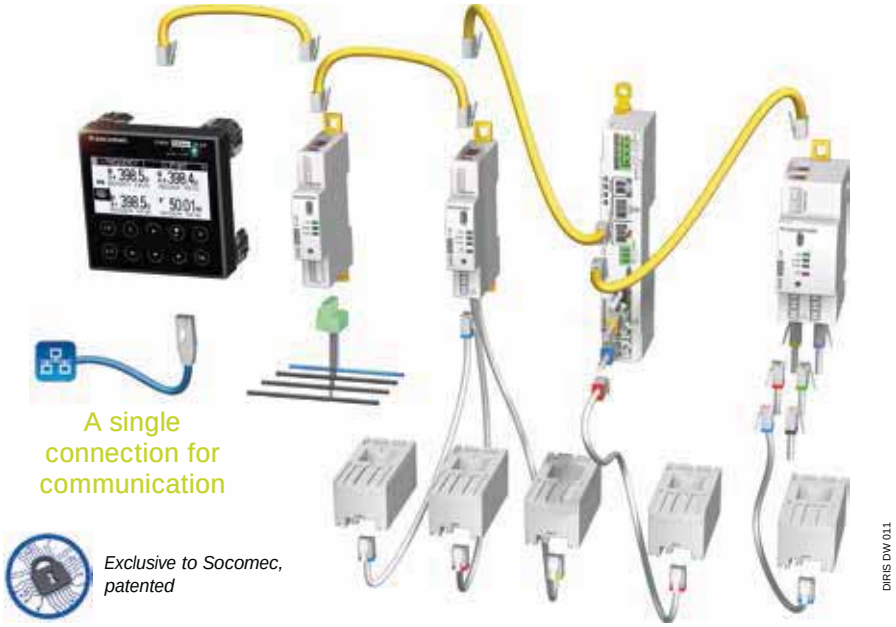
Measurement & energy management

Multi-circuit Power Monitoring devices

DIRIS Digiware

Build your system:

A single centralised control unit + A single voltage measurement module (U) + Current measurement modules (I) + Current sensors



- Flexible
  - Shared functions
  - Installation of components close to the load
  - Compact design
  - Wide choice of current sensors
- Multi-circuit
  - Ability to monitor several circuits via a single current measurement module due to independent current inputs
- Accurate
  - Class 0.5 as per standard IEC 61557-12 for the global measurement chain from 2% to 120% of nominal current
- Plug & Play
  - RJ12 current sensor connection and RJ45 interconnection of modules (fast, reliable, intelligent)
  - Auto-configuration of parameters
- Cost effective
  - Up to 30% saving compared to existing metering technology
  - Implementation in a quarter of the time vs existing technologies

Control and power supply interfaces

DIRIS Digiware D display

- Centralised view of the data from the DIRIS Digiware voltage and current modules
- Power supply to the DIRIS Digiware modules
- Access to the data over Ethernet (DIRIS D-50) or RS485 (DIRIS D-40)

DIRIS Digiware C-31 interface system

- Centralises all of the system's data
- Allows to provide all information to energy management software via RS485 Modbus output

Our dedicated Expert Services for DIRIS Digiware

We offer services to improve your energy performance:
- commissioning,
- training.

(see pages 53 to 60)

Ask for our catalogue Expert Services

Associated current sensors with DIRIS Digiware and DIRIS B-30

Various types of current sensors can be connected:

- ***TE*** Solid current sensors
  - Suitable for new installations
  - Match the pitch of protective devices
  - 5 to 2000 A
- ***TR*** Split-core current sensors
  - Suitable for existing installations
  - 25 to 600 A
- ***TF*** Flexible (Rogowski) current sensors
  - Suitable for existing installations with space restrictions or with high-intensity currents
  - 150 to 6000 A

TE *TR* *TF*

IEC 61557-12 certification

A precise reference, IEC 61557-12 is the common denominator for all PMDs (Performance Monitoring Devices), devices designed to measure and monitor electrical parameters in distribution networks.

Respecting this standard ensures your equipment offers a high level of performance.

CEI/IEC 61557-12

Measurement & energy management (continued)

Multi-circuit Power Monitoring devices (continued)

Voltage measurement module

1 single voltage measurement point for the entire system.


DIRIS DW 005

DIRIS Digiware U-10
- Metering

DIRIS Digiware U-20
- Metering
- Voltage monitoring (THD)

DIRIS Digiware U-30
- Metering
- Voltage monitoring (THD)
- Quality analysis (EN 50160 + alarms)

Current measurement modules

Allows you to allocate the loads to be measured or to monitor independent current inputs.
For example 1 three-phase load and 3 single-phase loads.


DIRIS DW 004

DIRIS Digiware I-3x
- 3 current sensor inputs
- I-30: metering
- I-31: metering and load curves
- I-33: metering and voltage monitoring (THD)
- I-35: metering, load curves, voltage monitoring (THD), analysis (min / max) and alarms


DIRIS DW 007

DIRIS Digiware I-4x
- 4 current sensor inputs
- I-43: metering and voltage monitoring (THD)
- I-45: metering, load curves, voltage monitoring (TDH), analysis (min / max) and alarms


DIRIS DW 008

DIRIS Digiware I-6x
- 6 current sensor inputs
- I-60: metering
- I-61: metering and load curves

Wireless Power Monitoring device

DIRIS B-30
- Radio frequency (wireless) or via RS485
- Multi-circuit up to 4 current measurement inputs
- Plug & Play RJ12 current sensor connection
- Accurate as per standard IEC 61557-12:
  - Class 0.5 from 2 % to 120 % of nominal current for the global measurement chain (associated with TE or TF current sensors)
  - Class 0.2 for the meter alone.


DIRIS B 009


DIRIS B 010

The DIRIS B-30 can be connected to:
- a DIRIS G gateway for centralisation and communication of data wirelessly or via RS485 and Ethernet
- optional modules to communicate in BACnetIP, BACnet MSTP and PROFIBUS, DP protocol. Digital or analogue input / output or temperature input modules can also be connected

Associated current sensors with DIRIS Digiware and DIRIS B-30

Various types of current sensors can be connected:
- ***TE*** Solid current sensors
  - Suitable for new installations
  - Match the pitch of protective devices
  - 5 to 2000 A
- ***TR*** Split-core current sensors
  - Suitable for existing installations
  - 25 to 600 A
- ***TF*** Flexible (Rogowski) current sensors
  - Suitable for existing installations with space restrictions or with high-intensity currents
  - 150 to 6000 A


DIRIS T 002

TE


DIRIS T 010

TR


DIRIS T 015 A

TF

Remote screen DIRIS D-30

For displaying measurement and metering data.


