

Single and  
three-phase  
STS

# STATYS

from 32 to 4000 A

protection for your critical applications

## More than 25 years of specialist experience

- SOCOMEC UPS has more than 25 years of experience in designing, producing and customising Static Transfer Systems. As leader in multiple-source and multi bus architecture, SOCOMEC has installed thousands of STS systems in many sectors that have demonstrated their adaptability and high reliability.

- Investing more than 10% of turnover in R&D, SOCOMEC has always incorporated new technologies to ensure optimum quality and performance. **STATYS**, the latest design in STS, is the 4<sup>th</sup> generation of SOCOMEC STS. It incorporates the most advanced technologies combined with long experience to guarantee seamless and reliable power transfers.

## STATYS provides

- High reliability - Internal redundant design
- Flexibility and adaptability to various types of applications.
- Compact design: saves up to 40% of valuable space.
- Operational security & ease of use
- Remote data access in real time and from any location.
- Full support and service.

## Static Transfer Switch: user benefits

Supplied by two independent alternate sources, **STATYS**:

- provides redundant power supply to mission critical loads,
- increases the power supply availability by choosing the best power supply quality,
- prevents fault propagation,
- allows easy extension and easy infrastructure design, ensuring high availability of the power supply to critical applications,
- facilitates installation and maintenance procedures.

## STATYS also provides protection against:

- main power source outage,
- failures in the upstream power distribution system,
- failures caused by faulty equipment supplied by the same source,
- operator errors.



Your protection for

- > Finance, Banking and Insurance
- > Healthcare sector
- > Telecom & Broadcasting
- > Industry
- > Power generation plants
- > Transport



## High reliability - Internal redundant design

**STATYS** increases the overall availability of the system during abnormal events and programmed maintenance. It allows plant segmentation and intelligent fault management, therefore increasing the global uptime of the system. The SOCOMEC UPS **STATYS** range has been designed with the latest technology that provides internal fault tolerance.

Other features include:

- redundant control system using double microprocessor control boards,
- dual redundant power supplies for control boards,
- individual control board with redundant power supply for each SCR path,
- redundant cooling with fan failure monitoring,

- real-time SCR fault sensing,
- separation of main functions to prevent internal fault propagation,
- robust internal field communication bus,
- internal monitoring of sensors to ensure maximum system reliability,
- 24/7/365 real-time remote monitoring.

## Flexibility – Adaptability to various types of applications

Dual or single cord servers, linear or non-linear loads, IT or electromechanics are just some of the load types that **STATYS** can supply. Wherever a smart power source is needed, whether for existing or new electrical plants, **STATYS** can be easily installed and efficiently supply the load.

**STATYS** offers a wide range of three-phase systems that suits all types of applications and power supply systems.

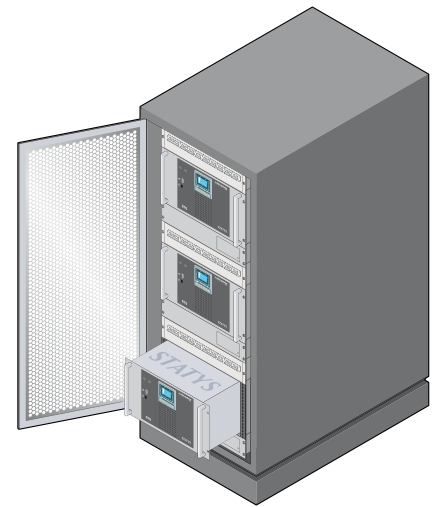
It is available in:

- 3 wires arrangement without neutral,
  - for reduced cable costs,
  - for local zoning of the applications by using insulating transformers,
- 4 wires three-phase arrangement with neutral, with or without neutral pole switching,

for every load, linear or non-linear, and with every power factor.

**STATYS** offers:

- flexible digital control capacity that can adapt to any operational or electrical environment conditions,
- advanced Transformer Switching Management (ATSM).



