

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.

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.

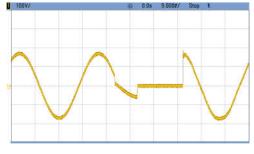
The ATS is fed by two AC power sources. When the primary power source detector circuit senses a loss of power on that circuit, it immediately switches the load over to the backup power source in under one cycle. This is



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



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.

ATS Model

1000-3800

15 A

208 V

1000-5800

20 A

208 V

1000-7800

30 A 208 V

1000-9800

1000-90

40 A 208 V

1000-3000

15 A 220, 240 V

1000-5000

20 A 220, 240 V

1000-7000

30 A 220, 240 V

1000-9000

40 A 220, 240 V



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SPECIFICATION		ATS-1000- 3800	ATS-1000- 5800	ATS-1000- 7800	ATS-1000- 9800	ATS-1000- 3000	ATS-1000- 5000	ATS-1000- 7000	ATS-1000- 9000
ELECTRICAL									
VA at 208 V		3120	4160	6240	8320				
VA at 220 V						3300	4400	6600	8800
VA at 240 V						3600	4800	7200	9600
Current rating		15 A	20 A	30 A	40 A	15 A	20 A	30 A	40 A
Switching technology					Mechani	cal relays			-
NPUT								'	
Voltage range:		208 V; 166 - 239 V ± 2.5 % nominal							
Voltage range: 220 V or 240 V						220 or 240 V; 184 - 264 V ± 2.5 % nominal			
Frequency range		47 to 63 Hz, Caution: Both sources must use same nominal frequency							
Transfer time		Under one cycle							
AC input connection		Hardwire							
			(standa	rd Hardwired	units must b		a qualified el	lectrician)	
UTPUT						,	· · ·	· · · · · · · · · · · · · · · · · · ·	
Voltage / Current		208 V / 15, 20, 30 or 40A 220 or 240 V / 15, 2						5, 20, 30 or	40 A
Load regulation		1 % from no load to full load							
Power efficiency		99 % or higher							
AC distribution		Hardwire terminals							
		(standard Hardwired units must be installed by a qualified electrician)							
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							
HYSICAL							, ,		
Dimensions: Inches / mm				W: 16" / 406	mm H: 3.25'	' / 83 mm D:	12" / 305 mr	n	
Weight: lbs / kg		12 lbs / 5.45 kg							
Front mount kit for rack: 19" / 23" /		MK-5019A / MK-5023A / MK-5024A							
24" / 482.6 / 584.2 / 609.6 mm									
Center mount kit for rack: 19" / 23"		MK-5019F / MK-5023F / MK-5024F							
/ 24" / 482.6 / 584.2 /609.6 mm Wall or floor mount kit		MK-5000C							
						00000			
		1			32° to 104° F	= / 0° to 40° (<u></u>		
Ambient temperature					32 l0 104 r	-70 1040 (0		
AGENCY APPROVALS				07/02/27 Ed	2 LIL Standa	rd for Sofoty	Information T		quipmont
Safety		UL 60950-1 Issue: 2007/03/27 Ed:2 UL Standard for Safety Information Technology Equipment - Safety - Part 1: General Requirements - CSA C22.2#60950-1 Issued: 2007/03/01 Ed:2 Information							
					ipment Safety				
VARRANTY		•			<u> </u> ,				
Warranty		1		Two vear li	imited warran	tv covers par	ts and labor		
		TSi Po	wer's ongoing p	roduct improven	nent process mak	es specifications	subject to chan	ge. Other compa	anies product
(ETL)		names	herein are for ic	dentification purp	oses only and ma	ay be trademarks	s of their respect	ive companies.	·
US	ATS system architecture								
Intertek									
				rimary AC				Primary	
Utility A Primary In		Circuit Breaker Relay							
TSi POWER	Ground				Logic	= = = = = = = = = = = = = = = = = = =			
1103 W Pierce Avenue						-			-0 L2/N
Antigo, WI 54409 USA					Alarm				
Tel: + 1-715-623-0636 Utility A0									
Fax: + 1-715-623-2426	Backup In		L2 / NEUT	\sim		$\downarrow\downarrow\downarrow\downarrow\downarrow$		Backup	
Toll-Free: 1-800-874-3160			Ва	o o ackup AC		0000		Relay	<u> </u>
email: sales@tsipower.com		Gro		uit Breaker		DB-9 Alarm			Ground
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