DIRIS D 001

Measurement & energy management (continued)

Single-circuit energy meters

Single-phase energy meters

Class 1 in accordance with IEC 62053-21

Connection from 32 A to 40 A

***COUNTIS* E00/E02/E03/E04/E05/E06**

- Pulse output
- Dual tariff (except E00 and E02)
- Modbus communication (E03, E04)
- M-Bus communication (E05, E06)
- MID certification (E02, E04, E06)

Connection from 63 A to 80 A

***COUNTIS* E10/E11/E12/E13/E14/E15/E16/E17/E18**

- Pulse output
- Dual tariff (except E10)
- Modbus communication (E13, E14)
- M-Bus communication (E15, E16)
- Ethernet (E17, E18)
- MID certification (E12, E14, E16, E18)

Three-phase energy meters

Class 1 in accordance with IEC 62053-21

Connection from 63 A to 80 A

***COUNTIS* E20/E21/E22/E23/E24/E25/E26/E27/E28**

- Pulse output
- Dual tariff (except E20)
- Modbus communication (E23, E24)
- M-Bus communication (E25, E26)
- Ethernet (E27, E28)
- MID certification (E22, E24, E26, E28)

Connection up to 100 A

***COUNTIS* E30/E31/E32/E33/E34/E35/E36**

- Pulse output
- Dual tariff (E31, E32)
- 4 tariffs (E33, E34, E35, E36)
- Modbus communication (E33, E34)
- M-Bus communication (E35, E36)
- MID certification (E32, E34, E36)

Connection via CT / 5 A

***COUNTIS* E40/E41/E42/E43/E44/E45/E46**

- Pulse output
- 4 tariffs (E43, E44, E45, E46)
- Modbus communication (E43, E44)
- M-Bus communication (E45, E46)
- MID certification (E42, E44, E46)

***COUNTIS* E50/E53**

- Dual tariff
- Modbus communication (E53)

MID certification

What are the advantages of a B+D module MID meter EN50470?

- It guarantees a high-quality product.
- It allows electricity to be resold.
- It guarantees a standardised measurement accuracy.

COUNTIS and *DIRIS* management software

- **Webserver** (included in all Ethernet optional modules): monitors and uses data remotely and without the need for special software, via a web browser.
- **Easy Config**: configures COUNTIS E, COUNTIS ECi and DIRIS A simply and quickly on a PC.
- **Analysis**: analyses data to improve the reliability of your electrical installation.

Easy Config and Analysis are available to download from the SOCOMEC website: www.socomec.com

Energy metering for your existing installations

Allows you to easily add metering points in electrical enclosures which are very restricted in terms of integration.

- MID certification COUNTIS E42R
- MID + Modbus communication COUNTIS E44R

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Measurement & energy management (continued)

Multi-utility pulse concentrators

COUNTIS Eci2 & Eci3

- Up to 9 multi-utility energy meters: 7 logical inputs + 2 analogue inputs
- Available load curves for each of the 9 inputs
- RS485 communication through Modbus protocol
- Maximum customisation (choice of the measuring unit, currency, etc.)

Single-circuit multifunction meters (PMD)

DIRIS A10/A14 & A20

- Multi measurement (electrical instantaneous values)
- Metering (energy consumptions)
- Alarm management
- DIRIS A10: 4 modules DIN rail mounting
- DIRIS A14: 4 modules, MID, rail or door mounting
- DIRIS A17: 72 x 72 mm door mounting
- DIRIS A20: 96 x 96 mm door mounting

DIRIS A40/A41/A60 & A80

- 96 x 96 mm door mounting
- Multi measurement
- Metering
- Power management (load curves, etc.)
- Harmonic analysis up to level 63
- DIRIS A41 (designed for highly distorted networks): neutral current measurement
- DIRIS A60: detection of events (voltages/currents) and storage of ½ period RMS curves
- DIRIS A80: A60 + monitoring of differential currents - RCM (Residual Current Monitoring)
- According IEC 61557-12 (power monitoring devices)

Network analyser

DIRIS Q800

- Acquisition, processing and backup module for measurements, harmonics, alarms, load curves, dips, outages and overvoltages and vector diagrams
- Analysis of the energy quality according to IEC 61000-4-30
- Class A according to IEC 62586-1/2
- Measure of the differential current
- GPS synchronisation
- Colour touch screen panel
- Connectivity via Ethernet
- RS485, USB and wifi port
- Integrated webserver

IEC 61557-12 certification

A precise reference, IEC 61557-12 is the common denominator for all PMDs (Performance Monitoring Devices), devices designed to measure and monitor electrical parameters in distribution networks.

Respecting this standard ensures your equipment offers a high level of performance.

CEI/IEC 61557-12

Optional modules

- 2 pulse outputs
- JBUS/MODBUS RS485 communication
- PROFIBUS/DP communication
- Ethernet with webserver
- Temperature
- Memory (DIRIS A40/A41)
- 2 analogue outputs
- 2 configurable inputs + 2 configurable outputs

Our dedicated Expert Services for DIRIS Q800

We offer services to improve your energy performance:

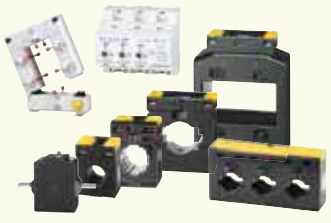
- commissioning,
- power quality audit,
- assessment of the data readings (reports, maintenance schedules, recommendations),
- training.

(see pages 53 to 60)

Ask for our catalogue Expert Services

Current transformers

Socomec offers a complete, high-performance range of current transformers capable of meeting all the requirements of your installations.



TRAFO 017 - 018 - 021 - 024 - 028 - 077 - 008 - 108

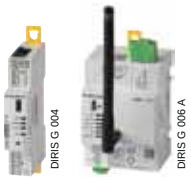
Measurement & energy management (continued)

Communication gateways

DIRIS G
WEBVIEW embedded web server

Two versions are available:

- Power Monitoring: real time measurements and alarms (all versions)
- Power & Energy Monitoring (DIRIS G-50 and G-60):
  - real time measurements and alarms
  - historical of measurements and analysis of consumptions
- Connected metering and measurement devices are automatically addressed and detected by the DIRIS G gateway
- Wireless communication (DIRIS G-40 and G-60)
- Automatic clock synchronisation (SNTP)
- Synchronisation of connected devices.
- Automatic data export (FTP)
- Warning messages in case of alarms (e-mail SMTP)
- Automatic recording and storage of measurements and consumption data



Our dedicated Expert Services

We offer services to fully integrate all your devices in your network:

- project engineering,
- complete range of customised solutions,
- technical site audit,
- solution specification,
- commissioning,
- maintenance,
- training.

(see pages 53 to 60)

Ask for our catalogue Expert Services

Datalogger

DATALOG *H60* and *H80*

- Remotely and automatically read multi-fluid energy meters
- Centralise and send secured data from a single or multi-site to a monitoring software (GPRS, 2G, 3G, Ethernet)

Data collection via different links:

- Modbus on RS232, RS485 or Ethernet port
- M-Bus or Wireless M-Bus radio receiver
- Analogue or pulse inputs

ARF868 radio modem

- Convert data from a serial link into a radio frame (frequency range 863 - 870 MHz)
- Long range from 1 to 20 km
- Communication RS232, RS485 or USB
- The product can be configured as a transmitter, receiver or repeater

Radio communication interfaces

Wireless M-Bus AMR
(Automatic Meter Reading) modem

- Collect automatically energy data from water and gas meters
- Long range: up to 1 km
- 2 pulse inputs
- 12 years back-up time

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Measurement & energy management (continued)

Software suite

WEBVIEW - Real time monitoring of power and consumption

Web server is embedded in the DIRIS G communication gateway.

