Static uninterruptible power supplies for IT

ELECTA HP

100-600 kVA Three-phase/Three-phase

ELECTA HP range in sizes from 100 to 600 kVA Thanks to the on-line, double conversion technology achieved entirely with IGBT and DSP (Digital Signal Processor), the ELECTA HP series ensures maximum protection and power quality for any type of data processing or industrial load, particularly for "mission critical" applications, and classified as VFI SS 11 (Voltage and Frequency Independent) in accordance with IEC EN 62040-3. This series has been designed using a new configuration that includes an IGBT sinewave input rectifier rather than the more conventional thyristors.

Zero impact source

The ELECTA HP version offers the benefits summarized in the Zero Impact Source formula, thanks to the IGBT rectifier, solves all integration problems in systems where the power supply has a limited installed power, where the UPS is also powered by a generator, or where there are compatibility problems with loads that generate harmonic currents,; as a matter of fact, ELECTA HP has zero impact on the power source, either network or generator:

- · less than 3% input current distortion
- · Input power factor 0.99
- power walk-in function that ensures a progressive start-up of the rectifier
- start-up delay function, to restart the rectifiers when mains power is restored if there are several UPSs in the system.

In addition, ELECTA HP plays a filter and power factor correction role in the power network upstream of the UPS, since t eliminates harmonic components and the reactive power, generated by the powered utilities.

Maximum Battery care system

ELECTA HP takes care of battery in order to maintain service conditions for as long as possible.



Flexibility

The configuration with the output transformer, a feature of both the ELECTA HP and conventional series, is characterized by the galvanic isolation of the load and the battery for greater versatility in system configurations. As a matter of fact it allows for two network inputs (main and emergency) separate, and coming from two different power sources; this is particularly suited to parallel systems in order to ensure the selectivity between the two sources, thus improving the reliability of the entire installation.



Main features

- · High efficiency
- · Compact size: only 0.85m2 a for 250kVA UPS
- · Light weight
- · Double load protection, both electronic and galvanic, for the battery.

The entire ELECTA HP range is suited for use in the broadest spectrum of applications; thanks to the flexibility of configuration, accessories and options available, it is suited for powering capacitive loads such as blade servers, etc. Power supply reliability and availability for critical applications are guaranteed by the parallel distributed or centralized parallel up to 8 units, per redundant (N +1) or power parallel.

Option

- · Input isolation transformer
- · Synchronization device
- · Hot connection device
- · Interface for generator
- · Closed Loop parallel kit option (Closed loop: to be ordered with the UPS)
- · Empty battery cabinets or for high backup time

Models	MHT 100	MHT 200	MHT 160	MHT 200	MHT 250	MHT 300	MHT 400	MHT 500	MHT 600	
POWER	100	200	160	200	250	300	400	500	600	

П	N	D	П	IT

Nominal voltage 380 - 400 - 415 Vac Three-phase

45 ÷ 65 Hz Frequency Power factor > 0.99 <3% THDi Harmonic current distortion

Soft start 0 ÷ 100% in 30" (selectable)

Frequency tolerance \pm 2% (selectable from \pm 1% to \pm 5% from front panel) Standard equipment Back Feed protection; separable bypass line

provided standard

BATTERIES

Type open lead acid and VRLA AGM / GEL; NiCd.

Ripple current Zero Charge voltage compensation -0.5 Vx°C

OUTPUT

Nominal power (kVA) 100 120 160 200 250 300 400 500 600 225 Active power (kW) 90 108 144 180 270 360 450 540

Number of phases 3 + N

Nominal voltage 380 - 400 - 415 Vac Three-phase + N

Static stability ± 1% Dynamic stability \pm 5% in 10 ms

Voltage distortion < 1% with linear load / < 3% with non-linear load

Crest factor (lpeack/lrms) 3:1 Frequency stability on battery 0.05% Frequency 50 or 60 Hz (selectable) Overload 110% for 60'; 125% for 10'; 150% for 1'

INFO FOR INSTALLATION

Weight (kg) 656 700 800 910 1000 1400 1700 2100 2700 Dimensions (hwd) (mm) 1900 x 2100 x 1000 1900 x 800 x 850 1900 x 1000 x 850 1900 x 1500 x 1000

Remote signals voltage-free contacts (configurabile) ESD and bypass (configurabile) Remote controls

Communication Double RS232 + remote contacts + 2 slots for communications interface

0°C / +40°C Ambient temperature Relative humidity < 95% non-condensing

Colour Dark grey RAL 7016

Noise level (1 m) 63 ÷ 68 dBA 70 ÷ 72 dBA 70 dBA 72 dBA

Protection level IP20 (others upon request) **Smart Active Output** up to 98,5%

Safety: EN 62040-1-1 (directive 2006/95/EC); EMC: EN 62040-2 (directive 2004/108/EC) Regulations

Classification according (Voltage Frequency Independent) VFI - SS - 111

to IEC 62040-3