

# ATS

## ATS Model

800-3900

15 A  
3450 VA  
230 V

800-5900

20 A  
4600 VA  
230 V

800-7900

30 A  
6900 VA  
230 V

Two AC inputs - one AC output

Automatic transfer switch

## Automatic transfer switches

The ATS-800 series of automatic transfer switches is designed for applications where two or more autonomous power sources are available. The ATS can be utilized as single or multiple units for different levels of redundancy. The ATS-800 is specifically designed as a low-cost alternative to the ATS-1000 with limited rack space thanks to its 1-RU height.

### Typical ATS applications

Applications include industrial control, automatic test equipment, oil exploration and utilities. For customers with unique needs, TSi Power offers custom programming to address your unique requirements.

### How the ATS works

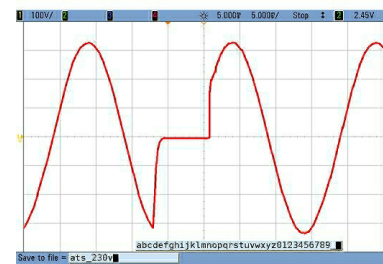
The ATS works with asynchronous or out-of-phase power sources which allows them to be used with a number of different sources. The ATS is fed by two AC power sources. When the primary power source detector circuit senses a loss of power on that circuit, it immediately switches the load over to the backup source in less than eight milliseconds (ms).



Front view showing enable/disable audible alarm switch and LED status indicators



Rear view showing hardwire cover, DB-9 connector, primary and backup circuit breakers



Transfer between primary and backup power

Upon return of primary power, the ATS will switch back in less than 8 ms. This is fast enough to be invisible to even the most sensitive equipment.



**TSi POWER**

1103 W Pierce Avenue  
Antigo, WI 54409 USA  
Tel: + 1-715-623-0636  
Fax: + 1-715-623-2426  
Toll-Free: 1-800-874-3160  
email: sales@tsipower.com  
Web: www.tsipower.com