- Monitor up to 32 devices
- Measure the parameters of your installation in real time
- Access measurement, monitoring and consumption distribution

2 versions available:

Power Monitoring

Monitor

- Automatic detection of connected devices
- Summary of the parameters measured on the electrical network and the loads
- Measurements of voltage, current, power, power factor, harmonic distortion rate (THD) and harmonics per rank
- Display of average / instantaneous values with min / max limits depending on the devices
- Total and partial energy consumption per load
- Input / output status
- Synchronisation of device clocks
- Graphical or table representation

Alarm

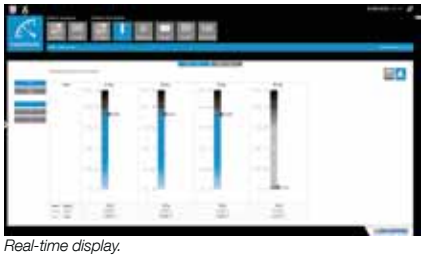
- Alarms for overloads, events and input status changes
- Display of alarm history
- Sorting by type, nature, criticality or state
- Alarm displayed on the main page
- Sending of alarm by email (SMTP)

Power & Energy Monitoring

Display

- Historical measurements and consumption (one year of data)
- Distribution of consumption by usage and by utility (water, gas, electricity, etc.)
- Export of consumption data in CSV format

Power & Energy Monitoring also includes the “Monitoring” and “Alarm” functions.


SOFT 027 A GB

Real-time display.


SOFT 025 A GB

Alarm history.


SOFT 036 A GB

Consumption history.

Measurement & energy management (continued)

Software suite

N'VIEW - Online energy management service

Cloud service for energy management performance.

- Analyse multi-fluid and multisite consumption
- Collect data from all leading commercial gateways

Our dedicated Expert Services for N'VIEW

We offer services to improve your energy performance:

- commissioning,
- customisation of the application,
- flexibility.

(see pages 53 to 60)

Ask for our catalogue Expert Services

Energy management

Dashboard

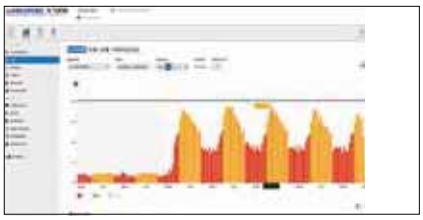
- Display collected data
- Multiple viewing options (widgets) suitable for the type of data
- Customisable dashboards
- Graphic presentation of the scope of analysis (hierarchy, plan of sites and buildings, industrial process diagram)

SOFT 043 A

View.

Analyse

- Analysis and comparison of multi-fluid energy consumption according to multiple criteria (timeframe, site, fluid)
- Analyse energy costs
- Tariff simulation and comparison
- Break down your energy bills depending on the provider
- Set up indicators for measuring energy efficiency
- Manage external influence factors (temperature, surface, occupancy rate, production)
- Measure and verify according to the IPMVP method
- Manage and archive customizable queries



SOFT 047 B

Analyse.

Report and Alarm

- Automatically generated or on-demand, customizable reports
- Programming multiple alerts (loss of data, thresholds, overrun costs, excess consumption)
- Manage and log alerts

SOFT 046 A

Alert and communicate.

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Measurement & energy management (continued)

Power Factor Correction system

COSYS

- Fixed, automatic and static compensation
- From 10 to 900 kvar
- Reinforced & Heavy duty capacitor
- Available with harmonic filters (189 Hz, 135 Hz, 210 Hz)
- Available with switch
- On demand products (specific IP, voltage, etc.)

Sensors

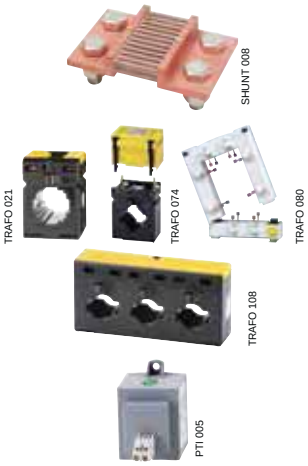
Shunt

- From 1 to 6000 A, at 100 mV
- Class 0.5

Current transformers

- From 5 to 5000 A
- Coiled primary, routing of cables and busbars, and split-cores
- Three-phase version
- Class 0.5 - 1 - 0.2S
- Transformers with integrated or snap-on converter

Current transformer automatic short circuit device



Indicators and transducers

- Digital and analogue in DIN, Rotex and modular unit
- Ammeters and voltmeters, AC / DC
- Frequency meters, phase-meters and wattmeters
- Digital multi-indicators: MULTIS LMp and LMg (modular) and L72 (72 x 72)
- Hours run meters
- Phase changeover switches
- Programmable transducers

Our dedicated Expert Services for COSYS

We offer services to ensure COSYS highest availability:

- product definition after in situ measurement,
- commissioning,
- warranty extension,
- maintenance packages,
- training.

(see pages 53 to 60)

Ask for our catalogue
Expert Services

To find out more

For more information about our measurement solutions, visit our website:
www.socomec.com/en/current-transformers

QRCODE 034 A GB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Innovative Power Solutions
GP4

Critical Power

Ensuring the availability and storage of high quality power

Uninterruptible Power Supplies

Single-phase UPS

NETYS PL


GAMME 255 A

- 600 and 800 VA
- RoHS compliant
- VFD “offline”
- For over / under the desk or floor installations
- British, French or German / Italian output sockets type available
- 4 sockets protected against power cuts and overvoltages, 2 sockets protected against overvoltages
- USB port for recharging mobile devices
- Mains connection by cable with plug

NETYS PE


GAMME 253 A

- From 600 to 2000 VA
- RoHS compliant
- VI “line interactive” with AVR, step wave
- Protection against power cut, overload, significant discharge and short circuit
- IEC 320 output sockets
- Integrated NTP protection
- USB interface

NETYS PR


GAMME 258 A

- From 1000 to 2000 VA - Mini Tower
- RoHS compliant
- VI “line interactive” with AVR, step wave
- Protection against power cut, overload, significant discharge and short circuit
- IEC 320 output sockets
- Integrated NTP protection
- USB interface

NETYS PR


NETYS 162 A

NETYS 163 A

- 1700 to 3300 VA - Rack / Tower
- Installation in tower mode or inside 19” rack cabinets
- RoHS compliant
- VI “line interactive” with AVR, step wave
- Protection against power cut, overload and short circuit
- IEC 320 output sockets
- ‘Hot swap’ battery extension modules
- Integrated NTP protection

NETYS PR


NETYS 990 A

- 1000 and 1500 VA - Rack 1U
- For 19” and 23” Rack cabinets
- High power density (1U - 45 mm)
- RoHS compliant
- VI “line interactive” with AVR, step wave
- IEC 320 output sockets
- Integrated NTP protection
- Local View
- NET VISION

Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

- commissioning,
- on-site intervention,
- preventive maintenance visits,
- 24-hour call out and rapid on-site repairs,
- maintenance packages,
- training.

(see pages 53 to 60)

Ask for our catalogue Expert Services

AVR - Automatic Voltage Regulation

The AVR function (Automatic Voltage Regulation) stabilizes the output voltage and avoids the switching to Battery Mode operation, therefore saving the battery to support critical power cut events.

LOCAL VIEW

Ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux and Mac OS X® operating systems.

