Product brochure

Power Xpert 9395 SBM

System Bypass Module
2000-4000 Amp

Powering Business Worldwide

System Bypass Module

Four decades of experience in paralleling large UPSs is incorporated in the newest System Bypass Module (SBM) from Eaton®. For use with parallel Power Xpert™ 9395 225–1100 kVA systems, the SBM is the key component that enables Eaton to deliver custom, multi-module UPS configurations that are tailored to your application and unique specifications.

The SBM features a 10-inch color LCD screen to display status for up to eight UPSs on the main screen, and provides an intuitive user interface. The touch-sensitive graphical display shows the entire one-line diagram of the system and is equipped with intuitive controls for quick access to key information like battery time remaining, event/alarm history, system metering for kW and kVA, voltage, current, frequency, power factor and phase balance.

In addition to providing terminal connections for system-level building alarm inputs and relay outputs, the SBM employs two X-Slots for Eaton's network connectivity cards, including the new Power Xpert® Gateway UPS card (PXGXUPS). To ensure the most reliable monitoring and user-friendly controls are included with alternative power circuit components, the system monitoring section may be deployed in custom or third-party switchgear.

The SBM is orderable with either momentary or continuous-duty rating, along with system-level circuit breakers for bypass, UPS system output, feedback protection and maintenance, or wrap-around bypass functions. There are four standard ratings available: 2000A, 2500A, 3000A and 4000A. Other ratings are optional.

The 9395 SBM features include:

- Large LCD display and system level controls
- Multiple X-Slot capability
- Supports Energy Saver System (ESS) up to 4 KA
- Offers exceptional UPS modularity
- Parallel up to 32 9395 UPSs, with ability to parallel unlike kVA UPS such as:
  - Parallel a 550 kVA with a 275 kVA
  - Parallel three 825 kVA models and one 550 kVA
  - Parallel an 825 kVA and a 275 kVA
- Eaton SBM available as a UL 891 or 1558 construction
- Molded case or UL 489 insulated case circuit breakers with choice of interruption ratings
- Fully-rated static switch
- Available for Powerware Hot Sync® capacity/redundancy parallel 9395 systems
- Momentary duty static switch

