Eaton 93PS UPS

8-10 kW

Key applications

- IT applications:
  - Server rooms
  - Localised Data centres
- Mission critical applications:
  - Manufacturing/Industrial facilities
  - Transportation
  - Retail Buildings
  - Healthcare
  - Telecommunication
  - Government

Lowest total cost of ownership (TCO)

- Highest efficiency in its power range with above 96% efficiency in double conversion mode and up to 99% efficiency in Energy Saver System mode
- Scalable by paralleling up to 4 units
- Smallest footprint on the market, footprint only 0.25 m²
- Unity power factor (1.0), providing more real power than many of its rivals

Maximum availability

- HotSync® patented load-sharing technology enables parallel operation of units without communication or loadshare signals. Eliminating the communication link eliminates the risk of single point of failure
- Equipped with ultra-rapid fuses in the Static Switch
  - ensuring safety in all scenarios
- Equipped with backfeed protection
  - no need for additional installments
- Advanced Battery Management – Intelligent battery charging to keep your batteries safe and in good condition
- The 93PS and Eaton's Intelligent Power Manager® software suite takes the resiliency of the system to the next level by bridging the electrical and IT infrastructure

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Technical specification

General

Model rating (1.0 p.f.)	8 kW	10 kW
Model catalogue reference	93PS-8(10)-0-MBS or 93PS-8(10)-1x9Ah-MBS	93PS-10(10)-0-MBS or 93PS-10(10)-1x9Ah-MBS
Number of internal batteries	0 or 1 x 32 blocks	0 or 1 x 32 blocks
Upgradability	Yes, to 10kW	No
External paralleling	Up to 4 units with HotSync technology	
UPS topology	Double conversion	
Efficiency in double-conversion mode	>96%	
Efficiency in Energy Saver System (ESS) mode	Up to 99%	
UPS dimensions (width x depth x height)	335 x 750 x 950 mm	
UPS Degree of protection	IP 20	
Acoustic noise at 1 m, in 25 °C ambient temperature	< 54 dBA in double conversion < 47 dBA in ESS	
Maximum service altitude	1000 m (3300 ft) above sea level at 40 °C Maximum 2000 m (6600 ft) with 1 % derating per each add. 100 m	
RoHS/WEEE compliancy	Yes	

Input

Model rating (1.0 p.f.)	8 kW	10 kW
Rated input voltage	220/380 V; 230/400 V; 240/415 V	
Voltage tolerance: Rectifier input Bypass input	 187 to 276 V rated voltage -15% / +10%	
Rated input frequency Frequency tolerance	50 or 60 Hz, user configurable 40 to 72 Hz	
Input wiring	3 phases + neutral	
Input power factor	0.99	
Rated input r.m.s. current: 380V 400V 415V	 13 A 12 A 12 A	 16 A 15 A 15 A
Soft start capability	Yes	
Back feed protection	Yes, for rectifier and bypass lines	

Output

Model rating (1.0 p.f.)	8 kW	10 kW
Output wiring	3 phases + neutral	
Rated output voltage	220/380 V; 230/400 V; 240/415 V, configurable	
Total voltage harmonic distortion: 100% linear load 100% non-linear load	 < 1.5% < 3.5%	
Rated output power	8 kW / 8 kVA	10 kW / 10 kVA
Overload capability: On inverter On bypass	 10 min 102-110% load 60 sec 111-125% load 10 sec 126-150% load 300 ms >150% load Continuous < 125% load 20 ms 1000% load	
Rated input r.m.s. current: 380V 400V 415V	 13 A 12 A 12 A	 16 A 15 A 15 A
Load power factor: Rated Permitted range	 1.0 0.8 lagging to 0.8 leading	

Battery

Model rating (1.0 p.f.)	
Battery technology	12 V, VRLA
Battery design life	5 years
Battery quantity: Internal External	 32 blocks, 192 cells per battery string 28-40 blocks per string
Battery voltage: Internal External	 384 V 336V – 480V
Nominal Ah capacity (C10)	9Ah
Charge current limit	Default 5A, configurable Maximum 12.5A
Battery start option	Yes

Communication circuits

Model rating (1.0 p.f.)	
MiniSlots	2 communication bays
Network/SNMP interface	Yes, standard
Standard connectivity ports	Mini-slot ports for optional cards, Device USB and Host USB, RS-232 service port, relay output, 5 building alarm inputs and a dedicated EPO,Web and SNMP card

Compliance with standards

Model rating (1.0 p.f.)	
Safety (CB certified)	IEC 62040-1
EMC	IEC 62040-2
Performance	IEC 62040-3
RoHS	EU directive 2011/65/EU
WEEE	EU directive 2012/19/EU

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