

# STS Series

## Static Transfer Switch (Thyristor Based)

SPE STS Series 1-Phase & 3-Phase Thyristor controlled Static Transfer Switches are used to ensure instantaneous transfer between two independent AC power sources to critical electrical loads. The operations are continuously monitored by DSP controller. In the event of primary source failure, the backup (alternate) source will be automatically connected (transferred).



### APPLICATIONS

- Critical IT operations
- Telecommunication centers
- Network operations centers
- Fiber optic nerve center
- Process control
- Data centers
- Airport security system
- Commercial buildings
- Power Utilities / Generation plants
- Automated manufacturing / Assembly Lines

### FEATURES

- Smart Control and high reliability with DSP (Digital Signal Processor)
- Thyristor controlled switching (fully static)
- Automatic and Manual transfer modes
- 2x16 character LCD display, showing measurements, status and alarm messages
- Graphic touchscreen user interface module (HMI) \*Option
- LED display for easy observation of transfer switching status
- Audible alarm
- LED Test
- Internal Maintenance bypass switch
- Internal redundant and monitored power supplies
- Calibration of measurements from front panel
- Language selection from front panel (English / German / Turkish / Dutch / Portuguese)
- Protection: Input High / Low, Output High / Low, Over Temperature, Short Circuit
- Programmable Operation Parameters (Password Protection)
- Common alarm relay output
- Monitor and control via RS-232 (\*RS-485 Modbus option)
- 200 event log records with date with time stamping
- Internal cabinet Lighting and Space Heater \*Option

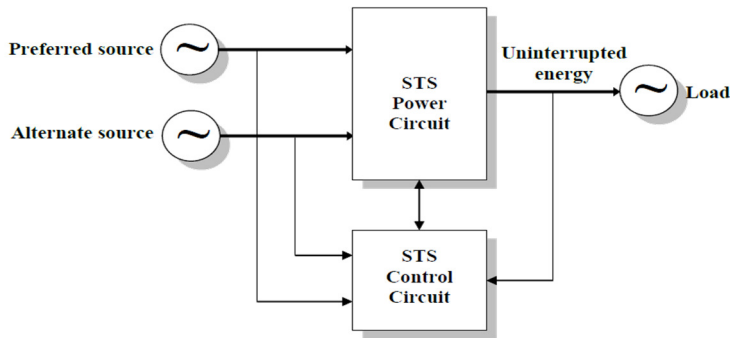




### SPECIFICATIONS – SINGLE PHASE STS

MODELS	STS 1016	STS 1032	STS 1050	STS 1063	STS 1100	STS 1150
<b>POWER (A)</b>	<b>16</b>	<b>32</b>	<b>50</b>	<b>63</b>	<b>100</b>	<b>150</b>
<b>INPUT</b>						
Input Voltage	110V / 120V / 220V / 230V / 240V					
Nominal Frequency	50 or 60 Hz					
<b>OUTPUT</b>						
Output Voltage	110V / 120V / 220V / 230V / 240V					
Transfer Time	Synchronous transfer => < ¼ period (cycle), 5.0ms @ 50Hz, 4.2ms @ 60Hz					
Efficiency	➤ 98 %					
Overload Capability	150% for 1-min, 250% for 20ms					
Source Voltage Distortion	10% maximum					
Operation Temperature	-5°C – 50°C					
Storage Temperature	-20°C – 70°C					
Max. Altitude	2000 metre					
Dry Contact	1x Dry Contact output for common alarm (*Option: 4x Dry Contacts)					
Communication	Standard RS-232 (*Option: RS485 Modbus)					
<b>GENERAL FREATURES</b>						
Alarm Indications	Overload, Over temperature, Fuse Failure, Maintenance Switch Active					
Event Log	200 event logs with real time & date stamping					
LED Indications	(Source1 Good, Source2 Good, Source1 On, Source2 On, Output OK, Common Alarm, Source1 Maint, Source2 Maint, Synchronisation Bad)					
Alarm	Audible Alarm					
Protection	Load high current inhibit function – Inhibits emergency transfer in case of short circuit					
Power Supplies	Redundant Internal Power Supplies					
Compliance	IEC 62310 ; EMC EN 55011, EN 61000-2-2, 61000-4-2, -3, -4, -5, -6, -8					

PE STS Series Single Phase Static Transfer Switch. Specifications can change without notice. Datasheet v1.1



## SPECIFICATIONS – THREE PHASE STS

MODELS	STS 3050	STS 3100	STS 3150	STS 3200	STS 3400	STS 3500	STS 3600	STS 3800
<b>POWER (A)</b>	50	100	150	200	400	500	600	800
<b>INPUT</b>								
Input Voltage	380 / 400 / 415 Vac ; 3 (3-pole) - 3+N (4-pole) (optional)							
Nominal Frequency	50 or 60 Hz +/-10 % (adjustable)							
<b>OUTPUT</b>								
Output Voltage	380 / 400 / 415 Vac ; 3 (3-pole) - 3+N (4-pole) (optional)							
Transfer Time	Synchronous transfer => < ¼ period (cycle), 5.0ms @ 50Hz, 4.2ms @ 60Hz							
Efficiency	➤ 99 %							
Overload Capability	150% for 1-min, 250% for 20ms							
Source Voltage Distortion	10% maximum							
Operation Temperature	-5°C – 50°C							
Storage Temperature	-20°C – 70°C							
Max. Altitude	2000 metre							
Dry Contact	1x Dry Contact output for common alarm (*Option: 4x Dry Contacts)							
Communication	Standard RS-232 (*Option: RS485 Modbus)							
<b>GENERAL FREATURES</b>								
Alarm Indications	Overload, Over temperature, Fuse Failure, Maintenance Switch Active							
Event Log	200 event logs with real time & date stamping							
LED Indications	(Source1 Good, Source2 Good, Source1 On, Source2 On, Output OK, Common Alarm,Source1 Maint, Sourc2 Maint, Synchronisation Bad)							
Alarm	Audible Alarm							
Protection	Load high current inhibit function – Inhibits emergency transfer in case of short circuit							
Power Supplies	Redundant Internal Power Supplies							
Compliance	IEC 62310-1,-2,-3 ; EMC EN 55011, EN 61000-2-2, 61000-4-2, -3, -4, -5, -6, -8							

PE STS Series Three Phase Static Transfer Switch. Specifications can change without notice. Datasheet v1.1