STATYS 037 A

## Operational security & ease of use

**STATYS** is equipped with user-friendly interfaces and commands providing secured operating controls:

- easy to read display with intuitive navigation,
- front access to all information (measurements, status and alarms),
  - acoustic notification (buzzer) of abnormal events,
  - password protection capability,

- automatically controlled interlock, preventing operator errors.

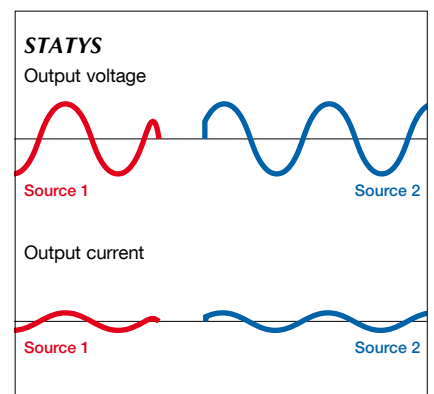
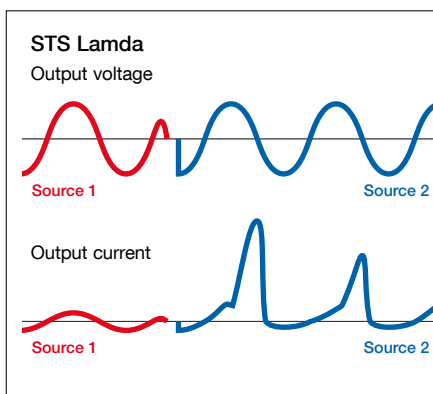
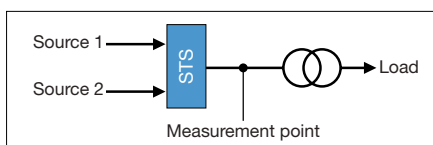
Its ease of use will dramatically reduce operator errors.



STATYS 041 A

## Advanced Transformer Switching Management

If the upstream network has no distributed neutral cable, two upstream transformers or one downstream transformer can be added to create a neutral reference point at the output. For the downstream solution, **STATYS**, thanks to ATSM, correctly manages the switching to limit inrush current and avoid the risk of spurious breakers.



STATYS 039 A GB - STATYS 042 A GB - STATYS 043 A GB

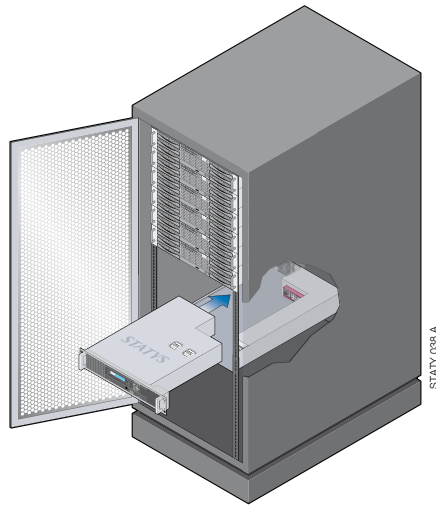
### Compact design: saves up to 40 % of valuable space

**STATYS** has a very compact design reducing significantly its operational footprint. It saves highly valuable floor space and reduces space requirement in the PDU.

**STATYS** has been designed to save space and for easy maintenance:

- small footprint,
- adjacent or back to back mounting,
- front access for easy maintenance procedures,
- compact Hot Swap 19" rack system (the smallest on the market),

Its high efficiency, its integrable chassis and its minimal footprint make **STATYS** the best STS to be embedded into a PDU.



### Remote data access in real time and from any location

Its advanced communication capabilities make **STATYS** easily integrable in the existing monitoring and control infrastructures.

**STATYS** fulfils prerequisites for:

- LAN connectivity and the customer's Building Management System (BMS) integration,
- remote connection for monitoring and maintenance,
- plug and play modular communication ComSlot (interfaces for flexible upgrading),
- programmable output dry contacts and insulated inputs,
- serial communication ports.

### Full support and service

As with all equipment, the devices that supply power to your critical applications require regular maintenance to continue providing secure operation.

Preventive maintenance helps avoid malfunctions and extends the life of your equipment as well as improving the MTBF (Mean Time Between Failures) of the installation.

