Static Transfer Switch MODEL B

i-STS

In recent years, computer racks have become increasingly demanding on reliable power requirements.

Rack mounted Static Transfer Switches offer the highest reliability of power for rack mounted equipment, yet so few can provide the capacity needed to comfortably operate a rack full of computer / IT equipment.

The Model B *i*-STS point-of-use Static Transfer Switch offers just that with units rated up to 63 Amperes per phase.

The Model-B *i*-STS is installed in the rack close to your computer equipment, eliminating many distribution issues that could otherwise arise and provides uninterrupted power to your critical equipment by automatically switching between two independent power sources upon detection of a problem. To avoid the dangers of paralleling power sources, all switching is break-before-make at zero current and is completed in less than ¼ of a cycle, (5 milliseconds), ensuring no disruption to the operation of your equipment.

The Range:
Model B *i*-STS 19 inch rack mount Static Transfer Switches are available in **20, 32, 40, 50 and 63 Amperes**. They are also available in 1 or 2 pole single phase and 3 or 4 pole three phase arrangements across all ratings.

All models are hot swappable using the standard fitted maintenance bypass arrangement that allows the STS to be tested and removed and inserted whilst supplying your load via the maintenance bypass.

All units come with a backlit graphic LCD with clear visual indication of the present operating state any alert conditions.

Simplicity Is The Key:
At Static Power, we believe in keeping things simple while maintaining the full functionality of our equipment. It is for this reason our equipment is so easy to operate. The i-STS can be easily transferred from one supply to the other by using the TRANSFER pushbutton while the LCD has a simplified control hierarchy which uses a down arrow and right arrow pushbuttons. The display functions are loaded with useful information such as supply variables, output voltage/current waveform analysis and a real time events log.

The LCD also allows all the settings to be modified from the front panel, (password protected). Setting of preferred supplies as well as the override function is performed through a simple slide switches at the back of the STS.

The Model-B i-STS is offered with various options for connection to your equipment/ computer load to always ensure maximum flexibility.

Communication:
The standard Model B STS is fitted with seven voltage-free contacts and three remote inputs. If you require a more advanced monitoring solution, we also offer monitoring through MODBUS or a web browser interface to monitor and if needed, control the STS. Setting of the STS parameters can also be performed using the web browser interface.

Maximum Reliability:
The Model B Static Transfer Switch is generously rated and features a high reliability, low maintenance, robust design with redundant detection circuitry.

The units use DSP high speed digital sampling for stable, reliable and predictable operation. We are so confident of the reliability of our equipment, we offer the industry's longest warranty period.

i-STS Features	Benefits
Rugged	Get the performance and robustness of power solid state devices instead of electromechanical relays.
Natural Air Cooled (no fans)	Low noise and maximum reliability
Break Before Make Transfers	Prevent paralleling of input sources
Large Overload and Fault Capacity (contains fuses)	Suitable for installations with fault capacity up to 20kA
Guaranteed Load Fault Transfer Lock-out	Will not transfer faults to alternative source
Synchronous and Non-Synchronous Transfers Allowed	Transfer at safely even if sources are asynchronous
SCR Open and Short Circuit Protection	No overlapping or loss of supply due to SCR or control failures
LAN Web Server Option Built Into Hardware	Monitor and control STS through Web Browser software
Redundant Controls	More secure higher MTBF for your equipment / Redundant power monitoring
Fixed Maintenance Bypass and Hot Pluggable STS Module	Maintain or replace STS without losing power to critical equipment

Specifications

Rating	20/32/40/50 & 63 Amperes RMS
Voltage Rating	230/240 V ± 20% single phase or 415/400 three phase
Permissible Voltage Distortion	20% THDV
Frequency	50 Hz ± 5%
Type	Single phase, single pole or single phase double pole or three phase, three or four pole
Efficiency	99.5 %
Transfer Type	Thyristor (break-before-make, no source overlap, zero current)
Detection	Digital (< 1 msec)
dV/dt	1000 V/µsec
MTBF	> 800,000 Hrs
Device Ratings	120 Amperes RMS, 1600 Volts, 2 kA 10msec, 20,000 A^2Sec
Fault rating	20 kA
Fault Current Setting	250 Amperes peak (transfer lock-out)
Protection	Internal 100 Ampere fuses
Overload Capacity	Up to 63 Amperes for 30 seconds 100 Amperes for 0.5 second 400 Amperes for 100 msec 1500 Amperes for 10 msec
Remote I/O	7 x Voltage free contacts (50 V DC, 1 Ampere N/C)
LAN Browser	Optional
Modbus TCP	Optional
Modbus RTU (RS232)	Optional
Operating Temperature	0 - 40 °C
Cooling	Natural (except for 63 Amp mulipole units)
Physical Size	3RU x 19 Inch x 385 mm deep, 3-phase units are 580 deep
Weight	15 kg (typical, 45kG for three-phase units)
Colour	Aluminium / Black front panel
Compliance	AS3100 & ASNZ/IEC 62310-1 (for STSs)
Warranty	24 months

Subject to change without notice.

Static Transfer Switches

i- STS Manufacturing is a subsidiary of
STATIC POWER PTY. LTD.
ABN 42 101 765 913

Post to:
Box 2003
Research Delivery Centre
Research VIC 3095
Australia
Manufactured at:
5/39-45 Susan Street
Eltham VIC 3095
Australia

Phone: +613 9431 0494
Fax : +613 9431 0939
Email : sales@i-sts.com.au
Web : www.i-sts.com.au