

Static Transfer Switch MODEL G

i-STS

The Model G *i*-STS units can be supplied with either conventional zero current thyristor uninterrupted break-before-make switch-over where the change-over is always completed in less than 5 milliseconds, or with current interruption technology ensuring minimal voltage degradation and interruption anywhere within the power cycle in less than 1 millisecond.

With limited install infrastructure this unit offers smallest footprint at only 500 mm depth (Size 1400 wide x 1900 high), with a separate top/bottom cable entry / exit and segregated isolation chamber, (Optional pluggable switchgear and form 3/4 construction). These units are ideal for corridors or adjacent to existing distribution boards where space is at a premium. Two cubicles can be easily separated for ease of installation.

These units are extra rugged and contain high fault capacity solid state thyristors for installation into high fault current environments, (35 or 50 kA capable short circuit capability).

The Range:

Rated from **250 to 1000 Amperes**, 3 phase, 3 or 4 pole configurations complete with integrated and segregated mechanically and electrically interlocked maintenance bypass facility.

Fully redundant low noise (<60dB(A)) monitored fan cooling.



Maximum Reliability:

The Model M *i*-STS features a high reliability, low maintenance, robust design with redundant circuitry. The units use DSP high speed digital sampling for stable, reliable and predictable operation. We are so confident of the reliability of our equipment, we offer the industry's longest warranty period.

These units also provide guaranteed load fault transfer lock-out to ensure that a fault in the load is not transferred to the alternate source, and feature safe synchronous & non-synchronous transfers between sources.

Triple redundant power supplies, Independent phase logic boards, SCR open and short circuit detection to ensure that there is no overlapping or loss of supply due to SCR or control failures to ensure maximum availability and protection for your load.

Simplicity Is The Key:

An uncomplicated bi-colour LED mimic and an easy to read large format backlit graphic LCD panel provide useful realtime information such as present status, variables that are all displayed on a single screen, power quality reporting, utilisation history and a 100 deep event log.

The *i*-STS can be easily transferred from one supply to the other by using the 'TRANSFER' pushbutton while the LCD has an uncomplicated easy to read and interpret control hierarchy which is operated using the down and right arrow pushbuttons.

Setting of all STS parameters is achieved via the LCD or using the web browser interface, (password protected). Dual setpoints for Manual and Auto Mode from User Control Panel.

User selectable preferred source and a controls override function.

Communication:

Each *i*-STS is fitted with seven voltage-free contacts and three remote inputs. For more advanced monitoring, we also offer MODBUS or a web browser interface to monitor and if needed, control the STS.



These specifications refer to a typical three phase thyristor based 250 - 1000, Ampere Model G free standing Static Transfer Switch

Specifications

Rating	250 /400 /500 /630 /800/ 1000 Amperes RMS
Voltage Rating	415/240 V \pm 20%
Permissible Voltage Distortion	20% THDV
Frequency	50 Hz \pm 5%
Type	3 + N (3-phase, 4-pole, or 3 phase, 3-pole)
Efficiency	99.7 %
Transfer Type	Thyristor (break-before-make, no source overlap, zero current)
Detection	Digital (< 1 msec)
dV/dt	>1000 V/ μ sec
MTBF	> 800,000 Hrs
Device Ratings	3500 Amperes RMS, 1600 Volts, 35 kA 10msec, > 7,000,000 A ² Sec
Fault rating	35 kA (or 50kA optional)
Fault Current Setting	500 Amperes peak (transfer lock-out)
Protection	External
Overload Capacity	Up to 120% Amperes for 30 seconds 500 % for 0.5 second 1000 % for 100 msec 35,000 Amperes for 10 msec
Remote I/O	7 x Voltage free contacts (50 V DC, 1 Ampere N/C)
LAN Browser	Optional
Modbus TCP	Optional
Modbus RTU (RS232)	Optional
Operating Temperature	0 - 40 °C
Cooling	Fan forced, redundant
Noise	< 60 dB(A) typically
Physical Size	1900mm high x 1400mm wide x 500mm deep
Cable Entry	Top or Bottom
Maintenance Access	Front Only (via double, lockable doors), Fully shrouded.
Weight	185 kg (typical)
Colour	RAL7035 (off white)
Compliance	AS3100 & ASNZ/IEC 62310-1 (for STSs)
Warranty	24 months

subject to change without notice.

Static Transfer Switches

↳ STS Manufacturing is a subsidiary of
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