

STATYS

Redundant design for power availability and site maintainability
from 32 to 1800 A



GAMME_381

The solution for

- > Data centre
- > Energy
- > Infrastructure & Transport
- > Industry

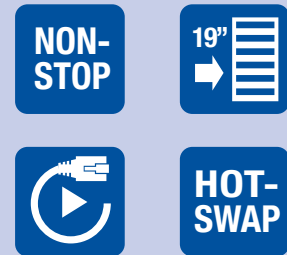
Strong points

- > Standard features
- > Alimentation
- > Flexibility
- > ATSM fonction
- > Protection

Conformity to standards

- > IEC 62310
- > IEC 60529
- > AS 62310
- > AS 60529
- > IEC 62310-2
- > AS 62310.2
- > CE
- > RCM

Advantages



Expert services

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



www.socomec.com/services

Function

Static Transfer Systems (STS) are intelligent switches providing increased supply availability, automatically transferring loads to alternative power sources when the primary power source fails or is not available. They enable flexible site maintenance ensuring high availability.

Advantages

Standard features

- A smart and flexible transfer system that can be configured according to the type of load.
- Synchronised and non-synchronised sources compatibility (configurable synchronisation tolerance and switching management).
- Fuse-free or fuse-protected design.
- Output fault current sensing.
- Internal CAN Bus.
- Double maintenance bypass.
- Neutral oversizing for non-linear loads compatibility.
- Embedded Inputs, output and maintenance bypass switches (cabinet version).

Alimentation

Supplied by two independent alternate sources, STATYS increases the overall electrical infrastructure availability during abnormal events and programmed maintenance.

- Provides redundant power supply to mission critical loads to increase global uptime of the supplied system.
- Increases the power supply availability by choosing the best power supply quality.
- Provides plant segmentation and prevents fault propagation.
- Allows easy extension and easy infrastructure design, ensuring high availability of the power supply to critical applications.
- Facilitates and secures the maintenance or the modifications of the overall electrical installation (source, distribution, switchboard) while the load is kept supplied.

Flexibility

STATYS is available in:

- 2 wires and 2 poles switching, to be connected between phase/neutral or phase/phase.
- 3 wires arrangement without neutral for reduced cable costs and for local zoning of the applications by using insulating transformers,
- 4 wires three-phase arrangement with neutral, with or without neutral pole switching.

STATYS offers:

- Flexible digital control capacity that can adapt to any operational or electrical environment conditions.
- Capability to manage synchronised and non-synchronised sources according to load specificity.

ATSM fonction

Advanced Transformer Switching Management (ATSM). 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.

Protection

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.

General characteristics

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

Standard communication features

- LCD or user-friendly 7» touch-screen multilingual graphic colour display.
- Slots for communication options.
- Dry-contact interface (configurable voltage-free contacts).
- Ethernet interface for STS monitoring via WEB pages.
- MODBUS TCP.
- Full digital configuration and setting.

Standard features

- A smart and flexible transfer system that can be configured according to the type of load.
- Synchronised and non-synchronised sources compatibility (configurable synchronisation tolerance and switching management).
- Fuse-free or fuse-protected design.
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High reliability - Internal redundant design

Main features:

- 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.

- Integrates an "auto-hold" feature to ensure load continuity in case of internal failure.
- 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.

Compact design

- Small footprint and compact units.
- Adjacent or back to back mounting.
- Integrable chassis version for optimal implementation into switchboards.
- Front access for easy maintenance.
- Compact Hot Swap 19" rack system.

Communication options

- Dry-contact interface (configurable voltage-free contacts).
- MODBUS RTU RS485.
- PROFIBUS / PROFINET gateway.
- REMOTE VIEW PRO supervision software.

Technical data

STATYS	19" rack - hot swap -1ph		19" rack - hot swap -3ph		Cabinet - integrable chassis (OEM)											
	32	63	63	100	200	300	400	600	630	800	1000	1250	1400	1600	1800	
ELECTRICAL SPECIFICATIONS																
Rated voltage	120-127/220 240/254 V		208-220/380-415/440 V													
Voltage tolerance	± 10% (configurable)															
Non-synchronized sources management	configurable up to +/- 180															
Frequency	50 Hz or 60 Hz (± 5 Hz (configurable))															
Number of phases	ph+N or ph-ph (+ PE)		3ph+N or 3ph (+ PE)													
Number of poles switching	2-pole switching		3 or 4-pole switching													
Maintenance bypass (cabinet version)	interlocked and secured															
Overload	150% for 2 minutes - 110% for 60 minutes ¹															
Efficiency	99%															
Admissible power factor	no restrictions															
ENVIRONMENT																
Operating ambient temperature	from 0°C up to 40°C															
Relative humidity	95%															
Maximum altitude	1000 m a.s.l. without derating															
Acoustic level at 1 m (ISO 3746)	<45 dBA		≤ 60 dBA					≤ 84 dBA								
STANDARDS																
Safety	IEC 62310, IEC 60529, AS 62310, AS 60529															
EMC	C2 category (IEC 62310-2, AS 62310.2)															
Product declaration	CE, RCM (E2376), UKCA															

(1) for 630 A only : 150% for 1 minute - 105% for 60 minutes

Dimensions

Model		Range (A)	Width (mm)	Depth (mm)	Height (mm)
1 phase	19" Rack	32 - 63	483 (19")	747	89 (2U)
		63 - 100	483 (19")	648	400 (9U)
3 phases	Integrable Chassis (OEM)	200	400	586	765
		300 - 400	600	586	765
		600 - 630	800	586	765
		800 - 1000	1000	950 ⁽¹⁾	1930
		1250 - 1800	910	815	1955
	Cabinet	200	500	600 ⁽¹⁾	1930
		300 - 400	700	600 ⁽¹⁾	1930
		600 - 630	900	600 ⁽¹⁾	1930
		800 - 1000	1400	950 ⁽¹⁾	1930
		1250 - 1600	2010	815	1955

(1) Depth does not include handles (+40 mm)