Single-phase and three-phase STS

STATYS

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

The solution for

- Finance, banking and insurance
- Healthcare sector
- Telecom & Broadcasting
- Industry
- Power generation plants
- Transport

STATYS provides

- 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.

Static Transfer Switch: user benefits

Supplied by two independent alternate sources, STATYS increases the overall electrical infrasrtucture 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.

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.

Flexibility

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

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.

It 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,
- 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,
- 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.

socomec
Innovative Power Solutions

STATYS

Single-phase and three-phase STS
from 32 to 1800 A

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.
- 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.

Standard features

- Smart commutation system configurable according to the 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).

Standard communication features

- Ethernet network connection (WEB/SNMP/eMail/MODBUS TCP).
- Dry-contact interface.
- Flexible Com Slots.
- LCD or Graphic Mimic Panel.
- Full digital configuration and setting.

Options

- Additional dry contacts interface board.
- MODBUS RTU.
- PROFIBUS interface.
- Automatic maintenance bypass interlock.
- Voltage adaptation.

Remote monitoring

- 24/7 real-time remote data access.
- Wide choice of communication protocols for remote monitoring and easy integration in your BMS / SCADA systems.
- LINK-UPS, remote monitoring service that connects your STS to your Critical Power specialist 24/7.

Technical data

STATYS	19" rack - hot swap				Cabinet - integrable chassis (OEM)									
Rating [A]	32	63	63	100	200	300	400	600	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)													
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													
Efficiency	99 %													
Admissible power factor	no restrictions													
ENVIRONMENT														
Operating ambient temperature	0-40 °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)													

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	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	900	600(1)	1930
		800 - 1000	1400	950(1)	1930
		1250 - 1600	2010	815	1955

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

socomec
Innovative Power Solutions