



INDUSTRIAL
PLCS



INDUSTRIAL
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.

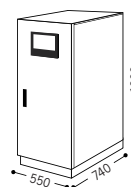
These features make **MP FC 400** one of the most generator compatible and environmentally friendly UPS available.

The complete range of power solutions

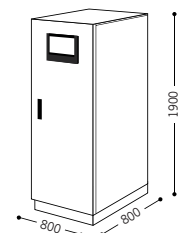
Uninterruptible Power Supplies, Central Battery Supply Units, Static Transfer Switches, Generators and Inverters

Dimensions (mm)

MP 30 FC 400



**MP 60 FC 400 - MP 80 FC 400
MP 100 FC 400 - MP 120 FC 400**



EASY TO INSTALL

MP FC 400 is compact with a foot print of only 0.64 m². 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
- LED remote status panel
- LCD based remote Control panel
- Remote Graphics Panel
- Input Isolation transformer
- Protection degrees higher than IP20

The Easy Source input, the Battery Care System as well as the flexibility and communication features are the same as those offered on the traditional Master Plus series.

| 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 |
| INPUT | | | | | |
| 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 | | | | |
| OUTPUT | | | | | |
| 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 | | | | |
| Peak factor | 3:1 | | | | |
| Overload | 110% for 60'; 125% for 10'; 150% for 1' | | | | |
| SYSTEM | | | | | |
| 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 (HxWxD) (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 | | | | |