ELECTA UPS ONLINE

10 kVA - 20 kVA

VFI TYPE ONLINE

- Large power size selection 10, 15, 20 kVA
- Small footprint
- Zero impact source
- Flexibility of use
- Advanced communications

The Electa series is ideal for protecting data centres and telecommunications systems, IT networks and critical systems in general, where the risks connected with poor energy supply can compromise the continuity of activities and services. The Electa series is available in 10-15-20 kVA models with threephase/ single-phase input and single-phase output, and 10-15-20 kVA models with three-phase input and output and on-line double conversion technology in accordance with VFI-SS-111 classification (as set out in standard IEC EN 62040-3). Electa is designed and built using state-of-the-art technology and components. It is controlled by a DSP (Digital Signal Processor) microprocessor, to provide maximum protection to the powered loads with no impact on downstream systems, and optimised energy savings.

Zero impact source

Electa solves installation problems in systems where the power supply has limited power available, where the UPS is supported by a generator or where there are compatibility problems with loads that generate harmonic currents; Electa has a zero impact on its power source, whether this is the mains power supply or a generator:

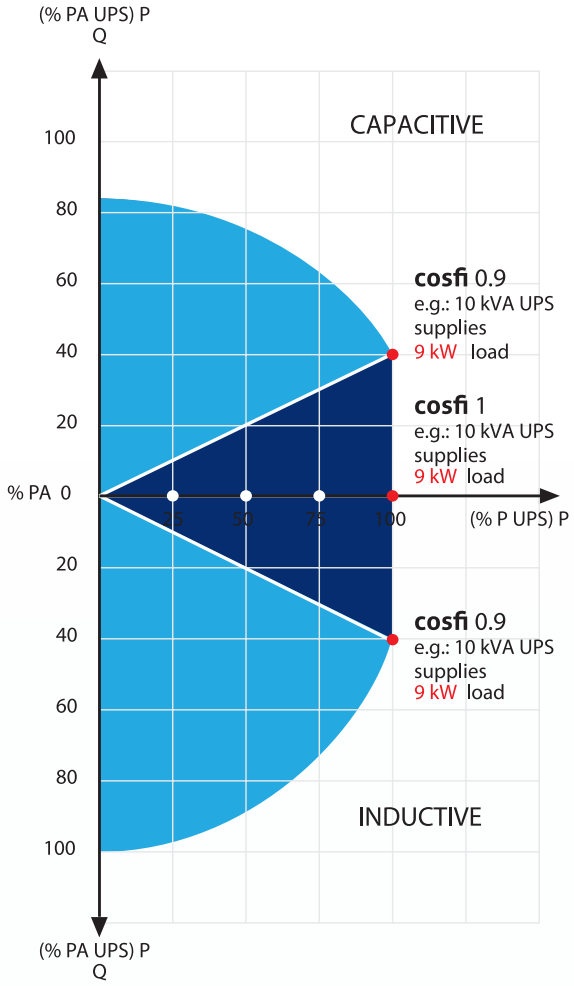
- input current distortion < 3%
- input power factor 0,99
- power walk-in function that ensures progressive rectifier start up
- start-up delay function, to restart the rectifiers when mains power is restored if there are several UPS in the system. In addition, Electa plays a filtering and power factor correction role in the power network upstream of the UPS, as it eliminates harmonic components and reactive power generated by the power utilities.

Installation flexibility

EM/ET 10,15,20 is available in two different cabinet frames:
• 1320mm high housing: batteries to for back up time up to 30 minutes on 20 kVA or Isolation transformer;
The single phase output (EM 10, 15, 20 kVA) thanks to Its highly flexible design allows full compatibility with both three-phase and single-phase power supplies, thus eliminating problems in connecting the UPS to the system.

Battery care system

Proper battery care is critical to ensuring correct UPS operation in emergency conditions. The Lever UPS battery care system consists of a series of features and capabilities to optimise battery management and obtain the best performance and operating life possible. Battery recharging: Electa is suitable for use with hermetically sealed lead-acid (VRLA), AGM and GEL batteries and Open Vent and Nickel Cadmium batteries. Depending on the battery type, different charging methods are available:
• One-level voltage recharge, typically used for widely available VRLA AGM batteries
• Two-level voltage recharge according to IU specification
• Charge blocking system to reduce electrolyte consumption and lengthen the life of VRLA batteries.
Recharge voltage compensation based on temperature in order to prevent excessive battery charges or overheating. Battery tests to diagnose in advance any reduction in performance or problems with the batteries. Deep discharge protection: during extended low-load discharges, the end-of-discharge voltage is increased - as recommended by battery manufacturers - to prevent damage or reduced battery performance. Ripple current: recharge ripple current (residual AC component) is one of the main causes of reduced reliability and battery life. Using a high frequency battery charger, Electa reduces this value to negligible levels, prolonging battery life and maintaining high performance over a long period of time. Wide voltage range: the rectifier is designed to operate within a wide input voltage range (up to - 40% at half load), reducing the need for battery discharge and thus helping to extend battery life.