NET VISION

Professional WEB / SNMP interface for UPS monitoring and shutdown management of several operating systems.

socomec Innovative Power Solutions

Uninterruptible Power Supplies (continued)

Single-phase UPS (continued)

NETYS RT

- 1100 to 11000 VA
- VFI “online double conversion”
- Installation in tower mode or inside 19” rack cabinets
- TÜV GS (product safety), RoHS
- IEC 320 output sockets or terminals
- Modular battery extension
- 1+1 parallel redundant configuration and manual bypass (5000 to 11000 VA)
- Local View
- RT-Vision

NETYS RT-M

- 1100 to 3300 VA
- Single-phase
- Designed for Marine Applications
- DNV-GL, TÜV GS (product safety), RoHS
- Installation in tower mode or inside 19” rack cabinets
- Compact footprint
- IEC 320 output sockets
- Built-in backfeed protection
- Modular battery extension
- Wide range of communication protocols
- Local View
- RT-Vision

ITYS

- 1 to 10 kVA
- RoHS compliant
- VFI “online double conversion”
- Constant output voltage and frequency regulation
- IEC 320 output sockets or terminals
- Flexible battery management
- Modular battery extension
- Models with powerful battery charger to use external battery cabinets
- Local View
- NET VISION

Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

- commissioning,
- on-site intervention,
- preventive maintenance visits,
- 24-hour call out and rapid on-site repairs,
- maintenance packages,
- training.

(see pages 53 to 60)

Ask for our catalogue Expert Services

AVR - Automatic Voltage Regulation

The AVR function (Automatic Voltage Regulation) stabilizes the output voltage and avoids the switching to Battery Mode operation, therefore saving the battery to support critical power cut events.

RT-VISION

Professional WEB / SNMP interface for UPS monitoring and shutdown management of several operating systems.

LOCAL VIEW

Ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux and Mac OS X® operating systems.

NET VISION

Professional WEB / SNMP interface for UPS monitoring and shutdown management of several operating systems.

Uninterruptible Power Supplies (continued)

Single-phase UPS (continued)

ITYS ES

- 1000 to 3000 VA
- Single-phase
- Designed for Electrical Substations
- RoHS
- Constant output voltage and frequency regulation
- Compact tower UPS system
- IEC 320 output sockets
- Manual bypass available as option
- Tropicalized boards
- Wide range of communication protocols
- Local View
- NET VISION

MODULYS

MODULYS RM - 1.5 to 9 kVA
MODULYS MC - 1.5 to 24 kVA
MODULYS EB - 9 to 24 kVA

- Modular UPS system easy to adapt to changes and growth of your system
- Power modules of 1.5, 3, 4.5 and 6 kVA, in tower, rack and system versions are easily combined to ensure the ideal configuration
- The number of Mod-Power and Mod-Battery units can be increased to provide N+1 to N+X redundancy
- Separate bypass input
- Slots for communication options
- NET VISION

Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

- commissioning,
- on-site intervention,
- preventive maintenance visits,
- 24-hour call out and rapid on-site repairs,
- maintenance packages,
- training.

(see pages 53 to 60)

Ask for our catalogue
Expert Services

AVR - Automatic Voltage Regulation

The AVR function (Automatic Voltage Regulation) stabilizes the output voltage and avoids the switching to Battery Mode operation, therefore saving the battery to support critical power cut events.

LOCAL VIEW

Ideal UPS monitoring and shutdown point-to-point solution for Windows®, Linux and Mac OS X® operating systems.

NET VISION

Professional WEB / SNMP interface for UPS monitoring and shutdown management of several operating systems.

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Innovative Power Solutions

Uninterruptible Power Supplies (continued)

Three-phase / single-phase UPS

ITYS PRO

- 10 kVA
- 95 % efficiency in VFI mode
- Output power factor: 0.9
- Designed to operate in challenging electrical environments
- Internal maintenance bypass
- Flexible battery management
- Internal isolation transformer (on request)
- EBS battery management system
- Local View
- Net Vision
- LINK-UPS

MASTERYS BC

- 15 and 20 kVA
- TÜV SÜD (product safety)
- Output power factor: 0.9
- Dual input mains
- 1+1 redundant parallel configuration
- Internal batteries (standard) and external battery cabinets (option)
- EBS battery management system
- NET VISION
- LINK-UPS

MASTERYS GP

- Green Power 2.0 range
- 10 to 20 kVA / kW
- TÜV SÜD (product safety)
- 96 % efficiency in VFI mode independently tested and verified
- Full-rated power: kW = kVA
- Parallel configuration up to 6 units
- Internal maintenance bypass
- EBS battery management system
- NET VISION
- LINK-UPS

MASTERYS IP+

- 10 to 60 kVA
- Designed to protect industrial processes
- TÜV SÜD (product safety)
- Compact solution with isolation transformer and integrated batteries
- Robust enclosure (2 mm thick heavy steel structure)
- Floor anchoring (to prevent tilting)
- Standard IP31 protection degree, dust and water splash resistant enclosure (IP52) with easy replaceable dust filters (option)
- Operation at temperature up to 50 °C
- Double EMC immunity
- Double overvoltage protection
- NET VISION
- LINK-UPS

Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

- commissioning,
- on-site intervention,
- preventive maintenance visits,
- 24-hour call out and rapid on-site repairs,
- maintenance packages,
- training.

(see pages 53 to 60)

Ask for our catalogue Expert Services

EBS (Expert Battery System)

EBS - Expert Battery System - manages the battery charger responding to the working temperature to preserve battery life and reduce operating costs. Able to manage different types of batteries (sealed, open lead-acid and nickel-cadmium batteries), it also protects batteries against deep discharge and provides a real-time calculation of the remaining back-up time, a real-time measurements concerning the battery and a periodic battery test for monitoring battery efficiency and for programming preventive or corrective maintenance in the case of abnormal situations.

NET VISION

Professional WEB / SNMP interface for UPS monitoring and shutdown management of several operating systems.

LINK-UPS

Remote monitoring service that connects your UPS to your Critical Power specialist 24 / 7.

Uninterruptible Power Supplies (continued)

Three-phase UPS

ITYS PRO

- 10 to 20 kVA
- 95 % efficiency in VFI mode
- Output power factor: 0.9
- Designed to operate in challenging electrical environments
- Internal maintenance bypass
- Flexible battery management
- Internal isolation transformer (on request)
- EBS battery management system
- Local View
- NET VISION
- LINK-UPS

MASTERYS BC

- 15 to 80 kVA
- TÜV SÜD (product safety)
- Output power factor: 0.9
- Dual input mains
- 1+1 redundant parallel configuration
- Internal batteries (standard) and external battery cabinets (option)
- EBS battery management system
- NET VISION
- LINK-UPS

MASTERYS BC+

- 100 to 160 kVA
- TÜV SÜD (product safety)
- Certified seismic resistance
- 95% efficiency in VFI mode
- Output power factor: 0.9
- Dual input mains
- Parallel configuration up to 6 units
- External battery cabinet with normal or long-life VRLA batteries.
- E-WIRE, tutoring app for a simplified installation
- Ready for integration in LAN and Industry 4.0 ecosystem.
- IoT ready and remote cloud services.
- NET VISION
- LINK-UPS

DELPHYS BC

- 200 to 300 kVA
- Output power factor: 0.9
- Dual input mains
- Backfeed protection
- Shared battery
- EBS battery management system
- LINK-UPS
- Parallel configuration up to 6 units

Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

- commissioning,
- on-site intervention,
- preventive maintenance visits,
- 24-hour call out and rapid on-site repairs,
- maintenance packages,
- training.

