

Eaton 9395 SBM

System Bypass Module, 2000 – 5000 A



The 9395 SBM cabinet line ups and matches perfectly with the 9395 UPS cabinet.

The 9395 SBM user benefits:

- Offers exceptional UPS modularity
- Available for Powerware Hot Sync® capacity/redundancy parallel 9395 systems
- Supports energy-saving technologies including Energy Saver System (ESS) and Variable Module Management System (VMMS)
- Large LCD display makes system level controls easily

Four decades of experience in paralleling large UPSs are incorporated in the newest Eaton® model of system bypass module: the Eaton 9395 SBM.

For use with parallel Eaton 9395 225–1100 kVA systems, the 9395 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 9395 SBM provides centralised bypass capability for UPS systems from 2000 A up to 5000 A (1,4–3,5 MVA). The 9395 SBM is also capable of paralleling UPS units with unequal kVA ratings – for example one 550 kVA unit with a 275 kVA unit, or three 825 kVA units with one 550 kVA unit.

Highest reliability and significant savings

The 9395 SBM employs a centralised static bypass switch that is used to route the power past the UPS units in the event of a temporary overload or UPS fault situation.

Instead of continuously feeding the entire system power through a common output cubicle, the 9395 SBM is connected in parallel with UPS units and carries the load current only when the system is in bypass mode.

The Hot Sync load sharing technology plays a key role in guaranteeing continuity and high reliability for the system, as it allows paralleling of the UPS units without the need for communication between them.

The Hot Sync technology, when combined with a separate output switch, allows the 9395 SBM to be detached from the UPS system and safely repaired while UPS modules feed the load.

The 9395 SBM supports Eaton's energy saving technologies: the Energy Saver System (ESS), which enables UPS system efficiency to reach 99 percent, and the Variable Module Management System (VMMS), which provides maximal efficiency for a parallel system at lighter loads without compromising power quality.

Ease of use with compact size

Compact and light, the 9395 SBM cabinet line ups and matches perfectly with the 9395 UPS cabinet. Customers benefit from its 10-inch, colour LCD touch screen that allows monitoring of the entire UPS system as a whole and the statuses of individual UPSs. The display is equipped with intuitive controls for quick access to key information, including system status measurements, remaining backup time, history logs, etc.

The 9395 SBM provides terminal connections for system-level building alarm inputs and relay outputs as well as two X-slots for Eaton's network connectivity cards.

The unit can be customised in accordance with exact customers' requirements. Specially coloured cabinets are even available to match the colour coding of customer's electrical system.

The SBM is usually a part of larger Eaton power quality projects. To ensure that the product meets your requirements please involve Eaton personnel in product specification and design.

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TECHNICAL SPECIFICATIONS

9395 SBM Ratings

Model	2000	2500	3200	4000	5000
Rating [A]	2000	2500	3200	4000	5000

General

Static switch type	Continuous duty
Parallel capability (nr. of UPS)	Up to 7 units (225-1100 kVA)
Efficiency	>99%
Audible noise	<75 dB(A) ¹⁾
Cooling air flow	up to 6000 m ³ /h (5000A)
Backfeed protection device	Included as standard
Distribution compatibility	TNC, TNS
Power poles switched	3
Neutral rating	100%

¹⁾ From 1m per ISO 7779 standard

Environmental

Operating temperature	0 °C to 40 °C
Storage temperature	-20 °C to 55 °C
Transmit temperature	-20 °C to 60 °C
Humidity	5% – 95%, non-condensing
Altitude, max.	1000m ²⁾

²⁾ Operating at maximum temperature, derate according to IEC62040-3

Input

Voltage	380/400/415V
Voltage range	-15% to +10%
Frequency range	45Hz to 65Hz

Output

Voltage	380/400/415V
Power factor range	0,8 leading to 0,7 lagging ³⁾
Crest factor	3:1 ³⁾

³⁾ Limited by UPS specification

Interrupt & overload ratings

Interrupt ratings	up to 100 kAICC, selectable
Load fault clearing capacity (depends on protective fuses)	750-1000% for 100ms 850-1100% for 20 ms

Dimensions (W x D x H) and weights

SBM 2000	2200 x 1040 x 1880 mm	1400 kg
SBM 2500	2200 x 1040 x 1880 mm	1400 kg
SBM 3200	2200 x 1040 x 1880 mm	1550 kg
SBM 4000	2500 x 1040 x 1880 mm	2250 kg
SBM 5000	2500 x 1040 x 1880 mm	2350 kg

Enclosure

Colour	RAL-9005 ⁴⁾
Degree of protection	IP20

⁴⁾ Available in other colours

Compliance with standards

Safety	IEC62040-1, EN60950-1
EMC	IEC62040-2
Performance	IEC62040-3, on applicable parts

User interface

Control panel	10.3 inch colour touch screen
Relay contacts	up to 13, programmable
Building alarms	up to 6, programmable

Operation modes

Efficiency	>99% on ESS
Parallel capability (nr. of UPS)	Up to 7 units (225-1100 kVA)

Optional accessories

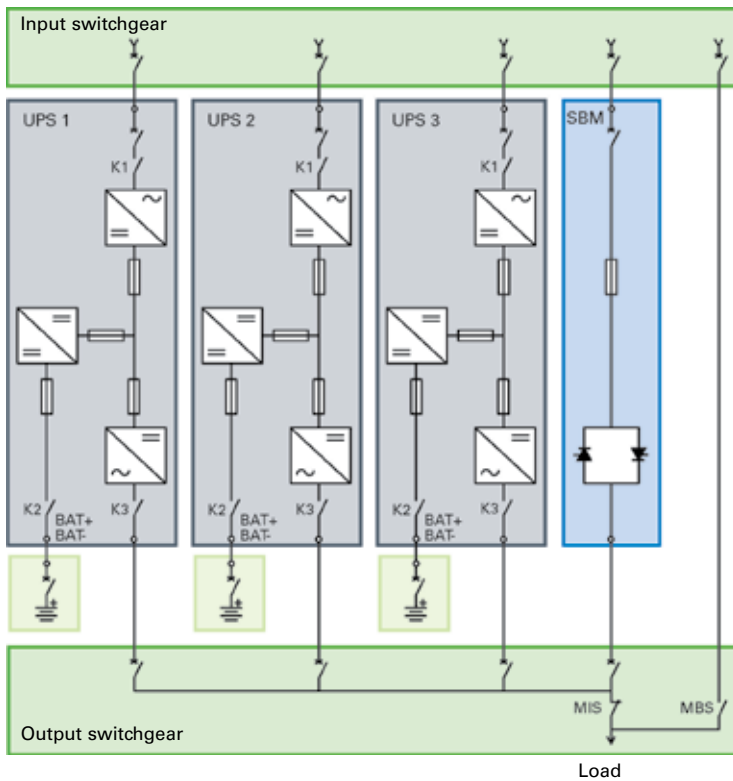
Remote display panel	on request
Module output breakers	according to request
Maintenance switches	according to request

Dimensions (W x D x H) and weights of IOM Modules

IOM 275 kVA	1350 x 880 x 1880 mm	800 kg
IOM 550 kVA	1890 x 880 x 1880 mm	1400 kg
IOM 825 kVA	3710 x 880 x 1880 mm	2650 kg
IOM 1100 kVA	4450 x 880 x 1880 mm	3250 kg

Communications

X-Slot connectivity (Web/SNMP, ModBus/Jbus, Relay, ViewUPS-X remote display)



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