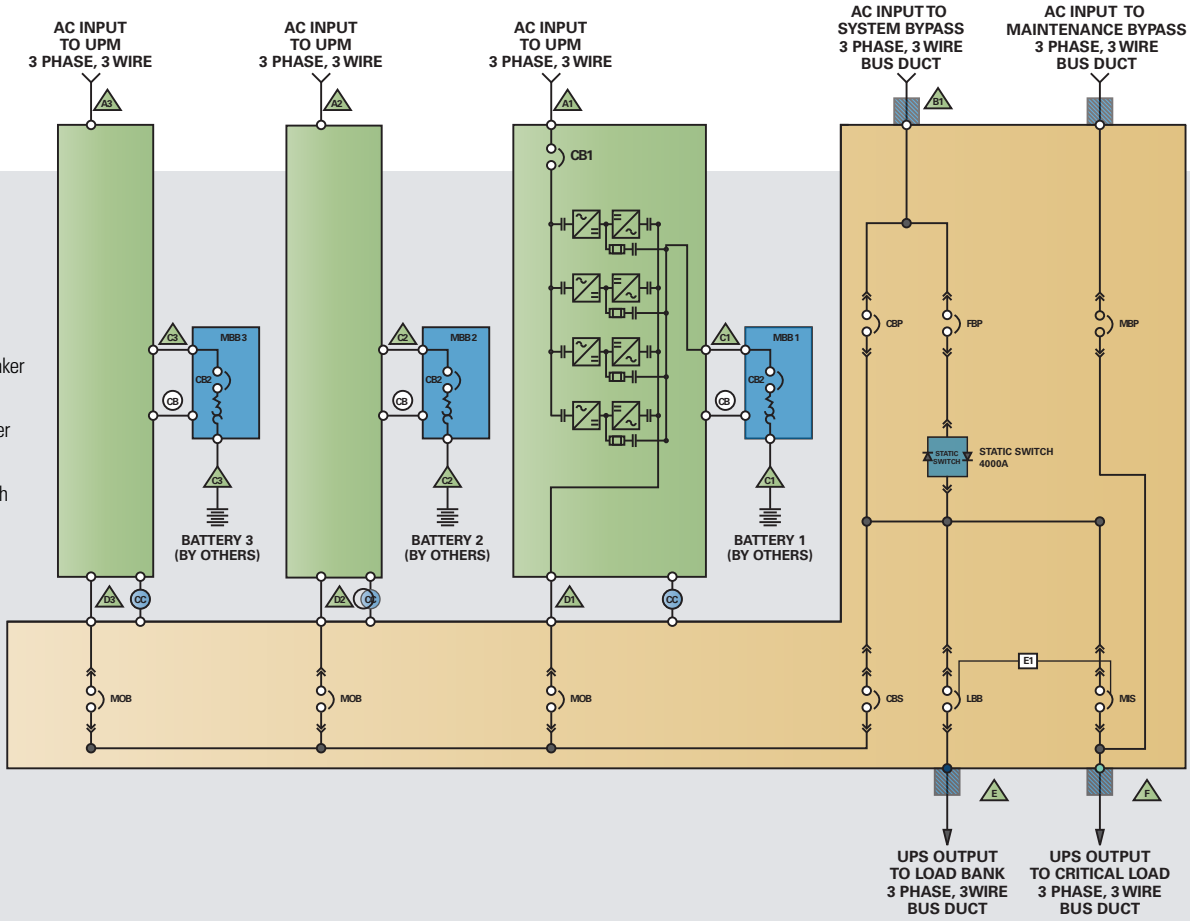
Options

- UPS input breakers
- Module output breakers (MOB)
- Load distribution breakers
- Load bank breaker (LBB)
- Continuous duty static switch
- Hot Tie® or Static Auto Tie controls
- Power Sync controls for A/B bus
- Custom displays

Eaton 10-inch touch screen

System one-line example

FBP: Feedback protection breaker
CBP: System bypass breaker
STSW (or SSW): Static switch
LBB: Load bank breaker
MIB: System output isolation breaker
CBS: System output breaker
MBP: Maintenance bypass breaker
MOB: Module output breaker
MIS: Maintenance isolation switch



Insulated case circuit breakers

- Adjustable ratings
- Electrically operated breaker closing and opening from system control panel
- Automatic spring charging
- Lever for manual spring charging
- Circuit breaker "open" and "closed" indicators
- Signal for springs charged or discharged
- Devices for racking-in and racking-out operations
- Operation without the need for an external power supply
- High precision trip units sensitive to true RMS value of the current

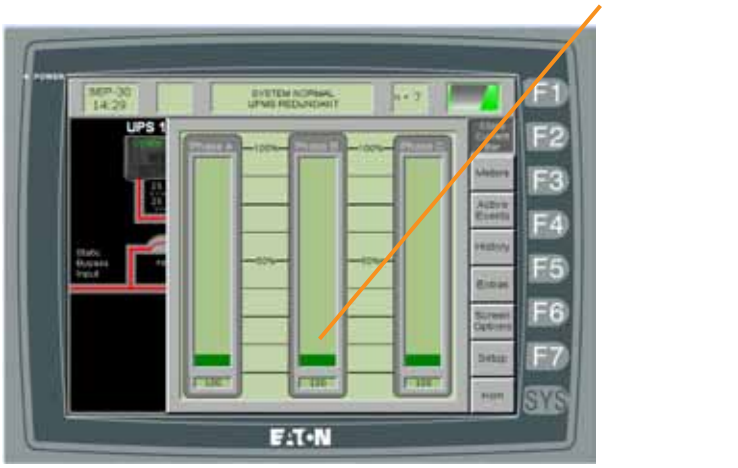
Bus and cable compartments

- Bus bracing (RMS symmetrical) – 100 kAIC standard rating
- 4000A maximum bus rating
- Standard tin-plated copper bus
- Load bank tab connections for system testing (optional)
- Ample cable entry space for power and control cables
- Ample NEMA two-hole cable lug landings
- Connection capacity for up to eight UPS modules, each containing four 9395 UPMs
- Optional neutral for three-phase, four-wire or 400V systems
- Rotary selector switches for setting current threshold and trip time
- Front panel test jack for testing the trip unit

- Overcurrent protection is provided by an advanced microprocessor-based trip unit
- Overload protection with inverse long time-delay trip
- Instantaneous short circuit protection with adjustable trip current setting
- Optional overhead hoist or floor crane available
- Available ModBus port