(see pages 53 to 60)

Ask for our catalogue Expert Services

NET VISION

Professional WEB / SNMP interface for UPS monitoring and shutdown management of several operating systems.

LINK-UPS

Remote monitoring service that connects your UPS to your Critical Power specialist 24 / 7.

A tutoring app for a simplified installation

> Augmented Reality technology

> Guided workflow on your smartphone

> Verification and validation by the Socomec Service Center

Download on the App Store

GET IT ON Google Play

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Uninterruptible Power Supplies (continued)

Three-phase UPS (continued)

MASTERYS IP+

- 10 to 80 kVA
- Designed to protect industrial processes
- TÜV SÜD (product safety)
- Compact solution with isolation transformer and integrated batteries
- Robust enclosure (2 mm thick heavy steel structure)
- Floor anchoring (to prevent tilting)
- Standard IP31 protection degree, dust and water splash resistant enclosure (IP52) with easy replaceable dust filters (option)
- Operation at temperature up to 50 °C
- Double EMC immunity
- Double overvoltage protection
- NET VISION
- LINK-UPS

MASTERYS GP

Green Power 2.0 range
10 to 40 kVA / kW

- TÜV SÜD (product safety)
- 96 % efficiency in VFI mode independently tested and verified
- Full-rated power: kW = kVA
- Parallel configuration up to 6 units
- Internal maintenance bypass
- EBS battery management system
- NET VISION
- LINK-UPS

MASTERYS GP4

- 60 to 160 kVA/kW
- TÜV SÜD (product safety)
- Best in class and officially attested:
  - $MTBF_{VFI}$ = 300,000 hours,
  - $MTBF_{UPS}$ = 10,000,000 hours.
- Certified seismic resistance.
- 96.5% efficiency in VFI mode independently tested and verified
- Full-rated power: kW = kVA
- Parallel configuration up to 6 units
- External battery cabinet with normal or long-life VRLA batteries.
- E-WIRE, tutoring app for a simplified installation
- Ready for integration in LAN and Industry 4.0 ecosystem.
- IoT ready and remote cloud services.
- NET VISION
- LINK-UPS

DELPHYS GP

Green Power 2.0 range
160 to 1000 kVA / kW

- 96 % efficiency in VFI mode independently tested and verified by Bureau Veritas
- Up to 99 % efficiency with Fast EcoMode
- Full-rated power: kW = kVA
- Parallel configuration up to 4 MW
- Distributed or centralized bypass
- Twin channel architecture with STS
- Distributed or shared battery
- Compatible with different battery technologies (e.g. Li-Ion, Ni-Cd…)
- BCR (Battery Capacity Re-injection)
- EBS battery management system
- LINK-UPS

Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

- commissioning,
- on-site intervention,
- preventive maintenance visits,
- 24-hour call out and rapid on-site repairs,
- maintenance packages,
- training.

(see pages 53 to 60)

Ask for our catalogue
Expert Services

Battery Capacity Re-injection

Easy periodical battery discharge test, without using a resistive load bank.
The test is performed by re-injecting batteries' energy at a constant power (settable) through the bidirectional rectifier.
Available on DELPHYS GP.

INNOVATION

Fast EcoMode

- Automatic operating mode that optimizes the efficiency depending on the quality of the input voltage. When the input voltage is within the tolerance (value is settable), the load is supplied by the bypass (VFD mode) and the efficiency achived is 99 %
- Ultra fast transfer time from bypass to inverter (2 ms) if the input voltage is out of tolerances and automatic transfer back to bypass when the input voltage is restored.
- Batteries are permanently maintened under charging, avoiding periodic restarts of the rectifier.
- Availble both for single and parallel units.

A tutoring app for a simplified installation

> Augmented Reality technology

> Guided workflow on your smartphone

> Verification and validation by the Socomec Service Center

Download on the App Store
GET IT ON Google Play

Uninterruptible Power Supplies (continued)

Three-phase UPS (continued)

MODULYS GP

Green Power 2.0 range
25 to 600 kVA / kW

- Fully modular system (UPS and batteries) with complete hot swap front-access
- Totally redundant design without any single point of failure
- Power module designed for superior robustness verified by an independent body (MTBF > 1,000,000 hr)
- Enhanced serviceability performance for concurrent maintenance
- Forever Young concept to avoid end-of-life criticality
- Module compatibility guarantee for 20+ years
- Up to 96.5% efficiency in VFI mode
- MODULYS GP efficiency & performance are tested and verified by TÜV SÜD
- Full-rated power: kW = kVA
- LINK-UPS

MODULYS RM GP

Green Power 2.0 range
Up to 4 x 25 kW

- Green Power 2.0 range up to 4 x 25 kW
- Rack-mounted modular UPS system
- 2 compact sub-rack enclosure models
- Designed for easy and no-risk integration in 19" rack cabinets
- High power density and low weight
- Pre-cabled system for simplified connections
- Complete set of pre-engineered and pre-tested parts for easy customization
- Power module designed for superior robustness verified by an independent body (MTBF > 1,000,000 hr)
- Full-rated power: kW = kVA
- Up to 96.5% efficiency in VFI mode
- MODULYS RM GP efficiency & performance are tested and verified by TÜV SÜD
- LINK-UPS

DELPHYS Xtend GP

Green Power 2.0 range
Up to 2.4 MVA / MW

- Real hot-scalable solution up to 2.4 MW by the addition of 200 kW modules
- Prewired system for easy power block docking
- Integrated coupling to simplify the In / Out switchboard
- 96% efficiency in VFI mode independently tested and verified by Bureau Veritas
- Up to 99% efficiency with Fast EcoMode
- Full-rated power: kW = kVA
- Distributed or centralized bypass
- Distributed or shared battery
- Adaptable disposition ("linear"-, "U"-, "L"-shaped)
- Compatible with different battery technologies (e.g. Li-Ion, Ni-Cd…)
- BCR (Battery Capacity Re-injection)
- EBS battery management system
- LINK-UPS

Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

- commissioning,
- on-site intervention,
- preventive maintenance visits,
- 24-hour call out and rapid on-site repairs,
- maintenance packages,
- training.

(see pages 53 to 60)

Ask for our catalogue
Expert Services

LINK-UPS

Remote monitoring service that connects your UPS to your Critical Power specialist 24 / 7.

Battery Capacity Re-injection

Easy periodical battery discharge test, without using a resistive load bank.

The test is performed by re-injecting batteries' energy at a constant power (settable) through the bidirectional rectifier.

Available on DELPHYS Xtend GP.

INNOVATION

Green Power 2.0 range

- High efficiency

Socomec offers the highest output level on the market in double conversion VFI online mode, while guaranteeing complete protection of the load against all supply quality problems. This 96% output level is certified by an independent international certification body under various real-life operating conditions. Green Power 2.0 integrates 3-level technology, reducing losses and thereby optimising overall output while saving energy (TCO) throughout the service life of the equipment.

