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PLCS



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PROCESSES

# Master Plus 400 Hz

## 30-120 kVA

### three-phase/three-phase

Master Plus 400 Hz 30-120 kVA



**Master Plus FC 400** series is a frequency converted based on the Master Plus UPS that can accept 50/60Hz and deliver a 400Hz output. The device has a double-conversion design (VFI SS 111 compliant with IEC EN 62040-3) with a transformer-isolated Inverter. The output voltage is 208Vac and configurable at 200Vac on site with a 115Vac version available on request.

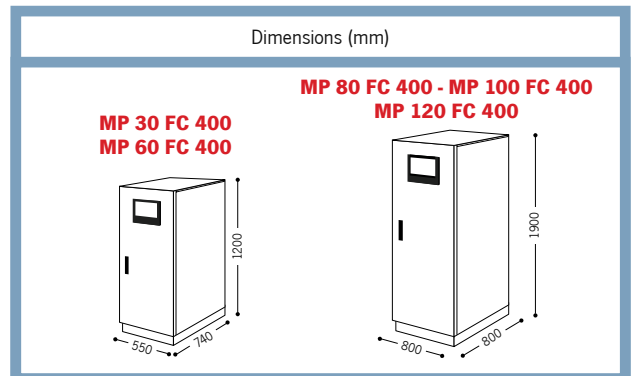
The basic design is a solid state generator with IGBT- based Inverter controlled using PWM techniques. It is ideal for applications such as avionic repair workshops, hangars, aircraft ground power in civil airports and military bases.

#### MINIMUM IMPACT ON POWER SUPPLY – EASY SOURCES

**MP FC 400** technology removes the problems of over sizing upstream power sources, whilst improving load power factors and current harmonics.

The UPS features the latest input current absorption techniques including progressive rectifier start-up and the option to reduce battery charging currents.

These features make **MP FC 400** one of the most generator compatible and environmentally friendly UPS available.



## EASY TO INSTALL

**MP FC 400** is compact with a foot print of only 0.64 m<sup>2</sup>. Front access to internal assemblies and top panel ventilation make space allocation within confined data processing or plant rooms easy. **MP FC 400** can be placed against a wall as there is no requirement for rear or side panel access for maintenance or ventilation.

## APPLICATIONS

- Aircraft ground power
- Airports
- Navy
- Military equipment
- Testing laboratories

## OPTIONS

- Input Isolation transformer
- 2 Programmable relay cards
- LCD based remote Control panel
- Remote Graphics Panel
- Input Isolation transformer
- Protection degrees higher than IP20
- Parallel/Redundant N+X operation.

MODELS	MP 30 FC 400	MP 60 FC 400	MP 80 FC 400	MP 100 FC 400	MP 120 FC 400
POWER (kVA)	30	60	80	100	120
<b>INPUT</b>					
Nominal voltage	380 - 400 - 415 Vac three-phase				
Voltage tolerance	400 V ± 20%				
Frequency	45 ÷ 65 Hz				
Power factor	≥ 0.93 (HC Version)				
Current distortion	< 5% C (HC Version)				
Soft start	0 ÷ 100% in 120" configurable				
<b>OUTPUT</b>					
Rated power (kVA)	30	60	80	100	120
Active power (kW)	24	48	64	80	96
Nominal voltage	230 Vac three-phase + Neutral				
Static stability	± 1%				
Dynamic stability	± 5%				
Voltage distortion	< 3% with linear load / < 4% with distorting load				
Frequency	400 Hz				
Crest factor	3:1				
Overload	110% for 60'; 125% for 10'; 150% for 1'				
<b>SYSTEM</b>					
Remote signalling	Voltage-free contacts				
Remote commands	EPO and ON/OFF				
Communication	double RS232 + remote contacts + 2 communication interface slots				
Efficiency	Up to 92%				
Dimensions (hwd) (mm)	1200 x 550 x 740			1900 x 800 x 800	
Weight (kg)	330	480	500	530	560
Noise level	61 ÷ 63 dBA at 1 m				
Operating temperature	0 °C ÷ +40 °C (50°C @ 75% load)				
Relative humidity	< 95% non condensing				
Protection rating	IP20 (other on request)				
Colour	RAL 7035 light grey				
Compliance	Safety: EN 62040-1-1 (directive 2006/95/EC); EMC: EN 62040-2 (directive 2004/108/EC)				
Classification according to IEC 62040-3	(Voltage Frequency Independent) VFI - SS - 111				