

STS Series

Static Transfer Switch

50A - 1250A



Product

AP STS series allows instantaneous transfer of power sources to the load. If one power source fails, the STS switches to the back-up power source so fast that the load never recognises the transfer made.

OPERATING PRINCIPLE

AP STS guarantees a source of redundant power, allowing the load to be switched between to alternative and independent power sources. Switching can be automatic (when a supply source falls outside of acceptable tolerances) or manually done by an operator from the front panel or remotely.

PROTECTION AGAINST ENVIRONMENTAL DISTURBANCES

Overloads and load faults. In the event of an overload, the user can decide the level of intervention of the internal protection devices in order to block the power supply. In the extreme case of a downstream short circuit, AP STS disconnects the load in order to avoid jeopardizing the operation of the other loads (i.e. in the event of poor selectivity of the protection devices).

TOTAL MICROPROCESSOR CONTROL

Microprocessor control logic ensures :

- Fast and safe switching between power sources
- Monitoring of all parameters via LCD display
- Constant monitoring of SCR operation
- Advanced remote diagnostics (RS232 and TCP/IP)

PROTECTION AGAINST POWER SUPPLY FAULTS

If one of the two power sources falls outside tolerance levels, AP STS will transfer the consumers to the second power source (switching is instantaneous if the two sources are in phase).

SUPERIOR PROTECTION

In the event of an output short circuit, AP STS blocks the transfer between the two power sources, eliminating the risk of propagating the short circuit and its effects to the other loads. A back feed control circuit

will trigger automatic protection devices to avoid energy feeding back to one of the inputs.

ACCESSIBILITY

The layout of the moving components and parts is designed to ensure easy frontal access :

- Power cable connections that are easily accessed with entry from below
- Boards housed in a dedicated area for rapid diagnosis / replacement
- All parts subject to monitoring, maintenance and/or replacement.

Features

- Increased power quality and noise reduction
- Power blackout protection and power redundancy
- Automatic static switching
- Remote monitoring input power sources
- Easy static and mechanical transfer to input sources
- Remote management the power events
- Power event logging
- Output current capability up to 1000% for short time
- Manufactured according to EC Directive; EN62310

Model	3-P50A	3-P100A	3-P150A	3-P200A	3-P250A	3-P300A	3-P400A	3-P600A	3-P800A	3-P1000A	3-P1250A	
	4-P50A	4-P100 A	4-P150A	4-P200A	4-P250A	4-P300A	4-P400A	4-P600A	4-P800A	4-P1000A	4-P1250A	
Nominal Current (A)	50	100	150	200	250	300	400	600	800	1000	1250	
Electrical data												
Input Voltage (Ph-Ph)	380/400/415VAC 3PH+N+Earth											
Input Voltage Tolerance	180-264VAC (PH+N)											
Input Frequency	50/60Hz											
Input Frequency Range	48-65Hz (upper and lower limits adjustable)											
Efficiency (full load)	>99%											
Input Voltage THD	<10%											
Transfer Type	“Break Before Make”											
Transfer Methods Available	Automatic/Manual/Remote											
Transfer Control	Synchronous; With adjustable delay (non-synchronous); zero current (non-synchronous)											
Transfer Time	<4msn for synchronoussources											
	<10msn for non-synchronoussources											
Switching Type	3-Poles : 3 phase switching; 4-Poles : 3 phases + neutral switching											
Crest Factor	3 : 1											
Admissible Overload	0-100% continuous; 101-150%, 1min 151-200%, 10sec; >300%, 250ms											
Protections	Output overload, short circuit, over temperature, backfeed and SCR fault protection											
LCD Panel and Mimic	Standard											
Communication	RS232 standard, RS485 optional											
TCP/IP Connection	Optional											
Dry Contacts	5 programmable relay outputs											
Serial Ports	2; optional											
Temperature Sensor	Standard for internal cabinet temperature											
Environment												
Operating Temperature	0°C - 40 °C											
Storage Temperature -	10°C - 50 °C											
Humidity	<90%(non condensing)											
Cooling	Forced cooling (redundant fans)											
Noise	<52dBA			<55dBA				<60dBA			TBA	
Safety Standard	EN62310-1											
EMC	EN62310-2											
Mechanical												
Dimension (W*D*H)(mm)		685*530*1500			685*580*1770				915*735*1905	1400*850*1905		TBA
Weight (kg)	3-Pole	139	145	165	195	205	230	240	340	-	-	TBA
	4-Pole	160	175	190	205	235	240	255	375	525	605	TBA

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