

# Eaton 9395 UPS

225 - 1100 kVA



## An Eaton Green Solution

Due to outstanding green performance, the 9395 has earned the "An Eaton Green Solution"™ label

### Advanced power protection for:

- Big data centers and server farms
- Financial services
- Building management
- Telecommunications
- Hospitals



# EATON

Powering Business Worldwide

## Double conversion UPS

### Premium power performance

- Double conversion provides the highest level of protection available by isolating the output power from all input anomalies.
- With a transformer-free design and sophisticated sensing and control circuitry the 9395 UPS delivers an efficiency of up to 94,5%.
- Maximised UPS energy efficiencies with Energy Advantage Architecture (EAA): Variable Module Management System (VMMS) optimises system efficiency at low load levels and Energy Saver System (ESS) allows dramatic increase in UPS efficiency without sacrificing load protection.
- Active power factor correction (PFC) provides 0,99 input power factor and below 3-5% ITHD (depends on utility UTHD), thus eliminating interference with other critical equipment in the same network and enhancing compatibility with generators.
- The UPS is optimized for protecting modern 0,9 p.f. rated IT equipment without the need to oversize.

### True reliability

- Patented Powerware Hot Sync® technology makes possible to parallel up to five UPSs to increase availability or add capacity. The technology enables load sharing without any communication line, thus eliminating single point of failure.
- The multi-module 9395 can be configured with inherent redundancy – anytime the load is below 50%, the system becomes automatically redundant.
- ABM® technology charges batteries only when necessary, preventing batteries corrosion and prolonging batteries service life by up to 50%.

### Extensive configurability

- The 9395 is a completely integrated system that incorporates multiple power modules and system switchgear on factory pre-wired bases.
- A multilingual graphical LCD display makes possible to monitor the UPS status easily.
- Wide software and connectivity options provide monitoring, management and shutdown capabilities over network

### Cost savings and sustainability

- High system efficiency reduces utility cost, extends battery run times and ensures cooler operating conditions.
- Compared to traditional UPS design, a transformer-free UPS is only 50% the weight and occupies just 60% the footprint, thus reducing impact on shipping.
- The new design requires 50-80% less energy in manufacturing due to less energy needed for testing thanks to Easy Capacity Test.
- Pre-wired configuration reduces cabling busbar costs and installation time. Front accessible design minimizes installation costs and saves valuable data centre space.
- A single technical platform used in Eaton's three-phase UPS products guarantees easy upgrades and similarity in service, thus lowering total cost of ownership.
- More than 90% of the materials can be recycled, further decreasing end-of-life impact.

# Eaton 9395 UPS 225 - 1100 kVA

## TECHNICAL SPECIFICATIONS

### UPS output power rating (0,9 p.f.)

kVA	225	275	450	550	675	825	900	1100
kW	204	250	408	500	612	750	816	1000

### General

Efficiency in double conversion mode (full load)	>94%
Efficiency in double conversion mode (half load)	>93%
VMMS (double conversion)	significantly increased efficiency at low loads
Efficiency in Energy Saver System (ESS)	up to 99%
Distributed parallelling with Hot Sync technology	5 + 1
Internal N+1 redundance capable	in 550 : 275 kVA in 825 : 550 kVA in 1100 : 825 kVA
Field upgradeable	yes
Inverter/rectifier topology	transformer-free IGBT with PWM
Audible noise	<76 dB; <81 dB (825 and 1100 kVA)
Altitude (max)	1000 m without derating (max 2000 m)

### Input

Input wiring	3 ph + N + PE
Nominal voltage rating (configurable)	220/380, 230/400, 240/415 V 50/60 Hz
Input voltage range	+15% / -15%, +10% / -10% for bypass
Input frequency range	45-65 Hz
Input power factor	0,99
Input ITHD	< 3-5% on nominal load, depending on the utility UTHD
Soft start capability	Yes
Internal backfeed protection	Yes, standard

### Output

Output wiring	3 ph + N + PE
Nominal voltage rating (configurable)	220/380, 230/400, 240/415 V 50/60 Hz
Output UTHD	<3% (100% linear load); <5% (reference non linear load)
Output power factor	0,9 (e.g. 250 kW at 275 kVA)
Permitted load power factor	0,7 lagging - 0,8 leading
Overload on inverter	10 min 100-110%; 30 sec 110-125%; 10 sec 125-150%; 300 ms >150%
Overload when bypass available	Continuous <115%, 20 ms 1000% Note! Bypass fuses may limit the overload capability

### Battery

Type	VRLA, AGM, Gel, Wet Cell			
Charging method	ABM technology or Float			
Temperature compensation	Optional			
Battery nominal voltage (lead-acid)	480 V (40 x 12 V, 240 cells)			
Charging current / Model	275	550	825	1100
Default A	38	76	114	152
Max* A	83	166	249	332

\*Limited by maximum UPS input current rating

### Dimensions and weights

225 kVA, 275 kVA	1350 x 880 x 1880 mm (wx dxh)	830 kg
225, 275 kVA redundant	1890 x 880 x 1880 mm	1430 kg
450, 500, 550 kVA	1890 x 880 x 1880 mm	1430 kg
450, 550 kVA redundant	2630 x 880 x 1880 mm	2030 kg
Field upgrade module, 225 or 275 kVA	740 x 880 x 1880 mm	600 kg
675, 825 kVA	3710 x 880 x 1880 mm	2520 kg
675, 825 kVA + 1 redundant	4450 x 880 x 1880 mm	3120 kg
1100 kVA	4450 x 880 x 1880 mm	3120 kg

### Accessories

External battery cabinets with long-life batteries, X-Slot connectivity (Web/SNMP, ModBus/Jbus, Relay, Hot Sync, ViewUPS-X remote display), integrated manual bypass for 225-550 kVA

### Communications

X-Slot	4 communication bays
Serial ports	1 available
Relay inputs/outputs	5/1 programmable

### Compliance with standards

Safety (CB certified)	IEC 62040-1, IEC 60950-1
EMC	IEC 62040-2
Performance	IEC 62040-3