

STS3000-4000

STATIC TRANSFER SWITCH

3 PHASE, 3&4 POLES

- VERY FAST UNINTERRUPTED TRANSFER
- ADVANCED COMMUNICATION
- MICROPROCESSOR CONTROL
- CHASSIS TYPE OPTION (*)



STS 3000-4000 3 phase, 3&4 pole static transfer switch transfers uninterruptedly critical loads to either of two independent AC power lines. The system monitors two AC inputs. If any of them goes out of the specified tolerance, it transfers the critical load to the other. By increasing the energy quality of the systems used with STS 3000-4000, while reducing the effects of interference and short interruptions, a backup power system is gained.

(*) Some range of TESCOM three or four-pole STSs are also available in chassis version. They are mainly used as building blocks in power distribution systems. They do not have protection equipment and cabinet covers on the unit but they are mainly used for uninterruptible transfer between alternative AC power sources.



GENERAL SPECIFICATIONS

- Full digital control with microprocessor controlled structure
- 2 AC inputs with 3 phase switching
- Easy installation and maintenance
- Compact design
- Wide input voltage range
- "Break Before Make" type transfer
- Very fast uninterrupted transfer even in case of any failure (≤4ms- for senconised sources)
- Selectable preferred source
- Fuse-free construction with a robust, high reliability SCR
- Digitally controlled system set points
- Programmable synchronized and unsynchronized transfers
- Convenient and multifunctional front panel and diagnostic codes
- Transfer inhibit system over a certain current value
- Overload, over temperature and short circuit protections
- Convenience during maintenance and repair with Isolated Maintenance Bypass
- Remote monitoring of energy resources
- TCP / IP, SNMP, MODBUS and RS232 infrastructure for communication
- Dry-contact interface
- Internal cooling fans
- Optional external AC power supply socket outlet
- Optional SNMP adaptor

TECHNICAL SPECIFICATIONS

MODEL	STS3050	STS3100	STS3150	STS3200	STS3250	STS3300	STS3400	STS3600	STS30800	STS31000	STS31250
	STS4050	STS4100	STS4150	STS4200	STS4250	STS4300	STS4400	STS4600	STS40800	STS41000	STS41250
Nominal current	50 A	100 A	150 A	200 A	250 A	300 A	400 A	600 A	800 A	1000 A	1250A

ELECTRICAL

Input voltage (Ph-Ph)	380/400/415 VAC 3P + N + G										
Input voltage tolerance	180-264 VAC (PH-N)										
Input frequency	50Hz. / 60Hz.										
Input frequency range	48-65Hz (upper and lower limits adjustable)										
Efficiency (at full load)	Up to 99.5%										
Input voltage THD	< 10%										
Transfer type	"Break before make"										
Transfer methods available	Automatic / Manual / Remote										
Transfer control	Synchron										
	With adjustable delay (non synchron)										
	Zero current (non synchron)										
Transfer time	< 4 msn for synchronous sources										
	< 10 msn for non-synchronous sources										
Switching type	3-Pole: 3-phase switching / 4-Pole: 3-phase switching + Neutral switching										
Output current crest factor	3:1										
Admissible overload	0% - 100% continuous										
	101% - 150% 1 min.										
	151% - 200% 10 seconds										
	> 200% 250 msec										
Protections	Output overload and short circuit protection, Overtemperature protection, Backfeed protection, SCR fault protection										
LCD panel and mimic	Standard										
Communication	RS232 standard, RS485 optional, SNMP optional										
TCP/IP connection	Optional										
Dry contacts	4 programmable relay outputs										
Two serial ports	Optional										
Temperature sensor	Standard for internal cabinet temperature										

ENVIRONMENTAL

Max. installation altitude	1000 m at nominal current rate, (- 1% derate 100m above 1000m)										
Cooling	Forced cooling (redundant fans)										
Operating temperature	0°C - 40°C										
Storage temperature	-10°C - +50°C										
Relative humidity	90% max. (non condensing)										
Protection degree	IP20										
Standards	EN 62310-1, EN 62310-2										
Acoustic noise	< 52 dBA			< 55 dBA				< 60 dBA	< 65 dBA		

PHYSICAL

Net weight (STS3000)	139	145	165	195 (87)	205 (91)	230 (96)	240 (105)	340	520	565	610
Net weight (STS4000)	160	175	190	205 (90)	235 (95)	240 (100)	255 (110)	375	560	615	660
Dimensions (mm) HxWxD	1500x685x540			1770x685x590 (Chasis type 760x600x545mm)				1905x915x735	1905x1250x850		

* Weights and Dimensions in paranthesis belong to Tescom Chassis-type STSs.