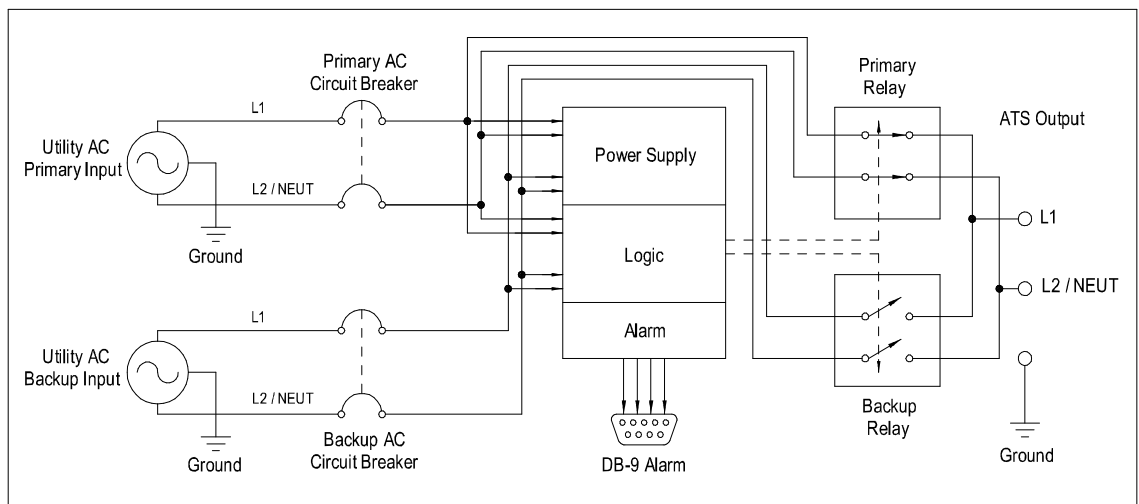
## Features and Benefits

- Accepts inputs from asynchronous sources and can be used with most supply voltages, including out-of-phase.
- Eight ms transfer time between sources is fast enough for even the most sensitive loads.
- Audible alarm with enable/ disable switch provides for unattended security.
- LED status indicators for quick visual displays of fault conditions.
- Higher than 99% efficiency means substantial energy savings (when the ATS is used as a battery-less UPS).
- Remote monitoring is provided through DB9 port. can be used with most supply voltages, including 70-90% reduction in both CAP-EX and OP-EX (when the ATS is used as a battery-less UPS).
- Built-in primary and backup rocker style circuit breakers are highly visible and easily accessible on rear of unit.
- The ATS allows redundant AC power to mission-critical equipment using any combination of UPS, backup generator or other available autonomous AC power sources.
- Sturdy steel enclosure is rack-mountable without the need for special brackets.

| SPECIFICATION                        | ATS-800-3900   | ATS-800-5900  | ATS-800-7900   |
|--------------------------------------|--|---|--|
| <b>ELECTRICAL</b>                    |  |   |  |
| VA at 230 V                          | 3450   | 4600  | 6900   |
| Circuit breaker ratings              | 15 A   | 20 A  | 30 A   |
| Switching technology                 | Mechanical relays  |   |  |
| <b>INPUT</b>                         |  |   |  |
| Voltage / Current / Voltage range    | 230 V / 15, 20, 30 A / 184 - 264 V   |   |  |
| Frequency range                      | 47 to 63 Hz $\pm$ 5%, Caution: Both sources must be same nominal frequency   |   |  |
| Transfer time                        | 8 ms   |   |  |
| Input / output wire size             | $\varnothing$ 1.63 mm ( $\varnothing$ 2.08 mm <sup>2</sup> )   | $\varnothing$ 2.05 mm ( $\varnothing$ 3.3 mm <sup>2</sup> ) | $\varnothing$ 2.59 mm ( $\varnothing$ 5.26 mm <sup>2</sup> ) |
| AC input connections                 | Hardwire terminals<br>(standard Hardwired units must be installed by a qualified electrician)  |   |  |
| <b>OUTPUT</b>                        |  |   |  |
| Voltage / Current                    | 230 V / 15, 20, 30 A   |   |  |
| Load regulation                      | 1 % from no load to full load  |   |  |
| Power efficiency                     | 99% or higher  |   |  |
| AC output connections                | Hardwire terminals<br>(standard Hardwired units must be installed by a qualified electrician)  |   |  |
| LED indicators: Green / Yellow / Red | Primary output / Backup output / No primary or backup AC   |   |  |
| Audible alarm                        | Buzzer beeps when loss of primary or backup AC occurs  |   |  |
| Audible alarm on / off               | Enable / Disable switch  |   |  |
| Alarm contacts                       | Rear-mounted DB-9 connector sends loss of primary / backup AC  |   |  |
| <b>PHYSICAL</b>                      |  |   |  |
| Dimensions: mm                       | W: 422 mm H: 44 mm D: 267 mm   |   |  |
| Weight: kg                           | 3.63 kg  |   |  |
| Integral 482.6 mm Front Rack-Mount   | Standard   |   |  |
| Ambient temperature                  | 0° to 40° C  |   |  |
| <b>CE COMPLIANCE</b>                 |  |   |  |
| Safety                               | EN 60950-1   |   |  |
| EMC                                  | Radiated: EN55022-1 Immunity: EN55024  |   |  |
| <b>WARRANTY</b>                      |  |   |  |
| Warranty                             | TSi Power's ongoing product improvement two year limited warranty covers parts and labor. Other companies product names herein are for identification purposes only and may be trademarks of their respective companies. |   |  |



## ATS system architecture



**TSi POWER**

1103 W Pierce Avenue  
Antigo, WI 54409 USA  
Tel: + 1-715-623-0636  
Fax: + 1-715-623-2426  
Toll-Free: 1-800-874-3160  
email: sales@tsipower.com  
Web: www.tsipower.com