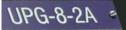
Powerware series



V

# Eaton 9395 SBM System Bypass Module 2000 — 4000 amp



BYPASS

BATTERY

# 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 Eaton® 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 8 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 PowerXpert® (PXGX 2000) card. To ensure that 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 wraparound 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 Mode (ESM) up to 4 KA
- Offers exceptional UPS modularity

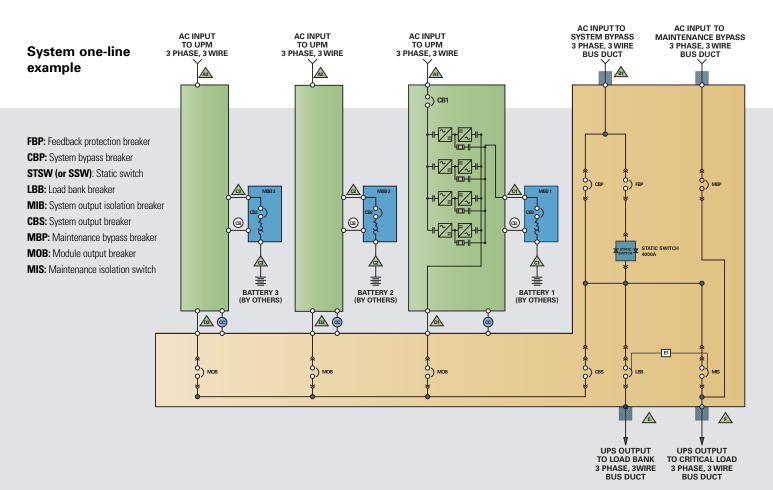
- Parallel up to 32 Eaton 9395 UPS, with ability to parallel unlike kVA UPS such as:
- Parallel a 550 kVA with a 275 kVA
- Parallel three 825 kVA models and one 550 kVA
- Parallel an 825 kVA and a 275 kVA
- Eaton SBM available as a UL 891 or 1558 construction
- Molded case or UL 489 insulated case circuit breakers with choice of interruption ratings
- Fully-rated static switch
- Available for Powerware Hot Sync<sup>®</sup> 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<sup>®</sup> or Static Auto Tie controls
- Power Sync controls for A/B bus
- Custom displays



Eaton 10 inch touch screen



#### Insulated case Cutler-Hammer circuit breaker (or others)

- 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

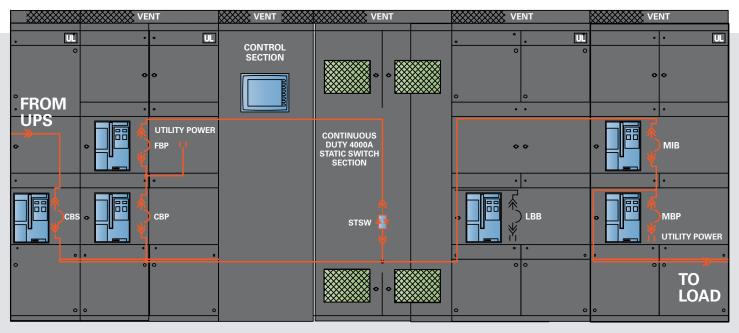
## Standards

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

# Digital Display and Bar Graph



LCD display showing load amperage detail



# SBM outline 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

#### **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 <sup>1</sup>	Depth <sup>2</sup>	Height*	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 <sup>1</sup>	Depth <sup>2</sup>	Height <sup>a</sup>	Min. Footprint		
SBM Model 2000A	Width ' 10-24'	Depth <sup>2</sup> 60-72"	Height <sup>a</sup> 94"	Min. Footprint 46.7 sq. ft.		
2000A	10-24'	60-72″	94″	46.7 sq. ft.		

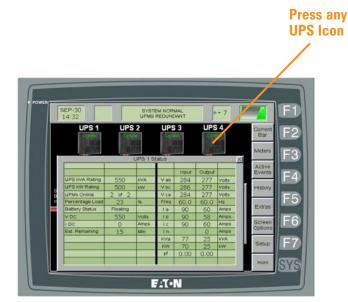
Min/Max dimensions, typical application

60" standard, up to 72" with optional busduct

IO1" 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

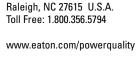


PowerChain Management®

ASIA PACIFIC Australia/NZ: 61.2.9693.9366 China: 86.21.6361.5599 HK/Korea/Taiwan: 852.2745.6682 India: 91.11.2649.9414 to 18 Singapore/SEA: 65.6829.8888

Eaton, PowerChain Management is a trade name, trademark, and/or service mark of Eaton Corporation or its subsidiaries and affiliates. All other trademarks are property of their respective owners.

©2009 Eaton Corporation All Rights Reserved Printed in USA 9395SBMFXA May 2009



UNITED STATES

8609 Six Forks Road



CANADA Ontario: 416.798.0112

LATIN AMERICA Brazil: 55.11.3616.8500 Caribbean: 1.949.452.9610 México & Central America: 52.55.9000.5252 South Cone: 54.11.4343.6323

#### EUROPE/MIDDLE EAST/AFRICA Denmark: 45.3686.7910

Finland: 358.94.52.661 France: 33.1.6012.7400 Germany: 49.0.7841.604.0 Italy: 39.02.66.04.05.40 Norway: 47.23.03.65.50 Portugal: 55.11.3616.8500 Sweden: 46.8.598.940.00 United Kingdom: 44.1753.608.700