3 LEVEL TECHNOLOGY

96% EFFICIENCY

- Maximum power: kW = kVA

The Green Power 2.0 UPS systems are designed to supply the latest-generation servers. The output power factor of 1 (kW = kVA) fully meets the requirements of loads with a high power factor, and supplies 12% more active power than a UPS with an output power factor of 0.9.

kW = kVA

socomec Innovative Power Solutions

Uninterruptible Power Supplies (continued)

Three-phase UPS (continued)

DELPHYS MP Elite+

- 80 to 200 kVA
- Output Power Factor: 0.9
- Transformer-based
- Fault-tolerant architecture
- Parallel configuration up to 1.2 MVA
- Distributed or centralized bypass
- Twin-channel architecture with STS
- Compatible with different battery technologies (e.g. Li-Ion, Ni-Cd…)
- Advanced communication interfaces
- NET VISION
- LINK-UPS

DELPHYS MX

- 250 to 900 kVA
- DELPHYS MX series is attested by Bureau Veritas
- Transformer-based
- Fault-tolerant architecture
- 93.5% efficiency (VFI mode, including the transformer)
- High power density
- Parallel configuration up to 5.4 MVA
- Distributed or centralized bypass
- Twin-channel architecture with STS
- Compatible with different battery technologies (e.g. Li-Ion, Ni-Cd…)
- EBS battery management system

Central Power Supply Systems

From 1.5 to 200 kVA

The EMergency CPSS range has been designed to answer your needs in terms of power supply for your safety system.

All our EMergency products are compliant with standard EN 50171.

The EMergency CPSS products are intended to ensure energy supply to emergency escape lighting in the event of mains supply failure.

Depending on the local legislation, it may be suitable for energizing other essential safety equipment, such as:

- electric circuits of automatic fire extinguishing installations
- paging systems and signaling safety installations
- smoke extraction equipment
- carbon monoxide warning systems
- special safety installations related to specific buildings, e.g. high-risk areas

Our dedicated Expert Services for UPS

We offer services to ensure your UPS highest availability:

- commissioning,
- on-site intervention,
- preventive maintenance visits,
- 24-hour call out and rapid on-site repairs,
- maintenance packages,
- training.

(see pages 53 to 60)

Ask for our catalogue Expert Services

NET VISION

Professional WEB / SNMP interface for UPS monitoring and shutdown management of several operating systems.

LINK-UPS

Remote monitoring service that connects your UPS to your Critical Power specialist 24 / 7.

EBS (Expert Battery System)

EBS - Expert Battery System - manages the battery charger responding to the working temperature to preserve battery life and reduce operating costs. Able to manage different types of batteries (sealed, open lead-acid and nickel-cadmium batteries), it also protects batteries against deep discharge and provides a real-time calculation of the remaining back-up time, a real-time measurements concerning the battery and a periodic battery test for monitoring battery efficiency and for programming preventive or corrective maintenance in the case of abnormal situations.

Static, electronic and automatic transfer systems

Static Transfer System

STATYS


GAMME 381_A

- 32 to 1800 A
- Single-phase and three-phase
- Compact hot swap 19” rack system, cabinet and integrable chassis solutions
- Fast switching between synchronised or non-synchronized sources
- Complete separation of both sources and the related distribution systems
- Advanced load fault-current management
- Suitable for all types of power supply systems and load to protect
- Compatible with any kind of electrical environments and neutral / grounding system
- Easy installation and maintenance
- Full internal redundant design and failure management
- Separation of main functions to prevent internal fault propagation
- Advanced communication interfaces

Electronic Transfer System

IT SWITCH


ITYS 030 C

- 16 to 20 A
- Single-phase
- 19” rack or customized integration
- Hot-swappable system with double maintenance bypass
- Automatic and seamless transfer of the critical load to an alternate source in case of preferred source corruption
- Transfer without source overlapping
- Synchronized and non-synchronized source management
- Load fault-current management
- Advanced operating parameter to adapt specific application requirement
- High performances and robustness
- User-friendly operation

Automatic Transfer System

STATYS XS


STATY_068_A.EPS
STATY_066_A.EPS

- 16 A and 32 A
- Single-phase
- RoHS compliant
- Compact 19” rack systems
- Plug-and-Play device
- Automatic and manual transfer
- Fast transfer time without source overlapping (ITI curve compliant).
- Synchronised and non-synchronised sources management
- User-friendly operation
- Integrated backfeed protection
- Maintenance-free equipment
- Remote management via LAN networks (SNMP)
- Real-time monitoring (RS485)

Our dedicated Expert Services for STS

We offer services to ensure your STS highest availability:

- commissioning,
- on-site intervention,
- preventive maintenance visits,
- 24-hour call out and rapid on-site repairs,
- maintenance packages,
- training.

(see pages 53 to 60)

Ask for our catalogue
Expert Services

To find out more

For more information about our Static, electronic and automatic transfer systems Static, electronic and automatic transfer systems, visit our website:
www.socomec.com/en/sts

QRCODE 106_A GB

socomec
Innovative Power Solutions

Back-up storage

Back-up storage solutions

Power supply continuity is a vital function for every critical application. The availability of a quality power supply is ensured by a UPS system, while the emergency energy to provide during a power outage is stored using a backup storage system.

When the power fails, the UPS draws its power from the backup storage system until it is able to start and synchronize standby generators.

Socomec provides different backup storage solutions to meet every requirement for protecting critical applications from unplanned system outages:

- VRLA lead-acid batteries
- Open-vented lead-acid batteries
- NiCd batteries
- Lithium-Ion batteries
- Lithium-Ion capacitors
- W-BMS, Wireless Battery Monitoring System

Lithium-Ion capacitor module

Lithium-Ion capacitor cells

Rectifiers

Rectifiers AC / DC

SHARYS IP

- 24 / 48 / 108 / 120 V
- From 15 to 200 A

SHARYS IP ENCLOSURES

- Up to 2 rectifier modules
- 1+1 redundancy

SHARYS IP SYSTEM

- Up to 4 rectifier modules
- N+1 redundancy

- Robust steel frame
- IP30 protection degree
- PCB tropicalisation as standard
- High efficiency up to 93 %
- Modularity with hot swap modules
- Double conversion switching technology for rectifier modules
- N+1 redundancy and scalability
- Advanced communication interfaces
- NET VISION

Certification

All SHARYS IP series rectifiers are certified by TÜV SÜD with regard to product safety (EN 61204-7 and EN 60950-1).

NET VISION

Professional WEB / SNMP interface for UPS monitoring and shutdown management of several operating systems.

Other solutions

RACK PDU - Power Distribution Unit

Zero-U PDU

- Metered or monitored Zero-U vertical PDU
- Single-phase
- Installation of 'U space' not required
- Simplified electrical connections
- Redundant architecture by using two PDUs in the same rack cabinet
- Easy remote control, monitoring and supervision
- PDU VISION

PDU VISION

WEB / SNMP manager interface for the connection to the LAN network. The device - suitable for remote monitoring – can be integrated into the PDU.

Energy Storage Solutions

Socomec offers modular energy storage solutions including all the necessary control and protection devices for all types of applications.

One of the key components of the solution is the Power Converter; Socomec proposes two models: SUNSYS PCS² for on-grid applications and SUNSYS PCS² IM that enables on-grid and off-grid applications. The main features of the converters are:

- full circular 4-quadrant P / Q capability,
- modular "Hot Swap" scalable system,
- extendible from a few kW up to several MW using units in parallel,
- suitable for either centralized or decentralized electrical installations,
- compatible with different battery technologies (lead-acid, lithium-ion…),
- opened communications for connection with Energy Management Systems,
- easy implementation in existing installations.

Our dedicated Expert Services for SUNSYS

We offer adapted services to guarantee the service continuity of SUNSYS solutions:

- commissioning,
- training.

