INDUSTRIAL PROCESSES

INDUSTRIAL PLCS

Master FC400

30-120 kVA
Three-phase/Three-phase

Highlights

- Frequency converter 50/400 Hz
- Output voltage: 208 V - 3F
- Galvanic isolaltion
- Two versions to reduce input harmonics
- Applications:airport, military and naval

The MASTER FC400 series static frequency converters are available from 30 to 120kVA, with a 50 or 60Hz input and a 400Hz output. The product of extended experience acquired in the UPS industry, the MP FC 400 series is distinguished by the use of technologically advanced components and for excellent reliability, ease of maintenance and easy of operation.
The MASTER FC400 series uses double conversion technology (VFI SS 111 voltage and frequency independent compliant with IEC EN 62040-3) with an output transformer inside in order to ensure the isolation of the load from network disturbances in all conditions.

The output voltage is 208Vca three-phase (200/115V versions upon request).
Thanks to high frequency, digitally-controlled IGBT technology, the MASTER FC400 static converters are ideal for airport, military and naval applications.

Minimum impact on network – easy source
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.

Ease of Installation and Maintenance

MASTER FC400 only requires a small space for installation (only 0.86m2 for 120kVA).
The main assemblies of the UPS can be easily accessed for maintenance, via the removable front panel. Fans located in the top of the UPS cabinet, eliminate the need for side or rear access, and allow the UPS to be placed against a wall.

Applications

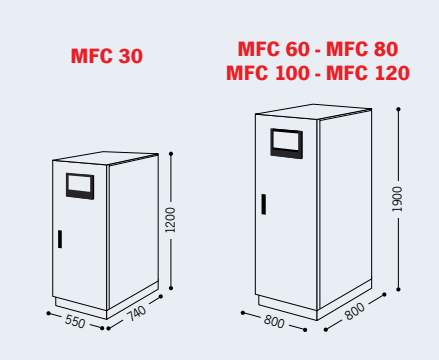
MASTER FC400 provides additional protection for a wide range of applications, including:

- Powering planes in airports
- Radar and flight-control systems
- Naval applications
- Military applications
- Power for test benches

Options

- Input isolation transformer
- 2 Programmable relay contact boards
- Remote LCD mimic panel
- Remote Graphic Panel
- Higher protection level than IP20
- Parallel.

Dimensions (mm)



MODELS	MFC 30	MFC 60	MFC 80	MFC 100	MFC 120
POWER	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					
Nominal power (kVA)	30	60	80	100	120
Active power (kW)	24	48	64	80	96
Nominal voltage	208 Vac Three-phase + Neutro				
Static stability	± 1%				
Dynamic stability	± 5%				
Voltage distortion	< 3% with linear load / < 4% with non-linear load				
Frequency	400 Hz				
Crest factor (Ipeack/Irms)	3:1				
Overload	110% for 60'; 125% for 10'; 150% for 1'				
INFO FOR INSTALLATION					
Weight (kg)	330	480	500	530	560
Dimensions (hwd) (mm)	1200 x 550 x 740	1900 x 800 x 800			
Remote signals	volt-free contacts				
Remote controls	ESD and ON/OFF				
Communication	Double RS232 + remote contacts + 2 slots for communications interface				
Ambient temperature	0°C / +40°C (50°C @ 75% load)				
Relative humidity	< 95% non-condensing				
Colour	Dark grey RAL 7016				
Noise level	61 ÷ 63 dBA a 1 m				
Protection level	IP20 (others upon request)				
Rendimento	up to 92%				
Regulations	Regulatory Directives LV 2006/95/EC - 2004/108/EC; IEC Safety EN 62040-1; EMC IEC EN 62040-2; IEC Performance EN 62040-3				
Classification according to IEC 62040-3	(Voltage Frequency Independent) VFI - SS - 111				