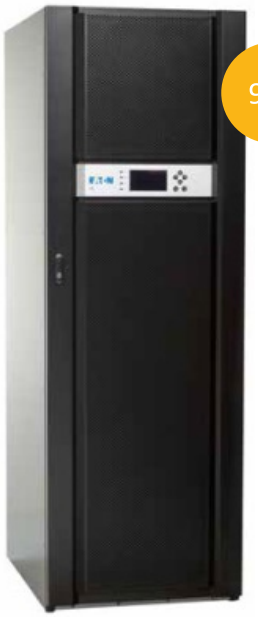
Eaton Power Xpert 93E

160-200 KVA



Total capacity in parallel
800 kVA

Power factor 1

The Dashboard:

Best in Class Efficiency

94%

Double conversion efficiency

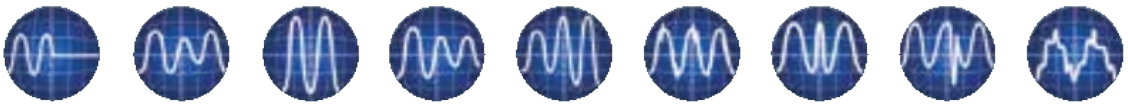
40°C without de-rating

Best in Class Footprint

98.5%

HE efficiency

2 Levels IGBT 4ms
MTTR<30min



Power Failure | Power Sag | Power Surge | Under-Voltage | Over-voltage | Line Noise | Frequency variation | Switching Transient | Harmonic Distortion

Key Features:

- Active Power Factor Correction
- Transformer free Design
- Easy integration in the IT space
- Easy front access
- IT space options : Chimney for cooling
- WEB / SNMP / MODBUS communication
- EPO built in contact
- Available and compatible for regenerate load also

Key Patents:

HotSync® spofless technology

ECT Easy Capacity Test

ABM Advanced battery management

HE High efficiency mode

EATON

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Eaton 93E-80-100-120-160-200 kVA UPS Technical Specification

General

Ratings	160 KVA	200 KVA
Model(Platform/Power Rating)	93E -160KVA /144KW	93E -200KVA /180KW
UPS Topology	Double Conversion, IGBT Converters	
Performance classification	VFI-SS-111	
UPS Dimensions: WxDxH (mm)	600x800x1876	
Degree of protection	IP20, with front door mounted washable dust filter(IP 21 optional)	
Cabinet colour	Black, RAL 9005	
Cable entry	Bottom/frontor Rear , Optional Top Entry Kit	
Weight (kg) without batteries	457	

ELECTRICAL INPUT CHARACTERISTICS

Ratings	160 KVA	200 KVA
Power Distribution System compatibility	TN, TN-S, TN-C, TN-C-S, TT (Three-phase, four-wire + PE)	
Rated input voltage.	Rectifier: 230/400Vac nominal (220/380, 240/415 Selectable)	
Operating frequency / tolerance	50 or 60Hz; Tolerance 40-72Hz	
Input current distortion	<5% THDi (Linear Load Condition at rated input current)	
Input power factor	0.99pf at 100% load	
Number of input phases	3 phases + Neutral + PE (3 phase input)	
Rated rectifier input current (rms @ 400V)	309/327A	
Bypass input current (rms @ 400V) Recommended/Max	289/332A	

EFFICIENCY IN DOUBLE CONVERSION MODE & HEAT DISSIPATION UNDER LINEAR LOAD CONDITIONS

Ratings	160 KVA	200 KVA
Efficiency @ 100% Linear Load	94%	94%
Efficiency @ 75% Linear Load	93.8%	93.8%
Efficiency @ 50% Linear Load	93.3%	93.3%
Efficiency @ 25% Linear Load	90.5%	90.5%
Heat Dissipation @ 100% Linear Load	9191	11489
Heat Dissipation @ 75% Linear Load	7139	8923
Heat Dissipation @ 50% Linear Load	5170	6463
Heat Dissipation @ 25% Linear Load	5770	4713

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ENVIRONMENTAL PARAMETER

Ratings	160 KVA	200 KVA
Ambient storage temperature	Range of -15 to +55 Degree C in the protective package	
Ambient service temperature	UPS: 0 to +40 Degree C	
Maximum service altitude	1000m above sea level. Maximum 2000m with 1% de-rating per each additional 100m above 1000mm above 1000m	
Relative humidity	5 to 95%, no condensation allowed	
Acoustic noise at 1m (ISO7779)	< 70db @75%	

ELECTRICAL OUTPUT CHARACTERISTICS - NORMAL MODE

Ratings	160 KVA	200 KVA
Rated output voltage	230/400 Vac, three phase, (220/380, 240/415 selectable)	
Crest factor	3:1	
Rated output frequency	50 Hz (default) or 60 Hz	
Total voltage distortion	<2% with linear load, <5% with non-linear load defined according to EN62040-3	
Short circuit capability, <400ms	800A	800A	800A
Overload capacity w/out bypass	102-125% load 10 minutes, 126–150% load 1 minute, >151% load 150ms @ 30°C	
Overload capacity with bypass	115% load continuous, 1000% for 20ms at 40°C and ≤1000m altitude Note: Selected external Bypass fuses or breaker may limit the overload capability	
Load power factor range	0.7 lagging to 0.9 leading without de-rating	
Range of frequency synchronisation with bypass	+/-3Hz/s default, up to 7Hz/s user settable for single UPS, up to 0.5 Hz/s for parallel UPS	

BYPASS CHARACTERISTICS

Ratings	160 KVA	200 KVA
Automatic bypass	Static bypass switch, continuously rated*, no break transfer *bypass capable of 115% continuous load	
Automatic bypass rating	200 KVA	
Automatic bypass SCR i^2t value	45000A^2s	
Back-feed protection	Optional Internal back-feed contactor	
Separate bypass input feed	Standard (single feed cable links supplied for field fitting)	
Manual bypass switch (internal)	Not Available	

BATTERY CHARACTERISTICS

Ratings	160 KVA	200 KVA
Battery nominal voltage	432V (216 Cells) or 456V (228 Cells) or 480V (240 Cells, Default)	
Float charge voltage	216/228/240 x 2.30V = 497/524/552V	
Maximum charge voltage	216/228/240 x 2.35V = 508/536/564V	
Battery cut off voltage	216 Cells = 1.85V/Cell, 228 Cells = 1.75V/Cell, 240 Cells = 1.67V/Cell	
Restored energy time to 90%	Maximum 10 hours recommended (dependant on battery size)	
Charging current (at full load)	80A	
Battery recharge profile	Advanced Battery Management (ABM®) = 90% resting,10% floating/charging (typical)	