The STS-I is one in a family of L-3 Power Paragon’s High Speed Digital Static Transfer Switches (Series STS-I). This STS automatically transfers critical loads from a primary power source to an alternate power source in the event of interruption or abnormal conditions.

Designed using Silicon-Controlled Rectifier (SCR) power-switching elements, the STS-I transfers the critical load between power sources in less than 1/4 cycle upon loss of source – more than 10 times faster than traditional electromechanical switches – appearing seamless to even the most critical loads.

Accomplishing rapid transfer without cross-connecting power sources, the STS-I ensures that no damage can occur to either power source. This also allows for transfer between two dissimilar power sources – a feature far superior to mechanical closed-transition automatic transfer switches.

The STS-I has precision digital sense and control circuits that do not require calibration or adjustments (no potentiometers).

The sensed analog signals are converted to digital format before being interpreted. All operational parameters are set digitally.

The STS-I has dedicated logic for the critical interpretation and switching operations. This dedicated logic ensures fast and predictable operation at all times. A microcontroller performs the system level functions such as operator interface (control panel), operating parameter setup, and remote monitoring and control.

The construction of the STS-I maximizes reliability and maintainability by separating the power electronics from the bypass system.

**FEATURES**

- Automatic/manual transfer control
- Fault tolerant transfer logic (no single point of failure)
- Redundant logic power
- ¼ cycle transfer without cross connection
- Selectable time delay for out of phase transfers
- Transfer between dissimilar sources of power
- Automatic retransfer with adjustable time delay
- Open- and shorted-SCR detection that does not cross connect the sources
- All parameters set digitally
- Parameter settings may be password protected
- Large 12” high resolution, color LCD panel with touch screen
- Data logger
- Small footprint
- Plug-in circuits breakers

**APPLICATIONS**

- Data centers
- Internet centers
- Communications centers
- Computer centers
- ATC facilities

**OPTIONS**

- Installation & start ups
- Site testing & training
- Spare parts
- Maintenance contracts
- Load test connector
STTS-I

**ELECTRICAL CHARACTERISTICS**

- **Voltage/Frequency**
  - 208/120 VAC, 3-PH, 4W, 60Hz
  - 480 VAC, 3-PH, 3 or 4W, 60 Hz
- **Current Rating**
  - 150, 250, 400, 600A
- **Efficiency**
  - 98% nominal

**OPERATIONAL CHARACTERISTICS**

- **Sense Time**
  - less than 2 ms upon loss of source
- **Sense & Transfer Time**
  - 1/4 cycle upon loss of source
- **RS-485 Port**
  - Offers remote status and operation access
- **User Adjustable Settings**:
  - Select preferred source
  - Overvoltage
  - Undervoltage
  - Retransfer ON/OFF
  - Retransfer delay time
  - Phase angle error
  - Transfer delay
  - Over load & peak overload
  - Transfer inhibit (overload)

**Panel Indicators:**

- Summary Alarm/Audible
- Source 1 Active
- Source 2 Active
- Source 1 Preferred
- Source 2 Preferred
- Source 1 Power
- Source 2 Power
- Input Avail Source 1
- Input Avail Source 2
- Phase Status
- Auto Retransfer On
- Auto Retransfer Off
- Load Power On
- Breaker Status

**Panel Controls:**

- Fault Reset
- Lamp Test
- Auto Retransfer On
- Auto Retransfer Off
- Select Source 1
- Select Source 2
- Control Enable
- Audible Alarm Reset

**Metering:**

- Input V, I, kVA
- Output V, I, kVA

**ENVIRONMENTAL SPECIFICATIONS**

- **Operating**
  - Temperature Range: 0°C to 40°C
  - Relative Humidity: 0% to 95% noncondensing

**PHYSICAL SPECIFICATIONS**

- **Weight**
  - 740 lbs /336 kg (150A/250A/400A)
  - 975 lbs /443 kg (600A)
- **Dimensions**
  - H 86.0 in. /218.4 cm
  - W 34.0 in. /86.4 cm
  - D 34.0 in. /86.4 cm