STS Series

Static Transfer Switch

50A -1250A

SW-STS, 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

SW-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, SW- 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, SW- 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, SW- 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;

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-P100A	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
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										
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 condesing)										
Cooling		Forced cooling (redundant fans)										
Noise		<52dBA			<55dBA				<60dBA			
Safety Standard		EN62310-1										
EMC		EN62310-2										
Mechanica												
Dimension (W*D*H)(mm)		700*1000*1500					700*1000*1700					1000*1200*1800
Weight (kg)	3-Pole	160	180	200	220	250	300	400	500	550	580	
	4-Pole	190	210	230	250	280	340	440	550	600	620	900