

MULTI-CLASS STATIC AUTOMATIC BUS TRANSFER

L3Harris' Multi-Class Static Automatic Bus Transfer (MC-SABT) automatically transfers critical load power from a normal power source to an alternate power source in the event of interruption or abnormal conditions.

The MC-SABT was developed to protect mission critical power loads on naval ships and other defense applications. As such, the MC-SABT is compatible with MIL-STD-1399 and STANAG 1008.

Designed using silicon-controlled rectifier (SCR) power switching elements, the MC-SABT transfers the critical load between power sources in less than 1/4 cycle upon loss of source—more than 10 times faster than traditional electromechanical switches—appearing seamless to even the most sophisticated loads. Transfer is programmable from 1 ms to 3.5 seconds.

L3Harris' MC-SABT has precision digital sense and control circuits that do not require any calibration or adjustments. All operational parameters are set digitally and the sensed analog signals are converted to digital format before being interpreted.

The MC-SABT has dedicated logic for the critical interpretation and switching operations. The dedicated logic ensures fast and predictable operation at all times. A microcontroller performs the system level functions such as operator interface (control panel), operating parameter adjustment and remote monitoring.

L3Harris' MC-SABT is designed for ease of installation and minimum maintenance. The enclosure is drip proof and one size accommodates all ratings. This feature maximizes interchangeability of components.

FEATURES

- > Continuous monitoring of sources
- > Automatic transfer operation
- > Manual transfer capability
- > Redundant logic power
- > Redundant fans
- > Transfer between asynchronous sources of power
- > Automatic retransfer with adjustable time delay
- > Extensive self-monitoring capabilities
- > RS-485 monitoring port
- > Adaptable to customer's data bus protocol
- > All adjustable parameters set digitally
- > 8-digit LED cycle counter and fault code display
- > RS-232 control port
- > MIL-STD-1399/STANAG 1008 compatible
- > MIL-S-901 Grade A shock & MIL-STD-167-I vibration qualified
- > Will not transfer into a fault
- > QPL certification-pending
- > Depot level support
- > Hot swap SCR



OPTIONS

- > Bulkhead mounting
- > Installation and start-up
- > Site testing and training programs

APPLICATIONS

- > Naval ships

ELECTRICAL CHARACTERISTICS

- > Voltage/frequency 440 V, 3-ph, 60 Hz, 3-wire
- > Current ratings 50-to-250 A
- > Efficiency 99% nominal
- > Overload 125% for 5 minutes
- > Withstand capability 20K amp for 28 ms

OPERATIONAL CHARACTERISTICS

- > Senses time less than 2 ms upon loss of source
- > Sense and transfer time 1/4 cycle upon loss of source
- > RS-485 port offers remote status and operation access

User Adjustable Settings

- > Select preferred source
- > Overvoltage
- > Undervoltage
- > Retransfer on/off
- > Retransfer delay time
- > Phase angle error
- > Transfer delay (optional)
- > Transfer inhibit (overload)

Panel Indicators

- > Summary alarm
- > Normal input available
- > Alternate input available
- > Phase status
- > Normal active

ENVIRONMENTAL CHARACTERISTICS

- > Operating temperature - 0-to-50°C
- > Relative humidity 0-to-95% (non-condensing)
- > Shock MIL-S-901 Grade A
- > Vibration MIL-STD-167-I for Type I equipment

- > Alternate active
- > Normal preferred
- > Alternate preferred
- > Retransfer on
- > Auto
- > Manual
- > Load Power on

Panel Controls

- > Fault reset
- > Lamp test
- > Manual/automatic
- > Manual operator
- > Transfer test
- > Control enable
- > Audible alarm reset
- > Auto manual

Options

- > Audible alarm
- > Maintenance bypass
- > 120 VAC voltage

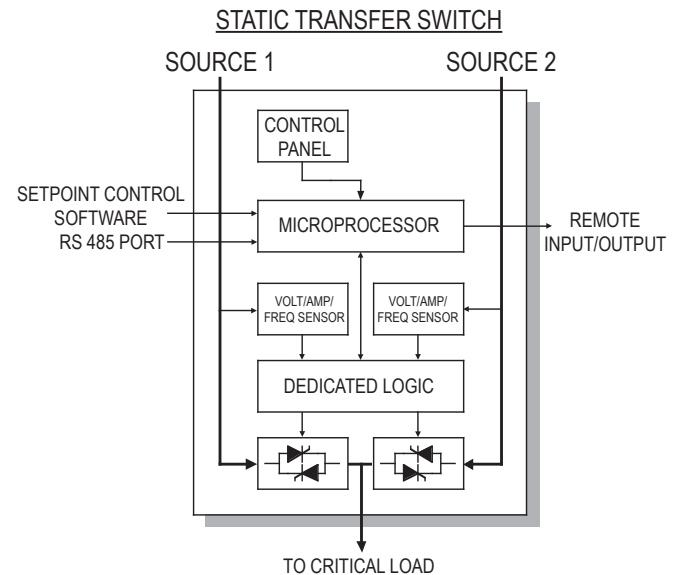
SPECIFICATIONS (FOR ALL RATINGS)

Dimensions

- > 36" height x 25.5" width x 13.5" depth (915 mm height x 647 mm width x 343 mm depth)

Weight

- > 346 lbs/157 kg



Dedicated logic provides the fastest and most reliable operation for the critical switching functions, while the microprocessor attends to system level functions

