

1000-3904

15 A 3450 VA 230 V

1000-5904

20 A 4600 VA 230 V

Automatic transfer switches

The ATS-1000 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.

Typical ATS applications

Applications include but are not limited to telecom, computers, data centers, industrial control, automatic test equipment, oil exploration and utilities.

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. Customers with special requirements can be offered custom programming to address special use situations.

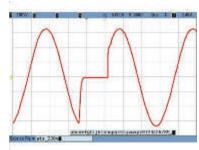
ATS is fed by two AC power sources. When the primary power source detector circuit senses a loss of power on that circuit, it immediately switches the load over to the backup power source in less



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



Rear view showing compartment covers, DB-9 connector, primary and backup circuit breakers



Transfer between primary and backup power

than eight ms. 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.

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 ATS is used as a battery-less UPS).
- Remote monitoring is provided through a DB9 port.

- 70-90% reduction in both CAP-EX and OP-EX (when ATS is used as a battery-less UPS).
- Built-in primary and backup 'flat-on' 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 can be rack, wall or floor mounted with optional mounting brackets.



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| SPECIFICATION | ATS-1000-3904 | ATS-1000-5904 |
|---|---|---------------|
| ELECTRICAL | | |
| VA at 230 V: -3004 / -5004 | 3450 | 4600 |
| Circuit breaker: -3004 / 5004 | 15 A | 20 A |
| Switching technology | Mechanical relays | |
| INPUT | | |
| Voltage / Current / Voltage range | 230 V / 15, 20 A / 196 - 264 V | |
| Frequency range | 50 Hz | |
| Transfer time | 8 ms | |
| AC input connections | IEC60320 C-14 | IEC60320 C-20 |
| OUTPUT | | |
| Voltage / Current | 230 V / 15, 20 A | |
| Load regulation | 1 % from no load to full load | |
| Power efficiency | 99% or higher | |
| AC output connections | IEC60320 C-13 | IEC60320 C-19 |
| 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 | |
| PHYSICAL | | |
| Dimensions: mm | W: 406 mm H: 83 mm D: 305 mm | |
| Weight: kg | 5.45 kg | |
| Front mount kit for rack: 482.6 / 584.2 | MK-5019A / MK-5023A / MK-5024A | |
| 609.6 mm | MIX 5010E / MIX 5000E / MIX 5004E | |
| Center mount kit for rack: 482.6 / 584.2 / 609.6 mm | MK-5019F / MK-5023F / MK-5024F | |
| Wall or floor mount kit | MK-5000C | |
| CE | | |
| Ambient temperature | 0° to 40° C | |
| CE COMPLIANCE | | |
| Safety | EN 60950-1 | |
| EMC | Radiated: EN55022-1 Immunity: EN55024-1 | |
| WARRANTY | | |
| Warranty | Two year limited warranty, parts and labor | |

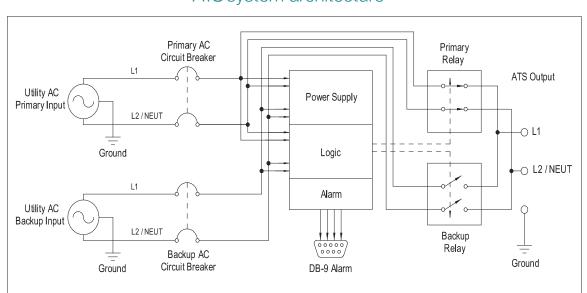
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ATS system architecture



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