(see pages 53 to 60)

Ask for our catalogue Expert Services

Energy Storage Solution for Smart Grids

SUNSYS PCS² range from 33 to 200 kW

- Maximum efficiency 96 %
- P and Q step response time < 50 ms
- Embedded functionalities:
  - Grid support (F / V)
  - Self-consumption
  - Energy shifting
  - Energy smoothing
  - Peak shaving

Energy Storage Solution for microgrids

SUNSYS PCS² IM range from 33 to 200 kW

- Maximum efficiency 96 %
- P and Q step response time < 500 ms
- On-Grid version functionalities +:
  - Grid forming
  - Scheduled & unforeseen islanding
  - Black start
  - Soft start
  - Power sharing
  - Synchronization
  - PV production control

Associated Products & Solutions

For a complete solution, we also propose:

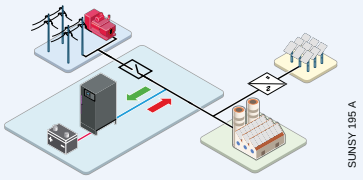
- Control cabinet
- Distribution cabinets
- Paralleling cabinet
- Batteries
- Containers

Main applications

Energy storage is the key solution to meet the challenge of energy transition, using renewable energy and providing energy cost reductions for the following 4 main applications:

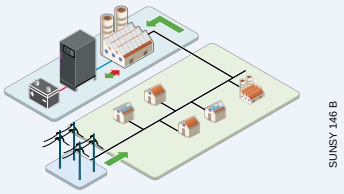
Autonomous Microgrids

- Ensures energy availability
- Ensures energy quality



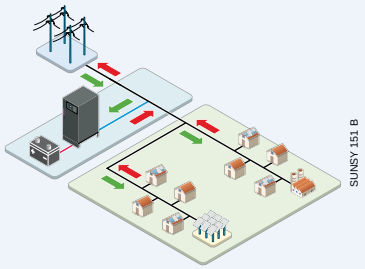
Smart Buildings and cities

- Peak shaving
- Maximizes self-consumption



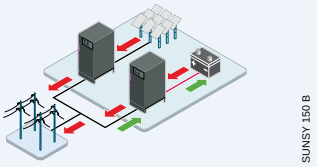
Grid support

- Improves grid stability
- Defers grid investment



Solar parks

- Manages renewable energy production



socomec Innovative Power Solutions

Photovoltaic inverter solutions

PV inverter up to 900 VDC

SUNSYS P33TR - P66TR & TL - P100TR & TL

- Maximum efficiency 97 %
- Modular architecture, 3-level technology and DPC system increase energy production even with low levels of sunlight
- 3-level converter
- DPC – Dynamic Power Control – increases efficiency, availability and lifetime of the PV system
- Product safety certified by TÜV SÜD

PV inverter up to 1000 VDC

SUNSYS P66TL1K - P100TL1K

- Maximum efficiency 97 %
- Modular architecture, 3-level technology and DPC system increase energy production even with low levels of sunlight
- 3-level converter
- DPC – Dynamic Power Control – increases efficiency, availability and lifetime of the PV system
- Product safety certified by TÜV SÜD

Our dedicated Expert Services for SUNSYS

We offer adapted services to guarantee the service continuity of SUNSYS solutions:

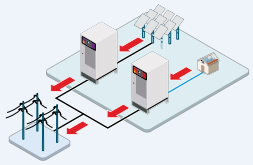
- commissioning,
- training.

(see pages 53 to 60)

Ask for our catalogue Expert Services

Main applications

A PV inverter converts the DC current coming from a photovoltaic plant into an AC current that can be fed to the grid or used for self-consumption. Socomec photovoltaic inverters are designed to be used for solar parks and buildings.



Benefits

The SUNSYS P solution is TÜV SÜD certified for product safety (EN 62109).

DPC - Dynamic Power Control

Thanks to its modular architecture and DPC (Dynamic Power Control) function, the SUNSYS P inverter optimizes the efficiency of your installation.

Production from the inverter is very efficient, even at very low levels of sunlight.

The modular architecture optimizes overall efficiency by only using the power modules it requires. In cases of partial sunlight, fewer modules are used which operate with a greater load and, consequently, with greater efficiency.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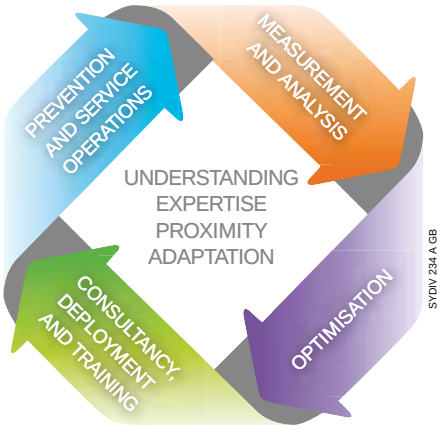
Expert Services

Enabling available, safe and efficient energy

Expert Services

As specialist manufacturers in the field of low voltage electrical facilities for over 90 years, Socomec offers a wide range of value-added services, a major factor in ensuring the reliability of your equipment throughout its design life.

Take advantage of personalised support throughout your project and reach your energy objectives with confidence!



To find out more

For more information about our complete offer for Expert Services, download the catalogue.
www.socomec.com/en/services-catalogue

QRCODE 145 A GB

Prevention and service operations

Preventive maintenance

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

APPLI 724 A

Benefits

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

Emergency service 24 / 7

- Specialist team of engineers on call 24 / 7
- Technical expertise on-site within 6 hours to 2 hours guaranteed
- Remote monitoring and proactive troubleshooting
- Corrective maintenance with original spare parts
- 24 / 7 spare part stock availability with high priority shipment

APPLI 588 A

Benefits

> Quality technical support
> Fast and precise diagnostic

socomec
Innovative Power Solutions

Prevention and service operations (continued)

Maintenance service packages

- Annual preventive maintenance visit
- Emergency hot-line 24 / 7
- Response Time to Site within 6 h to 2 h
- Original spare parts
- Battery Check

APPLI 718 A

	SILVER	GOLD	PLATINUM	PLATINUM+	REGULAR	PREMIUM	EVO PACK	PRISM
Standard UPS system	•	•	•	•				
Modular & scalable UPS system					•	•	•	
UPS system for data centres	•	•	•	•				•
Transfer switches	•	•	•	•				
Energy storage system	•	•	•	•				
Isolated power supply	•	•	•					
Power factor corrector system	•	•	•					

Benefits

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

Evolution pack

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.

Upgrade your service during warranty

Critical applications may require special maintenance services and committed troubleshooting from the real begining.

For that our Maintenance service packages can be applied also during warranty period:

- special discount will be applied right away compare to a normal contract,
- same discount will be applied on following renewals,
- with the 3Y - Warranty inclusive formula, the price will be fixed for the 3 year period.