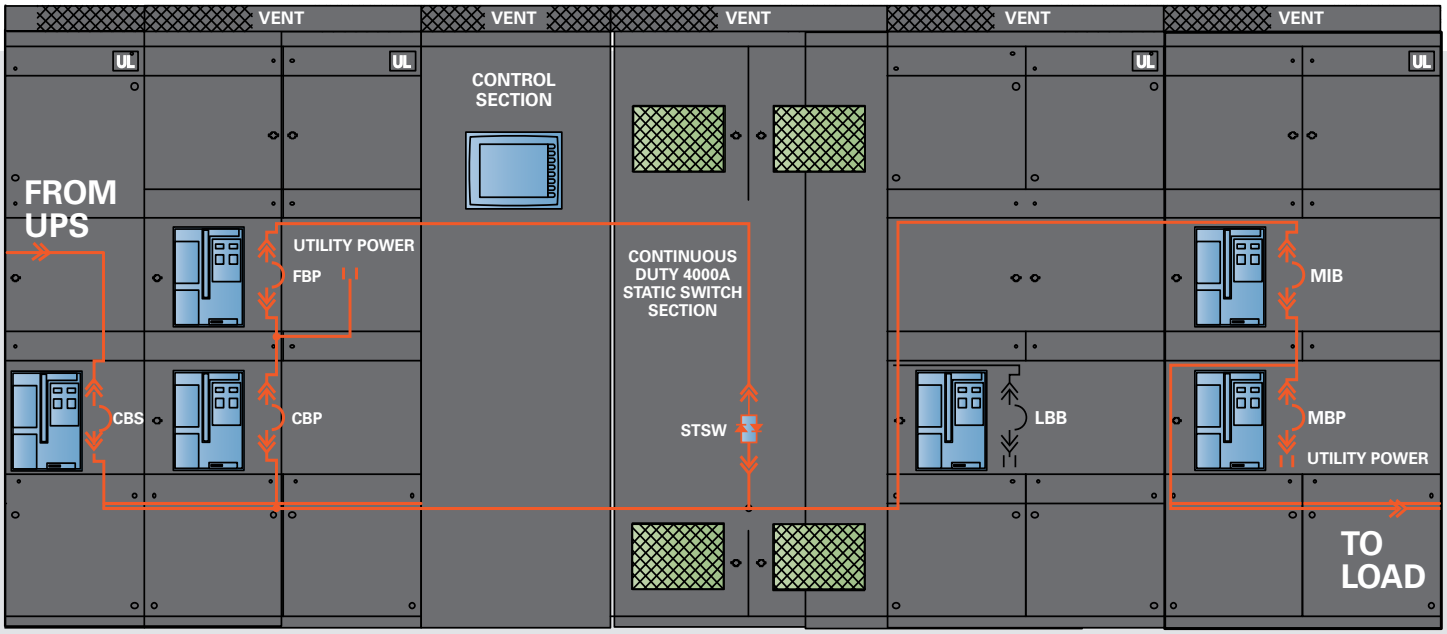
Standards

- UL 891 or 1558 construction
- UL 489 Insulated Case Circuit Breakers



LCD display showing load amperage detail

SBM outline example



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UL 489 Insulated Case Circuit Breakers

Frame Size	2000A	2500A	3000A	4000A
Standard Interrupting				
380 VAC	N/A	N/A	85	85
400 VAC	N/A	N/A	85	85
415 VAC	N/A	N/A	85	85
480 VAC	N/A	N/A	65	65
High Interrupting				
380 VAC	100	100	100	100
400 VAC	100	100	100	100
415 VAC	100	100	100	100
480 VAC	100	100	100	100

Interrupting rating, RMS symmetrical (kA) Based on 100 kA standard bus bracing and applicable breaker

Overall Dimensions

Eaton SBM

SBM Model	Width [1]	Depth [2]	Height [3]	Min. Footprint
2000A	8-20'	60-72"	94"	35.8 sq. ft.
2500A	8-20'	60-72"	94"	35.8 sq. ft.
3000A	10-30'	60-72"	94"	35.8 sq. ft.
4000A	10-30'	60-72"	94"	40.8 sq. ft.

Eaton SBM with System Maintenance Bypass

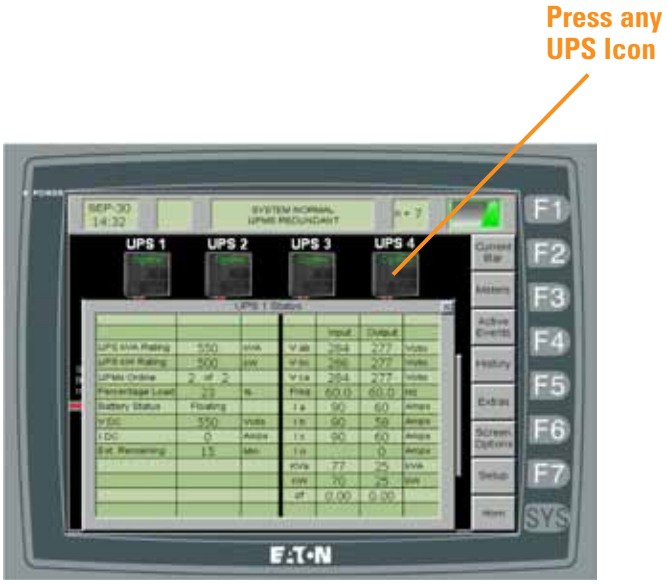
SBM Model	Width [1]	Depth [2]	Height [3]	Min. Footprint
2000A	10-24'	60-72"	94"	46.7 sq. ft.
2500A	10-24'	60-72"	94"	46.7 sq. ft.
3000A	14-40'	60-72"	94"	46.7 sq. ft.
4000A	14-40'	60-72"	94"	57.5 sq. ft.

[1] Min/Max dimensions, typical application

[2] 60" standard, up to 72" with optional busduct

[3] 101" with optional overhead hoist

LCD display showing online system with closed system output breaker (CBS), open system bypass breaker (CBP)



LCD display showing load amperage detail

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