

STS

Static transfer switches

MAXIMUM AVAILABILITY FOR ALL CRITICAL APPLICATIONS

Ablerex three-phase STS deliver high performance with an extremely short transfer time (≤ 4 ms) and high power handling (up to 3000 A) with large overload capacity.



IDEAL FOR:



Data centres



Industrial applications

FEATURES

- Provides redundant power to single-input equipment by managing two separate, independent power sources.
- Maximum automatic transfer speed between two sources: ≤ 5 ms for the 63 A versions, ≤ 4 ms for the 100 A to 1250 A versions.
- Maximum protection: it automatically inhibits the transfer in the event of a downstream short circuit, preventing damage to both sources.
- Total source independence and internal redundancy on all components including bypass, power supplies, cooling systems etc. ensures maximum continuity to the connected loads.
- Direct front access to all components and separate dual manual bypass guarantee easy and safe maintenance.
- Continuous input voltage and frequency monitoring to allow safe switching without source cross-overs.
- Real-time SCR status detection and backfeed protection for maximum upstream system safety.
- Circuit breakers for improved protection in all conditions.
- RS232, RS485 ModBus ports, dry contacts and slots for optional communication card.

KEY OPTIONS:

- Additional dry contacts card.
- Operation without neutral.
- Isolation transformer.
- Top cable entry.
- 4-pole configuration with switched neutral.

STS TECHNICAL DATA SHEET

MODEL		STS 63A-1P	STS 63A-3P	STS 100A-3p	STS 250A-3p	STS 400A-3p	STS 630A-3p	STS 800A-3p	STS 1000A-3p	STS 1250A-3p	
SIZE (A)		63	63	100	250	400	630	800	1000	1250	
INPUT	Terminal block	2-wire terminals	4-wire terminals								
	Rated voltage	208/220/ 230/240 Vac	208/380/400/415/440/480 Vac three-phase with neutral								
	Voltage tolerance	±15% (settable)			±10% (up to ±20% on request)						
	Frequency	50/60 Hz, ±1 Hz or ±5 Hz selectable			50/60 Hz, ±2 Hz (up to ±4 Hz on request)						
	Source harmonic voltage content	Up to 10%			Unlimited (>20%THD, switching time ≤10 ms)						
	Switching phase angle	7° to 15°			5° to 30°						
OUTPUT	Terminal block	2-wire terminals	4-wire terminals								
	Frequency	50/60 Hz									
	Switching time	≤ 5 ms Sync			≤ 4 ms						
	Switching type	Break before make, switching inhibited on fault									
	Power factor	1 to 0.3									
	Maximum crest factor	3:1									
	Load current distortion	Unlimited									
	Overload	110% for 60 min, 125% for 10 min, 150% for 2 min, 200% for 5 s			125% for 30 min, 150% for 10 min, 200% for 30 s, 2000% for 1 cycle, 4000% for 1/2 cycle						
EFFICIENCY	(AC/AC)	>98.8%	>98.5%	>99%							
GENERAL	Dimensions (WxDxH) mm	440x400x132	650x780x1400	820x835x1475			1220x860x1900			2000x1000 x2100	
	Weight (kg)	22	240	265	290	305	615	660	1000	1450	
	Protection	IP21			IP20						
	Installation layout	19" rack	Wall mounting, back to back, and side by side								
	Access	Rear	Front access, top and bottom cable entry								
ENVIRONMENTAL PARAMETERS	Operating temperature	-5°C to +40°C			0°C to +40°C						
	Altitude (a.s.l.)	<1000 m with no power derating, >1000 m with 0.6% derating for every 100 m			<1000 m with no power derating, >1000 m with 0.5% derating for every 100 m						
	Audible noise at 1 m	≤48 dBA	≤58 dBA	≤62 dBA							
CONNECTIVITY	User interface	LED synoptics	LCD graphic display, LED synoptics and function keys								
	Built-in communication ports	Card with 1 programmable contact	Relay contact card (9 contacts: 3 fixed, 6 programmable), RS232, ModBus-RTU adapter	Relay contact card, RS232, RS-485 ModBus-RTU adapter							
	Optional accessories	n.a.	n.a.	Additional relay contact card							
REGULATIONS	Standards	IEC EN 62310-1, IEC EN 62310-2, IEC EN 62310-3, IEC EN 62947-3									
	Marking	CE									

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