PRISM for your critical power equipment in data centres

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

COUV 266 A

Benefits

> Personalised maintenance and site improvement

> Improved system uptime

> Total control over your maintenance costs for 5 years

Prevention and service operations (continued)

Battery care

Advanced operations performed per single block:

- Impedance Test
- Temperature Measurement
- Thermal Image
- Voltage Measurement during discharge
- Torque settings (blocks in rack only)
- 24 / 7 remote watching by a specific Battery monitoring system

COUV 187 A

Benefits

> Maintains the battery back-up time
> Avoids risk of UPS downtime
> Optimises battery investment
> Back-up time measurement: thanks to specific set of measurements and analysis, Socomec is able to provide you with an accurate back-up time of your battery system

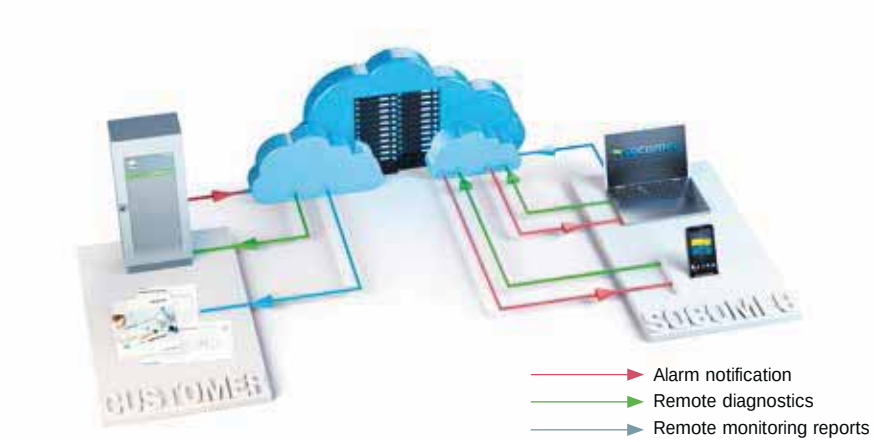
LINK-UPS remote monitoring

- LINK-UPS provides a permanent connection between any Socomec installed UPS and the nearest Socomec Service Centre.
- Automatic anomaly detection
- Proactive remote diagnostics
- Optimised troubleshooting
- Regular analysis reports

APPLI 581 A

Benefits

> Continuous monitoring of your equipment's performance
> Problem prevention
> Reduced Mean Time to Repair
> Increases system availability
> Saves downtime costs



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.

Replacement of consumables

- Original fans and capacitors and power supply PCB
- Fast delivery
- Knowledgeable technical support
- Safe and certified replacement procedure

APPLI 572 A

Benefits

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

Replacement of batteries

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

APPLI 572 A

Benefits

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

Prevention and service operations (continued)

UPS Rental

- UPS shipped in 4 hours
- UPS commissioning
- Hot-line technical support
- Maintenance contract coverage
- UPS decommissioning and removal
- Return transport


APPLI 789 B

Benefits

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.

Inspection and testing visit for transfer switches

- Manufacturer seal of approval
- Complete report including technical recommendations
- Certificate of conformity


APPLI 759 A

Benefits

> All critical points will be secured and under control
> Reduced risk of potential faults going undetected
> Costly downtime and the risk of operating losses are cut

Multibrand

- Maintenance plan optimised
- Unique call center for emergency calls
- Global analysis report of the installed base


DEFYS 101 A

Benefits

> Optimises all maintenance planning
> Centralises the emergency technical call-out services
> Advice on site's critical power issues and potential areas of risk / vulnerability
> Reduces operating costs

Measurement and analysis

Power quality audit

Comprehensive Analysis of:

- Voltage drop
- Reduction of power factor
- Unbalanced three-phase load
- Harmonic distortion
- Transient current
- Neutral and ground plan
- Electromagnetic compatibility


APPLI 731 A

Benefits

> Identification of disjunctions and dysfunctions
> Optimised operational efficiency
> Extended service life of equipment
> Improved reliability of the system

Thermal imaging

- Complete infra-red check-up of low voltage installation
- Wide range of components analysed
- Identification of malfunctions impossible through simple visual inspection


COUV 142 A

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)

Please check the availability of all those services for your area.

Measurement and analysis (continued)

Electrical measurement plan

- Audit of customer energy efficiency needs
- Integration and checking of each measurement point
- Commissioning of the solution
- Software customisation based on requests
- Several levels of training modules
- Maintenance and software upgrades


APPLI 541 A

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

Reactive power compensation

- Environment audit
- Measurement campaigns
- Dimensioning of the installation
- Simulation of new system integration
- Detailed customer report with recommendations
- Commissioning of new equipment


APPLI 492 A

Benefits

> Improves system power factor
> Avoids penalty charges from utilities for excessive consumption of reactive power
> Improves voltage regulation in the network and equipment efficiency
> Increases power availability

Insulation control*

- Commissioning of your ISOM solution
- Training on insulated IT earthing networks
- Regular control of your insulation
- Insulation fault detection


APPLI 241 A

Benefits

> Secured and reliable network
> Optimal continuity of service
> Manufacturer support during the entire lifecycle

** Service available only for France.*

On-site metrology

- 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


APPLI 527 A

Benefits

> Accurate measurement
> A wide range of measurement devices covered by Socomec
> Full compliance with ISO 50001

Online energy management services

- Remote software commissioning
- Support via digital platform available 24 / 7
- Training on demand
- Customization of the application


SOFT_048_A.EPS

Benefits

> Highly secure and auto-adaptive cloud platform
> Easy to set and to use
> Interfaced with a large panel multi brand measurement devices and sensors
> Flexible configuration based on a pay per use business model

Please check the availability of all those services for your area.

Optimisation

Continuous improvement approach

- 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

SYDIV 248 A

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

- Technical & economic analysis
- Support for planning the safe removal and disposal of old products
- Recycling of batteries
- Environmental standards adoption of (ISO 14001, WEEE, etc.)

SYDIV 249 A

Benefits

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

Product renewal

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

SYDIV 247 A

Benefits

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

Powerlease

- Financing solutions for your equipment
- Combined product & services offer
- Fixed-term lease for the entirety of the contract (36 to 84 months)
- New equipment can be added or removed by simply modifying the contract

SYDIV 279 A

Benefits

> Immediate implementation of your project
> No planned investment
> Optimizes your ROI
> Flexible and scalable solution
> Tailored to your requirements

Please check the availability of all those services for your area.

Consultancy, deployment and training

Project consultancy

- 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

CORPO 155 A

Benefits

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

Commissioning & on-site test

- 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)

APPLI 531 A

Benefits

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

Technical training

- 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 engineer" trainers

CORPO 270 A

Benefits

> Autonomy to manage routine operations
> Alarm procedures
> Safer operation and maintenance
> Always up to date with latest technologies

Notes

Notes

Socomec: our innovations supporting your energy performance

1 independent manufacturer

3,200 employees worldwide

10 % of sales revenue dedicated to R&D

400 experts dedicated to service provision

Your power management expert

POWER SWITCHING

POWER MONITORING

POWER CONVERSION

EXPERT SERVICES

The specialist for critical applications

- Control, command of LV facilities
- Safety of persons and assets
- Measurement of electrical parameters
- Energy management
- Energy quality
- Energy availability
- Energy storage
- Prevention and repairs
- Measurement and analysis
- Optimisation
- Consultancy, commissioning and training

A worldwide presence

12 **production sites**
- France (x3)
- Italy (x2)
- Tunisia
- India
- China (x2)
- USA (x3)

27 **subsidiaries**
- Australia • Belgium • China • France
- Germany • India • Italy • Netherlands
- Poland • Romania • Singapore
- Slovenia • Spain • Switzerland • Thailand
- Tunisia • Turkey • UK • USA

80 **countries**
where our brand is distributed

HEAD OFFICE

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