Real-time monitoring means prompt reaction to abnormal events for minimum MTTR (Mean Time To Repair).

SOCOMECS is on hand for the customer during the entire lifetime of the equipment and even more:

- skilled technicians available for telephone consultancy and site inspection, technical and specification documentation, worldwide seminars and follow-up meetings,
- during a full commissioning service SOCOMECS technicians configure **STATYS** to be integrated with required monitoring systems.

### Standard features

- Redundant Microcontroller board.
- Individual SCR control board with redundant local power supply.
- Dual redundant electronic power supply.
- Comprehensive SCR fault sensing.
- Smart commutation system configurable according to the load.
- Redundant cooling.
- Fuse-free or fuse-protected design.
- Output fault sensing.
- Internal CAN Bus.

- Hot Swap 19-inch rack.
- Double Maintenance bypass.
- LCD and Graphical Mimic Panel.
- Password control.
- Full load parameter measurements.
- Ethernet Network connection.
- Front accessible components.
- Full digital configuration and setting.
- I/O Dry Contacts interfaces.
- Flexible Com Slots.

### Options

- Additional Dry Contacts interface board.
- RS232/485 serial port interface board.
- Profibus interface.
- Devicenet interface.
- Automatic Maintenance Bypass interlock.
- Voltage adaptation
- TVSS.

## 19" rack - Hot Swap

SIZE [A]	32	63	63	100
Voltage [V]	120 -127 / 220 - 240/254 (±10%)		208 - 220/380 - 415/440 (±10%)	
Number of phases	ph + N or ph-ph (+ PE)		3ph + N or 3ph (+ PE)	
Frequency [Hz]	50 or 60 (configurable ±5 Hz)			
Number of poles switching	2-pole switching		3 or 4-pole switching	
Neutral system	compatible with all earthing systems			
Maintenance bypass	interlocked and secured			
Overload	110% for 60 minutes - 150% for 2 minutes			
Efficiency	99%			
Admissible power factor	no restrictions			

## Cabinet - Integrable chassis (OEM)

SIZE [A]	FROM 200 A TO 4000 A
Voltage [V]	208 - 220/380 - 415/440 (±10%)
Number of phases	3ph + N or 3ph (+ PE)
Frequency [Hz]	50 or 60 (configurable ±5 Hz)
Number of poles switching	3 or 4-pole switching
Neutral system	compatible with all earthing systems
Maintenance bypass	interlocked and secured
Overload	110% for 60 minutes - 150% for 2 minutes
Efficiency	99%
Admissible power factor	no restrictions

## Dimensions and weight

SIZE [A]	1ph 3ph	32	63	63	100	200	300	400	600	FROM 800 A TO 4000 A	
<b>19" RACK</b>											
WxDxH (mm)		483 x 747 x 89 (19" x 747 x 2U)**		483 x 648 x 400 (19" x 648 x 9U)*						-	
Weight (kg)		26		58						-	
<b>CABINET</b>											
WxDxH (mm)			-		500x600 x1930**	700x600x1930**	900x600 x1930			contact us	
Weight (kg)			-		195	270	345			contact us	
<b>INTEGRABLE CHASSIS (OEM)</b>											
WxDxH (mm)			-		400x586 x765	600x586x765	800x586 x765			contact us	
Weight (kg)			-		70	105	130			contact us	
<b>ENVIRONMENT</b>											
Operating ambient temperature							0 - 40 °C				
Degree of protection			IP 31						IP 20		
Relative humidity							95%				
Maximum altitude							1000 m a.s.l. without derating				
Cooling							forced ventilation				
Sound pressure level			< 45 dB(A)				≤ 60 dB(A)			contact us	
<b>STANDARDS</b>											
Performance and safety							IEC 62310, EN 50022, IEC 60364-4, IEC 60950, IEC 60529, IEC 60439-1				
Protection class							CB or PC class				
EMC class							C2 category (IEC 62310-2)				

\* Depth does not include handles (+40 mm). Total height corresponds to 3U for fixed part and 6U for the Hot Swap module. - \*\* Depth does not include handles (+40 mm).