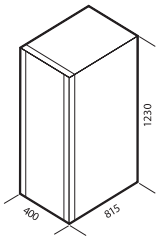
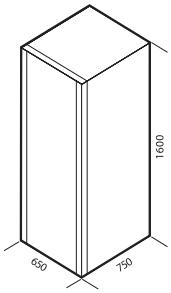
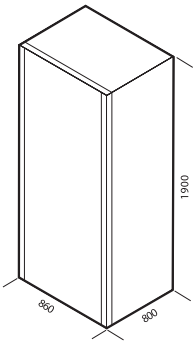
Maximum reliability and availability

Distributed parallel configuration of up to 8 units per redundant (N+1) or power parallel system. The UPS continue to operate in parallel even if the connection cable is interrupted (Closed Loop).

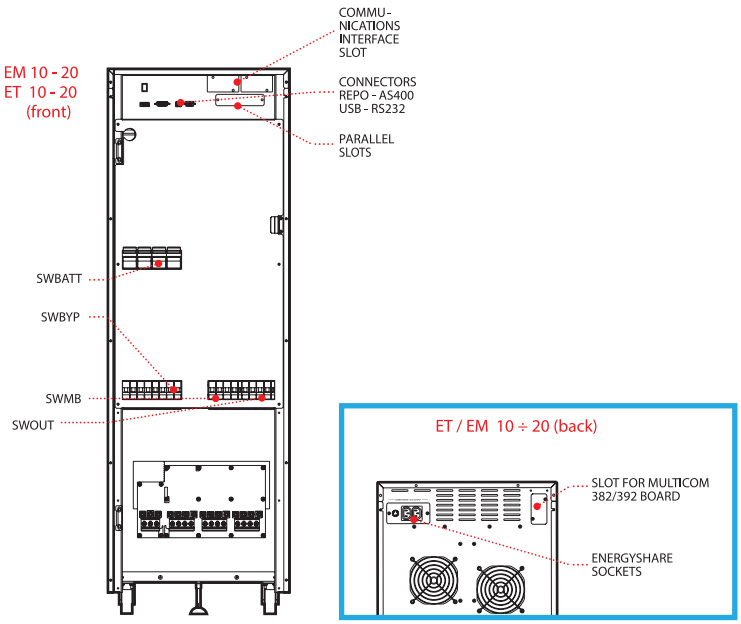
Advanced communications

Electa is equipped with a back-lit graphic display (240x128 pixels) providing UPS information, measurements, operating states and alarms in different languages. It can also display wave forms and voltage/ current forms. A wide range of comunications options are available to ensure global and comprehensive UPS monitoring. Please refer to option table for details.

BATTERY BOX

MODELS	BB12079S0	BB4040S0	BB40100B0
DIMENSIONS (mm)			

DETAILS



ELECTA Technical Guide

MODEL	EM10BAT	EM15BAT	EM20BAT	ET10BAT	ET15BAT	ET20BAT
INPUT						
Nominal voltage	380-400-415 Vac three-phase + N / 220-230-240 Vac single-phase + N			380-400-415 Vac three-phase + N		
Nominal frequency	50/60 Hz					
Frequency tolerance	40 - 72 Hz					
Power factor at full load	0,99					
Current distortion	THDI ≤ 3%					
BYPASS						
Nominal voltage	220-230-240 Vac single-phase + N			380-400-415 Vac three phase + N		
Number of phases	1			3 + N		
Voltage tolerance (Ph-N)	180 - 264 V (selectable)					
Nominal frequency	50 or 60 Hz (selectable)					
Frequency tolerance	±5 (selectable)					
Bypass overload	125% for 60 minutes, 150% for 10 minute					
OUTPUT						
Nominal power (kVA)	10	15	20	10	15	20
Active power (kW)	9	13,5	18	9	13,5	18
Power factor	0,9					
Number of phases	1			3 + N		
Nominal voltage (V)	220-230-240 Vac single-phase + N (selectable)			380-400-415 Vac three-phase + N (selectable)		
Static variation	± 1%					
Dynamic variation	± 3%					
Crest factor	3 : 1 Ipeak/Irms					
Voltage distortion	≤ 1% with linear load / ≤ 3% with non-linear load					
Frequency	50/60 Hz					
Frequency stability during battery operation	0,01%					
BATTERIES						
Type	VRLA AGM/GEL/NiCd/Li-ion/Supercaps					
Recharge time	6 hours					
INFO FOR INSTALLATION						
Weight without batteries (kg)	105	115	120	105	115	120
Dimensions (WxDxH) (mm)	440 x 850 x 1320					
Communications	3 slots for communications interface / USB / RS232					
Operating temperature	0 °C / +40 °C					
Relative humidity	90% non-condensing					
Colour	Dark grey RAL 7016					
Noise level at 1 m [dBA ±2] Smart Active	< 40 dBA					
IP rating	IP20					
Smart Active efficiency	up to 98%			up to 99%		
Standards	European Directives: L V 2006/95/CE low voltage Directive EMC 2004/108/CE electromagnetic compatibility Directive Standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2 C2 Classification in accordance with IEC 62040-3 (Voltage Frequency Independent) VFI - SS - 111					
Moving the UPS	castors / transpallet (10 - 20 kVA)					

BAT Also available with internal batteries