Vertiv™ Liebert® STS2

1200-1850A 3P Chassis

Benefits

Reliability

- 100% rated, fuseless design
- Hot-swappable circuit breakers
- Flash memory enables firmware updates while supporting critical load

Flexibility

- Internal CANBUS protocol: high-bandwidth communication between system components via twisted-pair cables. Options can be added as simple network nodes

Low Total Cost of Ownership

- Conservative design margins and excellent overload capacity
- UL listed

For applications above 1000A, the Vertiv™ Liebert® STS2 SX Chassis provides the advantages and performance on the STS2 in a compact cabinet that can be easily integrated with switchgear as required by the project site.

The Liebert® SX Chassis brings the serviceability, reliability, and transfer performance of the Liebert STS2 into larger sizes such as 1200A and 1600A, all the way up to 1850A in the 380-600V input voltage range.

Color Touch-Screen Interface

The color touch-screen LCD interface allows you to quickly check the status of the unit and identify problems. The controls of the Liebert STS2 are intuitive and simple.

True Internal Redundancy

The Liebert STS2 has triple-redundant logic. Each DSP controller is capable of working independently, and each helps monitor the other two. If one malfunctions, the other two lock it out. Each controller has power feeds from both power supplies.

True Front-Access Design

All mechanical and electronic components of the Liebert STS2 are accessible from the front of the unit for installation and service—no side or rear access required.

This gives you several immediate benefits:

- Greater freedom in system design. The Liebert STS2 can be placed adjacent to or in back of other equipment.
- Simplified installation, with ample space for cable connections through top and bottom access plates.
- Less floor space required for maintenance access.
- Designed for maintainability, with all key components visible and accessible from the front of the unit, without shutting down the connected load.

Optimized Transfer for Downstream Transformers

The Vertiv™ Liebert® algorithm is designed to optimize transfer timing such that the volt-seconds applied to the downstream transformer primary is balanced, thus minimizing peak saturation current. This balance is achieved by directly computing the volt-second applied to the transformer during transfer events and determining the optimum time to turn on the alternate source SCRs in order to balance the volt-second within specified tolerance.

Switchgear Adaptability

The SX Chassis connects through its side to desired switchgear. This can be either supplied by Vertiv or a third-party switchgear manufacturer. The Vertiv-supplied switchgear utilizes E+I Engineering expertise to provide a UL891 solution that close-couples to the SX Chassis. E+I switchgear offers Form 4B separation of energized components, and its modular design allows for compact variations of cable entry and exit, switch configuration and output distribution to meet your project's needs.

Technical Specifications

Electrical

Rating	1200A, 1250A, 1400A, 1600A, 1800A, 1850A
Nominal Voltage	380, 400, 415, 480, 575, 600V
Frequency	50Hz, 60Hz
Withstand Rating	100 kA (380 – 480V) , 65 kA (575, 600V)
Switching Devices	Puck

Mechanical

Physical Dimensions	25.7”W x 35.6”D x 88.0”H (654 W x 905 D x 2235 H mm)
Weight	1430 lb (649 kg)
Cooling Requirements	24" Top (610 mm), 6" Rear (153 mm)
Mechanical Clearance	42" Front (1067 mm)
Fans	4 fans total (loss of one fan does not affect operation)
Bussing Entry/Exit	Right side of chassis
Service Access	Front and top
Maintenance Access	Front and top

Common Information For All Ratings

Components/Features

Front and top access for all power connections, servicing, maintenance and operation
Integratable with Vertiv switchgear or third-party switchgear vendors (bussed or cabled configurations)
Isolated low/high voltage circuit boards
Triple-redundant Logic
Patented Optimized Transfer (optional)
Remote Source Select (optional)
Transfer Inhibit (optional)

Monitoring

Display	LCD
Protocols	Modbus TCP, SNMP, BACnet IP or MSTP, Modbus/RTU, SMS, Email, HTTP/HTTPS and Vertiv Protocol
Event Log	512 alarm events
Time Sync	IS-UNITY-DP Card via real time (network)

Regulatory

Agency listed to:	UL-1008S, CSA C22.2 No 178.1, FCC Part 15 EMI Class A, RoHS, REACH

Operating Conditions

Operating Temperature	0° to 40°C (32° to 104°F)
Humidity	0 to 90% non-condensing
Storage Temperature	-20° to +55°C (-4° to 131°F)
Audible Noise	72 dBA at 5ft. (1.5m) with audible alarm off
Altitude	Up to 4,000ft (1200m) above sea level without derating. Above 4,000ft (1200m), output current is derated by 6% per 1,000 ft

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