

ATS

ATS Model

1000-3904

15 A
3450 VA
230 V

1000-5904

20 A
4600 VA
230 V

Two AC inputs - one AC output

Automatic transfer switch

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.



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



Rear view showing IEC60320 inlets/outlets, DB-9 connector, primary and backup circuit breakers

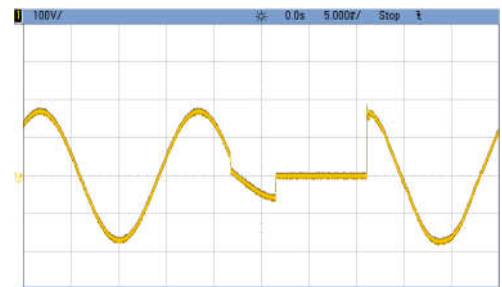
Typical ATS applications

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.

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 power source in under one cycle. This is



Typical transfer between primary and backup power

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.
- Transfer time of under one cycle between sources which 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 & enable function (unit ON/OFF) is provided through a DB9 port.
- AC Inputs are galvanically isolated.
- 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 '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.
- RCD (Residual Current Device) compatible.



TSi POWER

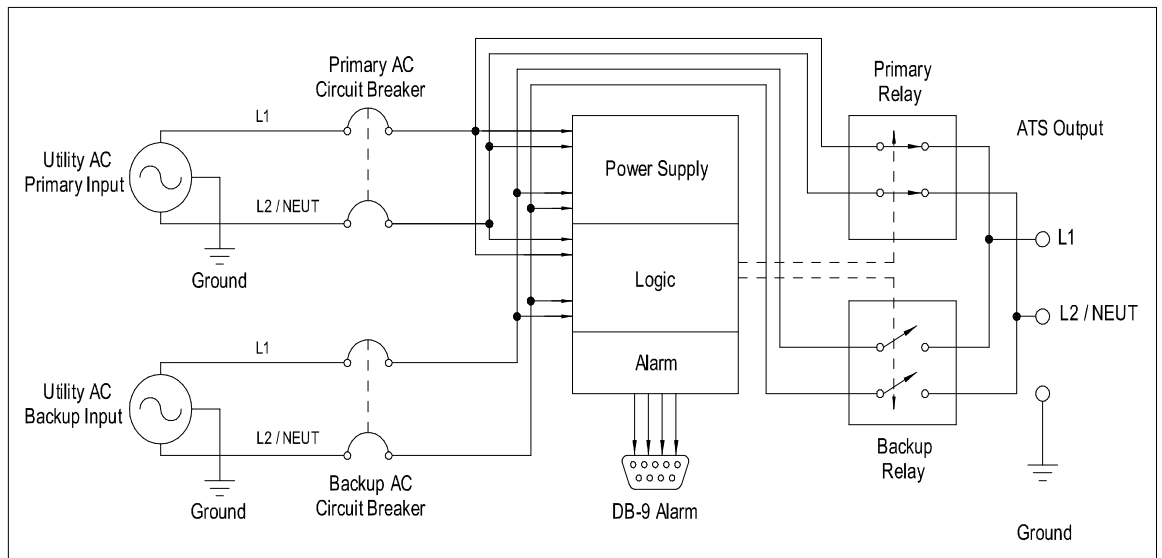
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SPECIFICATION	ATS-1000-3904	ATS-1000-5904
ELECTRICAL		
VA at 230 V	3450	4600
Current rating	15 A	20 A
Switching technology	Mechanical relays	
INPUT		
Voltage range	230 V; 184 - 264 V \pm 2.5 % nominal	
Frequency range	47 to 63 Hz, Caution: Both sources must use same nominal frequency	
Transfer time	Under one cycle	
AC input and output connections	IEC60320 C-14	IEC60320 C-20
OUTPUT		
Voltage / Current	230 V / 15, 20A	
Load regulation	1 % from no load to full load	
Power efficiency	99 % or higher	
AC distribution	IEC60320 C-13	IEC60320 C-19
LED indicators:	Green: Primary output, Yellow: Backup output, Red: 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 / inches	W: 406 mm / 16" H: 83 mm / 3.25" D: 305 mm / 12"	
Weight: kg / lbs	5.45 kg / 12 lbs	
Front mount kit for rack: 482.6 / 584.2 / 609.6 mm / 19" / 23" / 24"	MK-5019A / MK-5023A / MK-5024A	
Center mount kit for rack: 482.6 / 584.2 / 609.6 mm / 19" / 23" / 24"	MK-5019F / MK-5023F / MK-5024F	
Wall or floor mount kit	MK-5000C	
ENVIRONMENTAL		
Ambient temperature	0° to 40° C (32° to 104° F)	
AGENCY APPROVALS		
Safety	EN 60950-1	
EMC	Radiated: EN55022-1 Immunity: EN55024	
WARRANTY		
Warranty	Two year limited warranty covers parts and labor	

TSi Power's ongoing product improvement process makes specifications subject to change. Other companies product names herein are for identification purposes only and may be trademarks of their respective companies.



ATS system architecture



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